This document is an extension of the Kansas Curricular Standards for Mathematics. These standards, benchmarks, and examples are intended to be used in developing curricular materials for students who are eligible for the alternative assessment. One difference in the extended mathematics standards from the general education standards is that grade levels have not been specified for the indicators under each benchmark. Rather, the benchmarks and the indicators have been organized in a hierarchical fashion, reflecting the wide variation in performance expectations for these students. Each standard in the main body of the document contains a series of benchmarks that describe what students should know and be able to do. Each benchmark contains a series of indicators which identify what it means for students to meet a benchmark. Indicators are frequently followed by clarifying examples. (Contains 12 references.) (ASK)
Kansas

Extended

Curricular Standards for Mathematics

BEST COPY AVAILABLE

Kansas Department of Education
March 2000
Reprinted September 2000
March 1, 1999

Dear Colleagues:

It is with great pleasure that the Extended Curricular Standards in Mathematics is offered to you. These standards reflect the belief that all students are to be held to the same challenging standards resulting in every student leaving school prepared to lead a productive life.

Thanks to the work of dedicated educators, this document represents the Kansas State Department of Education's effort to develop an accountability system that is sensitive to the progress of all students. The Kansas educational system has high goals and expectations for all students, including students with disabilities. To assist you in ensuring that all students are held to the same high challenging standards, this document offers guidance to you as you work with your local curriculum development and accountability efforts.

Thank you for all you do to support and enhance the education of all of our students. We hope the information provided in this document will be helpful to you and result in greater success for our students.

Sincerely,

Alexa Pochowski, Ph.D.
Team Leader, Student Support Services.
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The writing committee would like to thank everyone who submitted written responses and input into the working drafts of this document. The committee has thoughtfully considered each response and felt that this input was invaluable to the development of this document.

In addition, the committee would like to thank the teachers, parents, school administrators, and community members who have worked and will continue to work, toward improving the education of students with significant disabilities.
General Introduction

Purpose

This document is an extension of the Kansas Curricular Standards for Mathematics. These extended standards, benchmarks, indicators, and examples are intended to be used in developing curricular materials for students who are eligible for the alternate assessment. In addition, the extended standards will be helpful in developing IEP goals, benchmarks, or objectives for students with the most significant disabilities and who will be eligible to take the Kansas Alternate Assessment. These standards are designed for students who require substantial adjustments to the general curriculum, yet allow that curriculum to maintain a clear connection to the general education standards.

As these extended standards were developed, the Kansas Curricular Standards for Mathematics were followed as closely as possible. The four basic standards appear here. The extended benchmarks, indicators, and examples have been developed to provide high expectations for these students.

One difference in the extended mathematics standards, from the general education standards, is that grade levels have not been specified for the indicators under each benchmark. Rather, the benchmarks and the indicators have been organized in a hierarchical fashion (where possible), reflecting the wide variation in performance expectations for these students. To understand the reason for this change, it is helpful to compare this approach with the one used in the general education standards. The general education standards establish challenging performance expectations through the use of indicators that become increasingly more difficult for higher grade levels. The state assessments are based on these indicators, resulting in a report of the percentage of students who successfully meet or do not meet the levels established for each grade level. Evidence of improvement is generated by reviewing and evaluating the increase in the percentage of students able to demonstrate their ability to meet the expectations of the standards, benchmarks, and indicators.

Because of the extremely wide range of abilities of students who are eligible to take the alternate assessment, it is not possible to establish grade-specific expectations and still maintain high standards. Instead, a range of indicators has been developed, which describe possible performance expectations for all of these students across grade or age levels. The range of indicators includes some that were established for the general education standards. Looking at changes in performance over successive years, rather than relative to grade-level expectations, will also generate evidence of improvement.
**Background Information**

The alternate assessment advisory committee began working in the fall of 1997. The purpose of the advisory committee was to provide input and suggestions to KSDE as they began to develop the various components of the Kansas Alternate Assessment.

The extended standards writing committee began working in the spring of 1999. The committee studied and evaluated the Kansas Curriculum Standards for Mathematics. The focus was to consider how these standards could be applied to students who were eligible to participate in the alternate assessment. Based on these standards the committee determined benchmarks, indicators, and examples.

**IDEA Requirements**

The reauthorized Individuals with Disabilities Act of 1997 (IDEA 97) resulted in a significant clarification of the educational expectations for students with disabilities. Specifically, the following requirements are made for performance goals and indicators and inclusion of students with disabilities in general state and district assessments:

*Section 612(a)(16)(A)*: “The state has established goals for the performance of children with disabilities in the State that (ii) are consistent, to the maximum extent appropriate, with other goals and standards for children established by the state;”

Accordingly, the Kansas Extended Standards have been developed to be consistent with the general standards, thus ensuring that the education of all students, including those with the most significant disabilities, is consistent with goals and standards for students as established by the Kansas State Board of Education. Further, the state is required to develop an alternate assessment for students with disabilities who are unable to participate in regular state and district assessments:

*Section 612(1)(17)(A)*: In general - Children with disabilities are included in general State and district-wide assessment programs, with appropriate accommodations, where necessary. As appropriate, the State or local educational agency -
(i) develops guidelines for the participation of children with disabilities in alternate assessments for those children who cannot participate in State and district-wide assessment programs; and
(ii) develops and, beginning not later than July 1, 2000, conducts those alternate assessments.

In keeping with this requirement, the extended standards serve as the basis for the development of the Kansas Alternate Assessment.
Definitions

The following definitions clarify the four levels of this extended standards document. These definitions are very closely aligned with the definitions that are used in the Kansas Curriculum Standards in Mathematics.

Standard: A curricular standard is a general statement of what a student should know and be able to do in academic subjects.

Example of a standard: Numbers and computation - The student uses numerical and computational concepts and procedures in a variety of situations.

Benchmarks: A specific statement of what a student should know and be able to do. Benchmarks are used to measure a student’s progress towards meeting a standard. Benchmarks are listed in hierarchical order under a standard.

Example of a benchmark: The learner demonstrates number sense in a variety of situations.

Indicators: A statement of the knowledge or skills that a student demonstrates in order to meet a benchmark. Indicators are critical to understanding the benchmarks and standards. Where possible, the indicators are listed in hierarchical order under a benchmark, from lower-level indicators to indicators of higher performance. This design allows every student from within the population covered by these extended standards to demonstrate a level of performance for the standards.

Example of an indicator: The learner counts by rote.

Clarifying Examples: Examples show how a student might demonstrate an indicator, using practical, real-world examples. Clarifying examples are NOT listed in hierarchical order. These examples are taken from the domains of school, vocational/career, community, recreation/leisure, and home. These domains are those in which students receive instruction in order to practice and maintain skills. The clarifying examples should provide a clear connection between the standards and instructional practice.

Clarifying Example:
School – Counts math manipulatives
Vocational/Career – Counts numbers embedded in steps of a task
Community – Counts to self to calm anxiety or maintain temper
Recreation/Leisure – Joins in count down the seconds remaining on a game clock at a sporting event
Home – Counts numbers in sequence while handling own money
As extended standards for other curricular areas are determined, many cross-disciplinary or integrated examples will be developed, in keeping with the way in which instruction students with the most significant disabilities occurs. In addition, these integrated examples will allow for the development of an integrated alternate assessment, which simultaneously will assess content from a number of curricular areas, rather than having separate subject assessments.

*Blank example pages are provided at the end of each benchmark. Teachers may use these pages to generate additional clarifying examples for their individual students.*

**Responses & Communication**

The demonstration of mathematical competencies may be mediated through any of the following:

- Concrete objects
- Paper and pencil
- Calculators
- Assistive technology
- Mental mathematics

The extended standards are written to address the wide variety of communication methods used by students who qualify for the alternate assessment. These methods include, but are not limited to:

- Speech
- Augmentative communication
- Sign language
- Large print
- Braille
- Touch and / object cues
- Computer access
- Pictures (picture board, notebook, etc.)
- Vocal responses (cries, utterances, etc.)
- Written responses (handwritten, computer-generated, etc.)
- Eye gaze
- Body movements
- Other methods used by a student to demonstrate knowledge
The Kansas Alternate Assessment

One alternate assessment will be developed to assess the knowledge and skills described through the extended standards, benchmarks, indicators, and examples in all of the curricular standards. This does not mean that students eligible for the alternate assessment are assessed “less” than students taking the “regular” assessments are. The alternate assessment will reflect the ways in which concepts are normally taught and the environments in which they are taught. Thus, the assessment will tie closely to actual instruction, reflecting good assessment practice. In developing the alternate assessment, all sensory systems will be considered and specific assessment tasks will be designed to ensure that no bias exists toward individuals with sensory or physical disabilities.

Use of this Document

This document may be used for a variety of purposes. First, as with the general education standards, the document will assist Kansas’ teachers in planning local curriculum and assessments for students with disabilities. Although the document is intended to provide a curricular focus, it is not a state mandated curriculum. In addition, the document provides a resource that can and should be used in developing the IEP, yet it is not intended that the document contain everything a student may need regarding mathematics or that may appropriately appear on a student’s IEP.

It is also not expected that districts will develop curriculum to include every indicator; instead, the document has been developed to provide information to support a broad range of different local curricular emphases. It should be noted that if students are taught only the items that are assessed, a comprehensive individualized instructional plan has not been made available and the student does NOT have a quality program.

Further, the extended standards document will be used by The University of Kansas Center for Educational Testing and Evaluation in development of the Kansas Alternate Assessment. The extended standards determine the skills on which the students are assessed over time.
Kansas

Extended Curricular Standards

Mathematics

Standards, Benchmarks, & Indicators

Without Clarifying Examples
Standard 1: NUMBERS AND COMPUTATION – The learner uses numerical and computational concepts and procedures in a variety of situations.

Benchmark 1 -- The learner demonstrates number sense in a variety of situations.

Indicators

The learner:

1. understands the concept of one
2. counts by rote
3. establishes one to one correspondence
4. identifies sub-sets
5. recognizes coins and currency
6. understands concepts of numbers greater than one
7. evaluates none, more, less, and/or equal (Ø, <, >, =, ≠)
8. understands the values of coins and currency
9. understands ordinal sequence
10. recognizes fractional parts of a whole object
Standard 1 - Numbers and Computation

Benchmark 2 — The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicators

The learner:

1. matches like numerals
2. counts manipulatives or other objects
3. recognizes and / or labels numerals
4. generates whole numerals
5. establishes number / numerical correspondence
6. identifies place value
7. identifies symbols for dollar and cent notations

Benchmark 3 - The learner uses numerical estimation in a variety of situations.

Indicators

The learner:

1. identifies same and different
2. identifies and / or estimates: more, less, or equal
3. matches equivalent sets
4. rounds whole numbers
5. estimates amount of purchase
6. estimates quantities and checks reasonableness of results

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and / or mental mathematics.
Standard 1 – Numbers and Computation

Benchmark 4 — The learner demonstrates an understanding of computation in a variety of situations.

Indicators

The learner:

1. understands add means combine / put together; subtract means compare sets, find out how many or take-away
2. adds one more to a set
3. adds or subtracts to create new set
4. skip counts by 5's, 10's, and 25's
5. understands multiply means adding equal groups; divide means separating into equal groups
6. understands mathematical symbols (+, -, ÷, ×, =)
7. uses one or more computational methods to add, subtract, multiply, and / or divide whole numbers
8. performs computations with money amounts
9. performs one-step practical word problems

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and / or mental mathematics.
Standard 2: ALGEBRA - The learner uses algebraic concepts and procedures in a variety of situations.

Benchmark 1 - The learner demonstrates an understanding of relationships in patterns in a variety of situations.

Indicators

The learner:

1. identifies patterns presented in a variety of formats: numeric, visual, oral, kinesthetic, pictorial, tabular, graphical, or listing
2. creates a pattern
3. matches or generalizes patterns
4. generalizes cyclical patterns
5. recognizes patterns involving two changes or two simultaneous changes

Benchmark 2 - The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

Indicators

The learner:

1. understands that a variable represents a single quantity that can change
2. understands that a constant represents a single quantity that remains the same
3. understands the equivalencies of coins and currencies
4. locates, matches, and plots distinct variables in sequence along a continuum
5. solves and / or sets up equations with missing number facts, using addition, subtraction, multiplication, and / or division
6. understands how changes in one variable affect other variables

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and / or mental mathematics.
Standard 2 – Algebra

Benchmark 3 - The learner demonstrates the use of models to show relationships in a variety of situations.

Indicators

The learner:

1. demonstrates understanding of same and different
2. demonstrates understanding of categorization
3. recognizes the same situation can be represented in more than one way
4. traces a route on a map

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Standard 3: GEOMETRY - The learner knows and uses geometric concepts and procedures in a variety of situations.

Benchmark 1 - The learner demonstrates an understanding of geometric figures and their properties.

Indicators

The learner:

1. matches three dimensional shapes
2. sorts three dimensional shapes with specific attributes
3. recognizes and / or labels shapes
4. combines and / or separates shapes into different configurations

Benchmark 2 - The learner estimates and measures using standard and nonstandard units in a variety of situations.

Indicators

The learner:

1. orders by a geometric attribute
2. selects and uses appropriate measurement vocabulary and / or tool(s)
3. uses the calendar
4. tells time
5. converts within the same measurement system
6. estimates geometric quantities and checks reasonableness of results

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and / or mental mathematics.
Standard 3 – Geometry

Benchmark 3. The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

Indicators

The learner:

1. uses proprioceptive feedback to determine response
2. recognizes the conservation of continuous / discontinuous substances
3. understands common spatial sense language
4. demonstrates ability to make necessary transformation in real-life situations
5. recognizes two or three-dimensional objects as they would appear from near far or different angles
6. gives or follows directions from one location to another
7. uses map to find location

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and / or mental mathematics.
Standard 4: DATA - The learner knows and uses concepts and procedures of data analysis in a variety of situations.

Benchmark 1 - The learner uses probability to make predictions and decisions in a variety of situations.

*Indicators*

The learner:
1. understands cause and effect
2. recognizes whether an outcome of a simple event is possible or impossible
3. recognizes the likelihood of possible results or outcomes of a simple event
4. predicts what should happen in a given situation and compares what does happen

Benchmark 2 - The learner collects and uses data to make decisions and solve problems.

*Indicators*

The learner:
1. makes a decision based on appropriateness or preferences, given information on possible choices
2. gathers data related to familiar experiences by counting, tallying, observation, interview, etc., appropriate for the situation
3. records numerical relations in tables
4. answers questions about data
5. describes data with graphs, charts, or physical displays
6. recognizes credible sources in contrast to misleading representation of information
7. recognizes appropriate conclusions generated from information collected

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Kansas

Extended Curricular Standards

Mathematics Standards, Benchmarks, & Indicators

With Clarifying Examples
Standard 1

Numbers and Computation

The learner uses numerical and computational concepts and procedures in a variety of situations.

Clarifying Examples
Clarifying examples show how a learner MIGHT demonstrate an indicator, using practical, real-world examples.
Clarifying examples are NOT listed in hierarchical order.

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.
2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
**Extended Standard 1 – NUMBERS AND COMPUTATION**

**General Curriculum Standard 1 – Numbers & Computation**

**Benchmark:** 1
The learner demonstrates number sense in a variety of situations.

**Indicator:** 1
The learner understands the concept of one.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selects one item from container of many (milk from milk cooler, book from library shelf)</td>
<td>Puts one price tag on each item</td>
<td>Takes one free sample at store's display</td>
<td>Selects one bowling ball to use during game</td>
<td>Adds only one scoop of detergent to washing machine load</td>
</tr>
<tr>
<td>Presses switch or designated key one time to produce message</td>
<td>Offers each customer who enters store one shopping cart</td>
<td>Chooses one side dish from menu that accompanies entrée</td>
<td>Moves appropriate distance on game board when one is selected</td>
<td>Removes correct quantity of ingredient from refrigerator when recipe calls for one egg, one carrot, etc.</td>
</tr>
<tr>
<td>Labels work to be turned in by using his or her name stamp once</td>
<td>Activates time clock lever only one time when checking in for work</td>
<td>Rings bell at customer service counter only one time</td>
<td>Complies with rule to take only one bounce on diving board entering swimming pool</td>
<td>Chooses one friend to come and visit when told by parent that both friends named cannot be invited at the same time</td>
</tr>
</tbody>
</table>

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.
2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 1
The learner demonstrates number sense in a variety of situations.

Indicator: 2
The learner counts by rote.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counts aloud or by sign as paraeducator handles mathematical manipulatives</td>
<td>Uses numbers embedded in steps of task sequence to direct self regarding what is to be done (One, get the ___; two put in the ___)</td>
<td>Begins to count aloud to try and determine how many people are ahead of him or her in a waiting line</td>
<td>Rote counts while turning pages as he or she looks at a catalog or magazine</td>
<td>Sets plates laid out for family dinner and counts as doing so</td>
</tr>
<tr>
<td>Participates in singing the refrain of a selection in music / chorus that includes a number sequence</td>
<td>Counts aloud or by sign as job coach or supervisor checks his or her piece work</td>
<td>Counts by rote in answer to the question, &quot;How old are you?&quot;</td>
<td>Counts steps in a repetitive dance pattern (1-2-3-4-, 1-2-3-4) while performing the movement</td>
<td>Imitates parents' or caregiver's &quot;You have five seconds warning&quot; to family pet (&quot;1, 2, 3, 4, 5&quot;)</td>
</tr>
<tr>
<td>Uses rote counting as self-talk, when asked a question, to think and keep from blurting out a wrong answer</td>
<td>Verbalizes directions to &quot;Hold 1, 2, 3, 4, 5, release&quot; when using tools on the job (mop squeezer, sealer)</td>
<td>Counts to self to calm anxiety and / or maintain his or her temper</td>
<td>Joins in, with crowd, to count down the seconds remaining on a game clock at a sporting event</td>
<td>Says or signs numbers in sequence while handling own money he or she is saving</td>
</tr>
</tbody>
</table>

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 1
The learner demonstrates number sense in a variety of situations.

Indicator: 3
The learner establishes one to one correspondence.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributes one paper or piece of equipment to each member in class</td>
<td>Requires one ticket from each person entering the movie theater</td>
<td>Puts one quarter in each slot on the coin-operated washing machine</td>
<td>Gives each person a colored game piece</td>
<td>Counts the number of shirts to pack for vacation (one needed for each day)</td>
</tr>
<tr>
<td>Offers one milk carton to each person that passes through the cafeteria line</td>
<td>Counts the number of items that remains on a storeroom shelf</td>
<td>Attempts to use only one discount coupon per item for purchase</td>
<td>Prepares a sufficient number of party invitations for each friend to have one</td>
<td>Counts the number of towels to place in bathroom so that each person in the home will have one</td>
</tr>
<tr>
<td>Counts the number of lockers in a row from a designated point to locate own locker</td>
<td>Puts a single card in the check-out pocket of each book, CD, videotape at library</td>
<td>Counts the correct number of blocks traveled in one direction before making a turn to the right or left</td>
<td>Puts one seed in each starter pot</td>
<td>Counts the number of candles on a family member's birthday cake</td>
</tr>
</tbody>
</table>

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 1
The learner demonstrates number sense in a variety of situations.

Indicator: 4
The learner identifies sub-sets.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies either chocolate milk or white milk as two available choices with school lunch</td>
<td>Shelves similar items together in storeroom</td>
<td>Identifies items from shopping list that can be located within same department of store</td>
<td>Identifies all CDs or audiotapes of favorite artist from friend's collection</td>
<td>Locates all the items (metal washers, long screws) from the bag of hardware items packaged with &quot;ready to assemble&quot; furniture</td>
</tr>
<tr>
<td>Divides mathematical manipulatives into groups according to attribute teacher or paraeducator designates</td>
<td>Realizes that red, yellow, and green are all varieties of apples to stock in produce section of grocery store</td>
<td>Realizes that various coin denominations are &quot;money&quot; or &quot;change&quot;</td>
<td>Separates cards in given suit from a deck of playing cards</td>
<td>Identifies own personal clothing items from baskets of the family's laundry</td>
</tr>
<tr>
<td>Separates recyclable items from trash collected when cleaning cafeteria after lunch period</td>
<td>Separates books coded as part of the &quot;children's collection&quot; when retrieving materials from the library's return box</td>
<td>Differentiates breakable and non-breakable items (flower pots, soda or pop bottles)</td>
<td>Assembles materials needed for favorite craft activity from cabinet of art supplies</td>
<td>Places dirty dishes in dishwasher, grouping similar items together in racks</td>
</tr>
</tbody>
</table>

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.
2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark:  1
The learner demonstrates number sense in a variety of situations.

Indicator:  5
The learner recognizes coins and currency.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify pennies, nickels, dimes, and quarters in school cafeteria</td>
<td>Puts a rubber band around like bills</td>
<td>Puts genuine coins in donation boxes</td>
<td>Discriminates between genuine currency and play money packaged in table games</td>
<td>Puts genuine coins into coin sorter machine</td>
</tr>
<tr>
<td>Identifies one, five, ten, and twenty dollar bills in mathematics class</td>
<td>Understands paycheck must be exchanged for coins and currency</td>
<td>Recognizes that bus tokens are an alternate form of money</td>
<td>Recognizes coins appropriate for insertion into a vending machine</td>
<td>Removes money received in greeting cards before throwing the card or envelope away</td>
</tr>
<tr>
<td>Recognizes that different countries have different coins and currency</td>
<td>Recognizes that employee lunch ticket substitutes for currency in the cafeteria at his or her workplace</td>
<td>Discriminates currency from coupons, checks, etc. by system of folds</td>
<td>Differentiates video game token from United States quarters</td>
<td>Participates with sibling or parent in wrapping coins for exchange at the family's banking institution</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
**Extended Standard 1 – NUMBERS AND COMPUTATION**

General Curriculum Standard 1 – Numbers & Computation

**Benchmark:** 1
The learner demonstrates number sense in a variety of situations.

**Indicator:** 6
The learner understands concepts of numbers greater than one.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joins group of two peers when teacher directs class to &quot;Divide yourselves into groups of three&quot;</td>
<td>Records tally marks correctly, in groups of five (four lines and diagonal slash) to keep track of completed work</td>
<td>Places three decorative arrangements on each table when assisting with set-up for community dinner or event</td>
<td>Realizes that in order to complete a distance of one mile, he or she must circle the track four times</td>
<td>Ingests proper dosage of medication that specifies &quot;Take two tablets&quot; at a designated time</td>
</tr>
<tr>
<td>Double clicks (i.e., two times) with computer mouse to open desired file</td>
<td>Wraps two forks in each napkin prepared for restaurant supply</td>
<td>Exits bus at designated number of stops after notable landmark (three stops after ballpark, two stops after certain grocery store)</td>
<td>Participates in card games that require players to collect four matching cards</td>
<td>Pairs up socks from laundry in sets of two</td>
</tr>
<tr>
<td>Holds a musical note for four beats, half note for two beats during music or band class</td>
<td>Cross-stacks papers in groups of a specified number</td>
<td>Complies with &quot;buddy system&quot; on community trip, staying with a partner to make group of two</td>
<td>Identifies plants that have three leaves when on the look-out for poison ivy</td>
<td>Adds correct number of measures of ingredients called for in recipe (two cups, three eggs)</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark:  1
The learner demonstrates number sense in a variety of situations.

Indicator:  7
The learner evaluates none, more, less, and/or equal (Ø, <, >, =, ≠).

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives appropriate answer in mathematics class when directly asked, &quot;What does this mean?&quot; (Ø, &lt;, &gt;, =, ≠)</td>
<td>Recognizes the need to add more items to complete a set for packaging</td>
<td>Understands the universal symbol (Ø) means &quot;none&quot; of the crossed out picture is allowed&quot; (no smoking, no skateboards)</td>
<td>Understands that a &quot;tie&quot; in a game means that the players or teams have an equal number of points</td>
<td>Recognizes that more dishes will be required for lunch if friends have been invited to stay and eat</td>
</tr>
<tr>
<td>Identifies quantities being weighed on a balance scale that is uneven as &quot;not equal&quot; in science class</td>
<td>Recognizes that the reason two preschoolers in day care might be crying at snack time is because the number of cookies each has is not equal</td>
<td>Realizes that the price he or she pays for an item, if no coupon is used, will be more than the price paid using a coupon</td>
<td>Recognizes that more weight is on one side than the other when a picnic table tips as person or heavy object is placed on it</td>
<td>Understands, when looks in the cookie jar and finds it empty, that none are currently available</td>
</tr>
<tr>
<td>Compares the sizes of two sets of manipulatives in mathematics class by matching one item from each group until runs out</td>
<td>Understands that, when a sack breaks as he or she is bagging groceries, it must be re-sacked with less inside</td>
<td>Reads a menu to locate selections that cost less than the money he or she has available</td>
<td>Understands that a field goal in a football game is worth less points than a touch down</td>
<td>Recognizes that he or she and siblings each receive equal gifts of money from family member</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 1
The learner demonstrates number sense in a variety of situations.

Indicator: 8
The learner understands the values of coins and currency.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>States the value of penny, nickel, dime, or quarter</td>
<td>Realizes that it is not appropriate to question coworkers about their salaries</td>
<td>Recognizes situations when coins are needed or preferred (pay phone, laundromat, vending machines)</td>
<td>Assists sibling with locating coins needed to complete his or her collection</td>
<td>Performs extra chores around the house to earn money for a specific purchase he or she wants to make</td>
</tr>
<tr>
<td>States the values of: one, five, ten, and / or twenty dollar bills</td>
<td>Refrains from leaving wallet or purse lying around unsupervised in the break room</td>
<td>Realizes, when shopping, that it is not necessarily a good idea to always spend all the money he or she has with him or her</td>
<td>Understands that an admission fee is required to many entertainment activities (movie, sporting event, museum)</td>
<td>Recognizes that cash should not be sent through the mail</td>
</tr>
<tr>
<td>Identifies when he or she can expect to receive change following cafeteria purchase</td>
<td>Understands that working extra hours, beyond the &quot;normal work week&quot; can result in overtime pay</td>
<td>Gives bills sufficient size or number to cover purchase cost</td>
<td>Recognizes that he or she has to have money to play a video game in an arcade</td>
<td>Opens a savings account and / or makes regular deposits into it</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 1
The learner demonstrates number sense in a variety of situations.

Indicator: 9
The learner ordinal sequence.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
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<th>Vocational Career</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Goes to the start of the line</td>
<td>Writes first and last names in appropriate locations</td>
<td>Understands that, to reach higher numbered</td>
<td>Locates song in a given ordinal position on</td>
<td>Requests seconds of a favorite food at mealtime</td>
</tr>
<tr>
<td>when told by the teacher to,</td>
<td>on job-related forms (application, withholding</td>
<td>floors in a building, he or she must go up</td>
<td>a music CD</td>
<td>only after everyone has been served first</td>
</tr>
<tr>
<td>&quot;Please go first&quot;</td>
<td>form)</td>
<td>stairs or use the elevator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follows regular hourly</td>
<td>Identifies pay days as the 2nd and 4th Fridays on a</td>
<td>Responds correctly when addressed by store</td>
<td>Identifies the number of outs or strikes a</td>
<td>Describes own place correctly, in birth order</td>
</tr>
<tr>
<td>schedule to get to classes</td>
<td>calendar page</td>
<td>clerk, &quot;Who was here first?&quot;</td>
<td>batter has, or outs in an inning, in a</td>
<td>of siblings (older siblings were born first,</td>
</tr>
<tr>
<td>at appropriate periods of the</td>
<td></td>
<td></td>
<td>baseball game (first, second, third)</td>
<td>second)</td>
</tr>
<tr>
<td>day</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies steps of procedure</td>
<td>Locates a specified letter in each word by which</td>
<td>Recognizes that numbered streets in downtown</td>
<td>Understands that team or player &quot;standings&quot;</td>
<td>Uses ordinals to guide caregiver in steps of</td>
</tr>
<tr>
<td>to be followed in science class</td>
<td>filing is to be completed (first, second, third)</td>
<td>area are not random, but go in order</td>
<td>refer to the linear order of who has won</td>
<td>his or her own personal care routine</td>
</tr>
<tr>
<td>Linear order</td>
<td></td>
<td></td>
<td>the most games</td>
<td></td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
## Extended Standard 1 – NUMBERS AND COMPUTATION

**Benchmark:**  1
The learner demonstrates number sense in a variety of situations.

**Indicator:**  10
The learner recognizes fractional parts of a whole object.

### EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Recognizes that chapters are parts of one, same story</td>
<td>Recognizes that his or her work crew is doing just one part of a bigger production job or service project</td>
<td>Realizes that he or she will pay only a portion of the advertised price, 3 for $1.00, if he or she purchases only one of that item</td>
<td>Identifies a popular music group when shown a picture of only two of the group's members</td>
<td>Realizes, when &quot;To be continued&quot; is shown at the end of a television broadcast, that he or she has viewed only a part of the whole story</td>
</tr>
<tr>
<td>Explains that two halves of a object or item are equal to one another and combine to make a whole</td>
<td>Reports hours worked in one-half or one-quarter hour increments of time</td>
<td>Understands the use of frequent buyer cards - that all symbols or boxes must be punched in order to receive the free item or discount</td>
<td>Understands that a relay team in track consists of four members, who run equal distances</td>
<td>Divides the remaining portion of a favorite dessert into pieces and checks to see if the pieces are essentially equal</td>
</tr>
<tr>
<td>Assembles correct number of smaller mathematics manipulatives, end-to-end, to equal one longer manipulative</td>
<td>Understands that if a packing slip says “one box of two” that the shipment in not complete until both packages arrive</td>
<td>Realizes that purchasing a &quot;round-trip&quot; ticket will pay his or her fare both to his or her destination and back home again</td>
<td>Realizes that, at the intermission following Act II of a three act play, two parts of the program are over, but one part remains</td>
<td>Copies a model of tri-folding paper before attempting to insert letter in envelope for mailing</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Benchmark: 1
The learner demonstrates number sense in a variety of situations.

Indicator:

**EXAMPLES ARE NOT HIERARCHICAL**

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<thead>
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<tbody>
<tr>
<td></td>
<td></td>
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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 2
The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicator: 1
The learner matches like numerals.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
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<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matches bus number on ID card to numerals on side of school bus parked in school loading area</td>
<td>Matches times for break written on schedule card to digital clock</td>
<td>Locates post office box that matches numeral on personal ID</td>
<td>Depresses buttons on telephone that match friend's written phone number to place a call</td>
<td>Sets kitchen timer to correspond with cooking time printed on recipe</td>
</tr>
<tr>
<td>Matches locker number on personal schedule card to locker in hallway</td>
<td>Matches dates on written work schedule to dates on personal calendar</td>
<td>Matches price tag on article of clothing to price printed on receipt</td>
<td>Matches seat number printed on ticket stub and numerals on stadium or auditorium seat</td>
<td>Matches expiration date stamped on milk carton with date on calendar</td>
</tr>
<tr>
<td>Matches numerals on intra-school mail to numerals on staff mailboxes</td>
<td>Hangs clothing on rack by matching tag sizes to numbers on racks</td>
<td>Presses button in elevator that corresponds with numeral on appointment card</td>
<td>Makes matched pairs with playing cards during game</td>
<td>Matches channel on television remote that corresponds with numeral printed on program guide</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 2
The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicator: 2
The learner counts manipulatives or other objects.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determines the number of steps he or she must take from the classroom to reach another designated location in the school</td>
<td>Counts the number of tally marks recorded to represent the amount of piecework completed</td>
<td>Counts the number of &quot;dings&quot; in an elevator to determine the floor at which the doors are preparing to open</td>
<td>Counts the number of repetitions he or she performs of an exercise when completing a fitness routine</td>
<td>Counts the number of greeting cards he or she received for a birthday or other holiday</td>
</tr>
<tr>
<td>Counts the number of peers in the class who will be taking part in an upcoming activity (hot lunch, class trip)</td>
<td>Counts the number of shifts completed during the current pay period</td>
<td>Counts the bills returned to him or her in change by a store clerk</td>
<td>Counts the beats in a given piece of music, to know when to &quot;come in&quot; with his or her voice or instrument</td>
<td>Determines the current time by counting the hourly chiming of the family's grandfather or cuckoo clock</td>
</tr>
<tr>
<td>Counts the number of items answered correctly on a given assignment</td>
<td>Participates in completing inventory of stock at job site</td>
<td>Complies with check-out limit for books-on-tape by counting the number of selections he or she wishes to request</td>
<td>Determines the total number of objects included in his or her favorite collections</td>
<td>Counts the number of days until a special event marked on the calendar will take place (vacation, sibling returning from college)</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 2
The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicator: 3
The learner recognizes and/or labels numerals.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
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<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locates homeroom by reading numerals posted on the side of classroom doors</td>
<td>Tells time (for break, lunch, quitting time) by reading a digital clock display</td>
<td>Identifies costs of various items in a store by reading numerals posted on pricing tags</td>
<td>Reads score posted on scoreboard at sporting event</td>
<td>Reads parent's posted work telephone number correctly</td>
</tr>
<tr>
<td>Presses numeral keys on a calculator to coincide with numbers named by peers or paraeducator during a lesson</td>
<td>Locates items in stock room according to shelf or bin number, as directed by job coach</td>
<td>Orders combination meal at fast food restaurant by meal number as displayed on menu</td>
<td>Identifies favorite athlete, in a televised or live game, by identifying the numerals on his or her jersey</td>
<td>Sets radio dial to favorite local station</td>
</tr>
<tr>
<td>Identifies specified volume in a series of books (reference or fiction series)</td>
<td>Reads his or her home address from personal ID card to taxi or van driver who is transporting him or her</td>
<td>Locates aisle designated by store employee in which item he or she wishes to purchase is shelved</td>
<td>Locates proper weights to be used during an exercise routine by reading numerals imprinted on them</td>
<td>Sets microwave timer for specified number of minutes, as requested by parent or caregiver</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 2
The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicator: 4
The learner generates whole numbers.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
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<th>Community</th>
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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keys in numerals on voice output device, to correct answer during classroom discussion</td>
<td>Copies birth date in numerical form from personal identification card</td>
<td>Copies amount of money earned from pay stub onto checking account deposit slip</td>
<td>Writes own telephone number on paper and gives it to a friend</td>
<td>Makes note of phone caller's telephone number for absent parent or sibling</td>
</tr>
<tr>
<td>Copies mathematics problem displayed on classroom overhead</td>
<td>Uses a rubber stamp to put the date on each piece of mail received at work on a given day</td>
<td>Writes down date of special event, from community bulletin board that he or she wants to attend</td>
<td>Records scores in table game or as spectator at sporting event</td>
<td>Copies time for medical exam from appointment card onto personal calendar</td>
</tr>
<tr>
<td>Produces numeral representations correctly, using brailler</td>
<td>Sets dial(s) on imprinting tool to numerals, as directed by job coach, for making price tags</td>
<td>Participates in preparing address labels by typing numerals on computer keyboard</td>
<td>Makes list of page numbers in catalog that includes items of interest to him or her</td>
<td>Writes his or her weight on diet record</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
**Extended Standard 1 – NUMBERS AND COMPUTATION**

General Curriculum Standard 1 – Numbers & Computation

**Benchmark:** 2
The learner demonstrates an understanding of number systems and their properties in a variety of situations.

**Indicator:** 5
The learner establishes number / numerical correspondence.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counts school newsletters according to number of students in homerooms</td>
<td>Labels boxes with appropriate stickers to show the number of pieces of contents</td>
<td>Puts the correct number of each purchase itemized on grocery list into shopping cart</td>
<td>Counts check marks and records the total number of items collected in scavenger hunt</td>
<td>Assembles correct number of ingredients, as indicated on picture recipe</td>
</tr>
<tr>
<td>Gets equipment for cooperative group's lab activity from written numeric list of necessary supplies (4 straws, 1 ruler)</td>
<td>Packages items accurately following pictorial guide with numeric entries (2 wing nuts, 2 bolts, 4 screws)</td>
<td>Utilizes express check-out in store only when he or she has posted number of items or fewer</td>
<td>Keeps a written record of the number of times he or she performs each exercise in fitness routine</td>
<td>Feeds pet designated amount of food each day (2 scoops), according to posted chore list</td>
</tr>
<tr>
<td>Follows assignment written on board and produces requested number of practice repetitions (2 sentences, write facts 4 times)</td>
<td>Prepares plant food or fertilizer mixture by combining designated measures of chemicals (4 capfuls, 2 cups)</td>
<td>Checks with posted signs regarding the number of garments allowed, at one time, in the fitting room</td>
<td>Checks completeness of newly purchased model kit, comparing contents with numerical list of parts</td>
<td>Participates in preparation of own daily or weekly medications (counting out pills according to written dosages)</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 2
The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicator: 6
The learner identifies place value.

EXAMPLES ARE NOT HIERARCHICAL
This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realizes that the order of numerals in any given number makes a difference in their value (05≠50, 371≠173)</td>
<td>Records a zero in front of single digit numerals used to represent the months January - September on computerized forms</td>
<td>Identifies the floor on which an office is likely to be located by the numeral in the 100's place (farthest to the left) in the written room number</td>
<td>Locates friend's apartment by the numeral in the units place (farthest to the right)</td>
<td>Enters a zero before a single digit channel number when using a remote control to select a television program</td>
</tr>
<tr>
<td>Exchanges a bundle of 10 unit blocks (using base 10 block manipulatives) for 1 ten</td>
<td>Files numerically by 1's, 10's, and / or 100's</td>
<td>Realizes that outdoor temperatures may be recorded as either above or below zero</td>
<td>Chooses appropriate weights for use with fitness machines (10lbs vs 100 lbs)</td>
<td>Uses the correct number of zeros following a numeral to enter the appropriate microwave cooking time</td>
</tr>
<tr>
<td>Lines up numerals vertically in a problem when copying from the overhead</td>
<td>Enters nine numerals that comprise his or her social security number appropriately with dashes in correct places</td>
<td>Enters two zeros following even dollar amounts, when using calculator (on grocery store cart) to total purchases</td>
<td>Realizes that some telephone calls (long distance) require that he or she dial three extra digits for the area code</td>
<td>Uses final two digits of the year's four (not random numerals) on forms or official papers to designate year</td>
</tr>
</tbody>
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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark:  2
The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicator:  7
The learner identifies symbols for dollar and cent notation.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
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<tbody>
<tr>
<td>Correctly identifies the $ and ¢ as indicating money amounts</td>
<td>Understands the difference between an hourly wage and a piece work rate of pay</td>
<td>Locates decimal point correctly within a numeral sequence when using an ATM machine</td>
<td>Differentiates price tags and sizing tags on clothing displayed for sale</td>
<td>Enters dollar amount in appropriate column when preparing deposit slip</td>
</tr>
<tr>
<td>Understands that a decimal point separates dollars and cents values in a written money expression</td>
<td>Locates prices for items displayed in break room vending machine, even if $ and ¢ are not noted</td>
<td>Locates the price of food or drink item he or she wishes to order on menu</td>
<td>Checks flyer / notice regarding an entertainment event for printed admission fee</td>
<td>Differentiates numeral representing quantity in multiple purchase newspaper ads from price notation (2 for $1.00)</td>
</tr>
<tr>
<td>Realizes that $30 and $.30 (or 30¢) do NOT represent the same amount of money</td>
<td>Identifies total amount of money earned during pay period from among many numerals on pay stub</td>
<td>Understands conventions used in check writing to denote cents (00/100, XX/100)</td>
<td>Differentiates money amounts from other numeric references (spaces to move, turns to take) in table game components</td>
<td>Understands that account balance on statement received in the mail represents the total amount of money he or she has in the bank</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

The learner demonstrates an understanding of number systems and their properties in a variety of situations.

Indicator:

EXAMPLES ARE NOT HIERARCHICAL

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**Extended Standard 1 – NUMBERS AND COMPUTATION**

**General Curriculum Standard 1 – Numbers & Computation**

**Benchmark:** 3
The learner uses numerical estimation of a variety of situations.

**Indicator:** 1
The learner identifies same and different.

**EXAMPLES ARE NOT HIERARCHICAL**
This is evident, for example when the learner:

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</tr>
</thead>
<tbody>
<tr>
<td>Uses pan balance to determine amounts of materials that have similar weights in science class</td>
<td>Restocks shelves appropriately, grouping new stock with items of similar size/shape</td>
<td>Attempts to distribute weight of purchases evenly among sacks when bagging own groceries</td>
<td>Attempts to sink a goal from the same distance as his or her successful opponent in basketball shooting contest</td>
<td>Fills individual snack bowls, for each of his or her guests with similar amounts of popcorn</td>
</tr>
<tr>
<td>Attempts to take his or her place in line when teacher directs the group to &quot;line up according to height&quot;</td>
<td>Identifies pieces of mail that have same designated zip code digits as model</td>
<td>Chooses a differently priced item from menu when companion says his or her first choice costs too much</td>
<td>Attempts to locate hobby shop item on store shelves that was advertised in sale ad</td>
<td>Divides vacuuming to be done around the house with siblings, so that each does approximately the same amount</td>
</tr>
<tr>
<td>Locates similar textures of surfaces in his or her physical environment to those found on orientation and mobility map</td>
<td>Follows model to place address labels appropriately (similar distance from lower edge on envelopes for mailing)</td>
<td>Discriminates series of weather alert sirens from regularly scheduled test of emergency broadcast system</td>
<td>Compares prices of various styles or brands of clothing items when window shopping</td>
<td>Complains that sibling was allowed to engage in some preferred activity longer than he or she (talking on telephone, playing video game)</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 3
The learner uses numerical estimation of a variety of situations.

Indicator: 2
The learner identifies and/or estimates: more, less, or equal.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Complies with teacher request to use less glue or paint on the art activity</td>
<td>Serves customers equal amounts of food in restaurant or cafeteria</td>
<td>Realizes that larger quantities or containers of food are likely to cost more than smaller ones of the same item</td>
<td>Compares scores of all players in game to identify the winner at the game's conclusion</td>
<td>Cuts equally-sized pieces of cake for all in attendance at a birthday party</td>
</tr>
<tr>
<td>Determines if one set of objects has more, less, equal, or about the same number as the second set of the same kind of objects</td>
<td>Compares time sheet from current pay period to last and estimates if paycheck should be more, less, or approximately equal</td>
<td>Recognizes that going to a popular restaurant at a busy meal time will likely result in his or her encountering more people and having a longer wait</td>
<td>Realizes that the cost of catalog, mail order, or internet purchase will be more than suggested retail price, due to shipping and handling</td>
<td>Recognizes that if he or she is cooking for self, less food is needed than if cooking for entire family</td>
</tr>
<tr>
<td>Selects appropriately from a one-digit, two-digit, and three-digit number (3, 30, 300) to estimate the amount of objects in a set</td>
<td>Identifies which bag, shelf, or bin should hold more or less of equally sized inventory items</td>
<td>Uses scale in post office and determines if envelope weighs more or less than the allowed limit for one stamp</td>
<td>Recognizes which person (including him or herself) is doing more or less talking in social conversation</td>
<td>Calls parents' attention to situation in which sibling receives more of one of his or her preferred privileges, food, etc., than he or she does</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark:  3
The learner uses numerical estimation of a variety of situations.

Indicator:  3
The learner matches equivalent sets.

EXAMPLES ARE NOT HIERARCHICAL
This is evident, for example when the learner:

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Distributes an equivalent set of</td>
<td>Places one salt and one pepper shaker on each table</td>
<td>Buys package of hot dogs buns that matches the</td>
<td>Packs a matching number of shirts or sweaters and</td>
<td>Takes an equivalent number of notes and</td>
</tr>
<tr>
<td>supplies or materials to each class</td>
<td>by matching model</td>
<td>number of hot dogs he or she is purchasing</td>
<td>slacks or skirts when packing for an out of town</td>
<td>envelopes from a drawer in preparation</td>
</tr>
<tr>
<td>member</td>
<td></td>
<td></td>
<td>trip</td>
<td>for writing thank you notes</td>
</tr>
<tr>
<td>Stores chairs in equivalent stacks</td>
<td>Packages advertised number of items in each container</td>
<td>Assembles centerpieces matching model for</td>
<td>Joins group or team that needs one more member in</td>
<td>Gets a matching number of nuts and</td>
</tr>
<tr>
<td>of four when cleaning up after</td>
<td>utilizing packing jig (shoes in shoebox)</td>
<td>appropriate number of each element included</td>
<td>order to play in a game</td>
<td>bolts as requested, when participating in</td>
</tr>
<tr>
<td>extracurricular meeting</td>
<td></td>
<td></td>
<td></td>
<td>the assembly of a bookshelf with parent or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sibling</td>
</tr>
<tr>
<td>Groups equal sets of 2, 3, 5, or 10</td>
<td>Places a complete set of towels (bath, hand, washcloth)</td>
<td>Staples front and a back on each placard, matching</td>
<td>Participates in a game that involves matching tiles</td>
<td>Sets table with appropriate number or</td>
</tr>
<tr>
<td>manipulatives that have elements</td>
<td>in each guest’s room</td>
<td>model, while preparing signs advertising a</td>
<td>with equivalent dot configurations</td>
<td>type of utensils at each place setting,</td>
</tr>
<tr>
<td>that have 2, 3, 5, or 10 elements</td>
<td></td>
<td>community event</td>
<td></td>
<td>as modeled by parent</td>
</tr>
</tbody>
</table>

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### Extended Standard 1 – NUMBERS AND COMPUTATION

**General Curriculum Standard 1 – Numbers & Computation**

**Benchmark:** 3  
The learner uses numerical estimation of a variety of situations.

**Indicator:** 4  
The learner rounds whole numbers.

**EXAMPLES ARE NOT HIERARCHICAL**  
This is evident, for example when the learner:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Counts a partially read page as one when recording the number of pages read in her or her reading log</td>
<td>Fills an order with a sufficient number of packages of an item to cover the number requested</td>
<td>Gives clerk one dollar more than the total amount to cover costs of his or her purchase</td>
<td>Selects the 10 lb. weight nearest the poundage prescribed in his or her therapy regimen</td>
<td>Cooks two pieces of toast, if he or she is supposed to eat 1-1.5</td>
</tr>
<tr>
<td>Records distances using numbers in the tens / hundreds place when reading mileage from a map</td>
<td>Records hours worked on time sheet, rounding up to the next hour when a job takes more than 30 minutes; not showing additional hour if job takes less than 30 minutes</td>
<td>Buys appropriate number of multiple-item packages to get the quantity of items he or she needs (2 packages of 8 count plates to get 10)</td>
<td>Adds the total number of miles he or she walked during a week and rounds the total for recording purposes</td>
<td>Uses one egg when preparing half of a recipe that calls for one egg</td>
</tr>
<tr>
<td>Rounds a decimal number to the nearest whole number</td>
<td>Includes a partial grouping of five tally marks (as &quot;one&quot;) when totaling work accomplished at end of his or her shift</td>
<td>Rounds time required for travel to next larger increment when arranging van transportation to take him or her to an appointment</td>
<td>Buys smallest package available, when purchasing craft supplies and only one of a particular item is needed</td>
<td>Feeds pet full scoop more than the written number that includes a fraction, if he or she is unsure of meaning</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 3
The learner uses numerical estimation of a variety of situations.

Indicator: 5
The learner estimates amount of purchase.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<thead>
<tr>
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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realizes that items displayed during book fair, school spirit week sales, are not free but do cost money</td>
<td>Estimates the weekly cost of work-related transportation, counting both getting there and returning home</td>
<td>Understands that each item he or she puts into the shopping cart will cost him or her something in order to take it home</td>
<td>Realizes that purchase of a movie ticket covers only the cost of admission and that additional money is required to purchase snacks</td>
<td>Requests to purchase a realistically priced gift for a friend (CD vs car stereo system, holiday pin vs diamond ring)</td>
</tr>
<tr>
<td>Realizes that whenever a purchase is made, the amount he or she will be required to pay will be more that the price shown, due to tax</td>
<td>Directs customer to departments in store according to money they wish to spend (designer clothes, store brand, fine jewelry, costume)</td>
<td>Estimates the total purchase price of several of the same item (4 candy bars @ 50¢ each will cost $2.00)</td>
<td>Estimates the cost of a catalog, mail order, Internet purchase by referring to shipping and handling chart and adding those costs to item's price</td>
<td>Estimates the amount of money he or she will need in order to purchase all ingredients to make favorite snack</td>
</tr>
<tr>
<td>Chooses items for lunch that correspond with the amount of money he or she has available to spend</td>
<td>Estimates the number of hours / days her or she will need to work in order to have enough money for a desired purchase</td>
<td>Realizes that when purchasing only one of an item priced 2 for a given dollar amount, he / she may have to pay more than half of the advertised cost</td>
<td>Adjusts expectation for purchase price of admission ticket according to day of week or time of day attendance at activity is planned (weekend rate)</td>
<td>Divides the total amount of money he or she has available to purchase holiday gifts, in order to determine how much can be spent on each family member</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 3
The learner uses numerical estimation of a variety of situations.
Indicator: 6
The learner estimates quantities and checks reasonableness of results.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Recognizes that he or she cannot purchase a full lunch in the school cafeteria if he or she has only $1.00</td>
<td>Estimates the amount of money he or she would like to make in a regular two week pay period, then checks this total against typical pay stub</td>
<td>Adds rounded-up prices of items for purchase on shopping cart calculator and compares total with amount billed by clerk</td>
<td>Guesses how many pennies are in his or her collection of loose change, then rolls pennies in bank wrappers to check his or her estimation</td>
<td>Guesses how long it will take to dust four rooms in the house then compares this estimate to the time required to finish one room</td>
</tr>
<tr>
<td>Divides a class assignment into segments over several days, and tries to accomplish the amount of work that is projected for the first day</td>
<td>Projects the number of hours he or she would like to work in a given month and compares this number with previous time sheets</td>
<td>Gathers the number of programs he / she thinks will be needed to give one to each person in a row, then checks to ensure that each person received one</td>
<td>Estimates the amount of time needed to complete a latch hook project, then checks the number of rows that can be completed in one block of time</td>
<td>Serves self what he or she believes to be a reasonable portion during a family meal and compares to size of other's servings</td>
</tr>
<tr>
<td>Estimates the amount of time he or she will need to be dismissed early in order to change into gym clothes for P.E. class, then compares the actual time changing took on first day</td>
<td>Estimates the amount of extra money he or she should earn by working on a Sunday, and checks by multiplying typical daily rate by 2</td>
<td>Arranges for transportation to arrive an estimated number of minutes prior to appointment time, then checks the appropriateness of his or her estimation upon actual arrival at destination</td>
<td>Suggests putting together a &quot;pick up&quot; game based on the number of peers in the area (peers confirm if a sufficient number of players are present)</td>
<td>Projects the number of boxes he or she thinks will be needed to pack his or her bookshelf for moving, then packs 1 or 2 to check the accuracy of prediction</td>
</tr>
</tbody>
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Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 3
The learner uses numerical estimation in a variety of situations.

Indicator:

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Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator: 1
The learner understands add means combine / put together; subtract means, compare sets, find out how many more or take-away.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moves two or more</td>
<td>Adds each hour of work completed each day to weekly</td>
<td>Understands that a combination platter in a restaurant involves the</td>
<td>Adds tally marks in groups of five to a running record</td>
<td>Puts one penny at a time into a bank</td>
</tr>
<tr>
<td>groups of manipulatives</td>
<td>total, by combining day's tally marks with those</td>
<td>addition of extra or other items to the order of a particular meal</td>
<td>to keep his or her score in a game</td>
<td></td>
</tr>
<tr>
<td>together physically when</td>
<td>already recorded on weekly sheet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>teacher or peer says to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;add&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removes item from a</td>
<td>Understands that making a deposit adds money to his</td>
<td>Continues depositing coins into a vending machine until money adds</td>
<td>Processes &quot;lose one life&quot; during a video game by</td>
<td>Removes one penny at a time from a bank</td>
</tr>
<tr>
<td>group of manipulatives</td>
<td>or her account; making a withdrawal subtracts (takes</td>
<td>to the amount required for purchase</td>
<td>subtracting one to determine the total number</td>
<td>while expressing or saying the words</td>
</tr>
<tr>
<td>when teacher or peer</td>
<td>away) money</td>
<td></td>
<td>of chances remaining</td>
<td>&quot;take away&quot;</td>
</tr>
<tr>
<td>directs learner to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;subtract one&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understands that teacher's</td>
<td>Takes the item a customer just named from the group</td>
<td>Understands that a finance charge will be added to your bank</td>
<td>Understands that fitness instructor wants him or her</td>
<td>Understands that when parent says, &quot;I'll</td>
</tr>
<tr>
<td>directive to &quot;add</td>
<td>of items prepared for an original order, when the</td>
<td>account means that more debt will be combined with the money he or</td>
<td>to combine a new exercise with the old work-out</td>
<td>add that to your wish list,&quot; it means</td>
</tr>
<tr>
<td>minutes&quot; to his or her free</td>
<td>customer requests that an item be subtracted</td>
<td>he or she already has</td>
<td>routine when told to &quot;add this exercise&quot;</td>
<td>that the item will be combined with</td>
</tr>
<tr>
<td>time allocation involves a</td>
<td></td>
<td></td>
<td></td>
<td>what is already wanted</td>
</tr>
<tr>
<td>bonus / reward of more time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(not less)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### Extended Standard 1 – NUMBERS AND COMPUTATION

**General Curriculum Standard 1 – Numbers & Computation**

**Benchmark:** 4

The learner demonstrates an understanding of computation in a variety of situations.

**Indicator:** 2

The learner adds one more to a set.

## EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
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</thead>
<tbody>
<tr>
<td>Hands peer a single item when asked to &quot;give me one more&quot; of the manipulatives being used during the lesson</td>
<td>Answers customer's request for another packet of ketchup / mustard/ by giving him one more</td>
<td>Requests a single additional side dish with meal order when waitress explains that his or her meal choice comes with one more side dish</td>
<td>Increases the number of repetitions he or she completes of each exercise by one</td>
<td>Gives pet one additional measure of food when told by sibling or parent that amount originally given was not enough</td>
</tr>
<tr>
<td>Adds one microscope slide to each lab group's supplies when given 12 slides by teacher and told that each set of partners will need one more</td>
<td>Puts an additional item into the box he or she is packing when notices that one slot among the dividers is vacant</td>
<td>Applies one additional stamp to a letter or package he or she is mailing when told by clerk that there is not enough postage</td>
<td>Puts one additional piece of candy into each party bag when he or she notices that several pieces remain after initial preparation</td>
<td>Adds an additional place setting to dinner table when told there will be one more for dinner tonight</td>
</tr>
<tr>
<td>Adds one sheet of graph paper to the cubbies that include each student's work materials as directed by the teacher</td>
<td>Adds one blue sheet to each stack of collated papers when told by job coach that the blue ones were mistakenly left out</td>
<td>Complies with companions directive, by taking only one, when told he or she may have one more of favored food item</td>
<td>Adds one seed to the pair he or she had already put in each of the starter pots he or she is planting</td>
<td>Distributes one additional napkin to each person eating when handed a stack of napkins</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator: 3
The learner adds or subracts sets to create new set.

EXAMPLES ARE NOT HIERARCHICAL

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<tr>
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</thead>
<tbody>
<tr>
<td>Combines the number of students requesting hot lunch and those bringing sack lunch to get the total lunch order for a class</td>
<td>Subtracts the total number of hours of sick leave taken during a pay period from the number of work hours scheduled to determine number of hours actually worked</td>
<td>Adds the number of his or her personal suitcases to the number each family member has to determine the total number of bags that must be retrieved from luggage pick-up</td>
<td>Crosses out the names of teams that have been eliminated from a sports tournament until ultimately left with only the winner</td>
<td>Combines two or more types of canned foods to create a new dish for dinner (fruit salad, casserole)</td>
</tr>
<tr>
<td>Subtracts the number of animal species from the total number of living things in a scene to determine the number of plants</td>
<td>Circles the notations of parts (fractions) of hours worked that can be added to the reported number of hours when totaling hours worked on time sheet</td>
<td>Removes commemorative quarters (for personal collection) from his or her change to determine the amount of money that remains to be spent</td>
<td>Combines pre-measured amounts of two primary color paints to create a secondary color (yellow + blue = green)</td>
<td>Removes all white pieces of clothing from pile of dirty laundry to assemble one load for the washing machine</td>
</tr>
<tr>
<td>Notices change in beat of selection in music class when drums are taken away (not played)</td>
<td>Assembles sets of 10 washers, 10 wing nuts, and 10 bolts into 10 units for packaging</td>
<td>Combines three different forms to be turned in to one particular office (home health, social security) into one envelope</td>
<td>Mixes plant food concentrate with water to make a mixture of appropriate strength for watering houseplants</td>
<td>Combines dry ingredients and liquid ingredients to make cake batter</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator: 4
The learner skip counts by 5's, 10's, and 25's.

EXAMPLES ARE NOT HIERARCHICAL
This is evident, for example when the learner:

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</tr>
</thead>
<tbody>
<tr>
<td>Skip counts by 5 to 100, while peer assists with a hundreds chart</td>
<td>Arranges quarters in $1.00 stacks, counting &quot;25, 50, 75, 100&quot;</td>
<td>Count dimes to reach amount of purchase that is evenly divisible by 10</td>
<td>Skip counts by 10 to total the amount of points that remains in his or her hand in face cards during a game</td>
<td>Skip counts by 5 the numerals on a traditional clock face, to determine the number of minutes after the hour</td>
</tr>
<tr>
<td>Uses repetitive addition function on calculator to skip count by 5, 10, or 25</td>
<td>Skip counts by 5 to determine how many five lb. bags of sugar are needed to make a given number of pounds (divisible by 5)</td>
<td>Totals number of envelopes stuffed for volunteer event by counting tally marks recorded in groups of five</td>
<td>Calls out the distance a runner gains on the football fields in increments of 10 yards</td>
<td>Counts the number of pieces of candy that were distributed to children by skip counting the empty bags using increments of 25</td>
</tr>
<tr>
<td>Combines 10-unit blocks (using base 10 manipulatives), while skip counting by 10 to 100</td>
<td>Skip counts by 10 when participating in inventory of items that are sold in packages of 10</td>
<td>Inserts quarters into vending machine, counting by 25¢, until he or she reaches or exceeds posted price of desired item</td>
<td>Skip counts by 5 to total the amount of money he or she has saved in nickels</td>
<td></td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator: 5
The learner understands multiply means adding equal groups; divide means separating into equal groups.

EXAMPLES ARE NOT HIERARCHICAL

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Arranges a set of manipulatives into groups of two, then skip counts by 2 to determine the total amount of items in the set</td>
<td>Calculates the total number of hours worked in one week by multiplying the number of days worked times the number of hours worked in one day</td>
<td>Understands that multiplying the number of dollars spent by a given tax amount (rate) is the same as adding that many cents tax for each dollar spent</td>
<td>Shares a dozen cookies among self and three friends by distributing them, one at a time to each person until all are given out and checks for equality</td>
<td>Understands parent request that the money be divided equally among siblings means that each will receive the same amount</td>
</tr>
<tr>
<td>Understands that multiplying a group of objects by 10 is going to result in a significantly larger number that if only 10 objects were added to the number in the group</td>
<td>Interprets job supervisor's report that &quot;the vote was divided&quot; to mean that equal numbers of workers preferred each of the choices offered</td>
<td>Realizes that some advertising flyers might be left over after he or she helps distribute an equal number to each of the businesses on a given block</td>
<td>Interprets the reference that his or her &quot;flowering plants are multiplying&quot; to mean that the plants are growing at a very rapid rate - instead of the blooms increasing one at a time</td>
<td>Realizes that in four weeks, he or she will have four times as much allowance money as he or she is given this one week</td>
</tr>
<tr>
<td>Follows teacher's instructions to divide your paper in half by folding the paper into two equal parts</td>
<td>Understands that the phrase division of labor, refers to a group of employees each completing an equal portion of work</td>
<td>Determines the number of people in attendance at a meeting by skip counting the tables at which people sat by 5</td>
<td>Follows peer's suggestion to divide the pieces when working on a puzzle together, by separating border and interior pieces</td>
<td>Cuts the remaining portion of a pie into pieces so that each person present receives an equal amount</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator: 6
The learner understands mathematical symbols (+, -, ÷, x, =).

EXAMPLES ARE NOT HIERARCHICAL

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Locates matching symbols on calculator (+, -, ÷, x, =)</td>
<td>Locates &quot;+&quot; and &quot;-&quot; on the computer keyboard</td>
<td>Translates a numerical expression written 3/99¢</td>
<td>Places battery in radio, CD player, or TV remote, correctly matching the &quot;+&quot; and &quot;-&quot; symbols</td>
<td>Follows picture recipe written with symbols &quot;+ 1 egg&quot;</td>
</tr>
<tr>
<td>Realizes the interchangeability of &quot;x&quot; and &quot;*&quot; symbols</td>
<td>Recognizes correct columns on inventory forms to enter &quot;extra&quot; (+) and &quot;missing&quot; (-) items</td>
<td>Looks on receipt to check accurate recording of &quot;taking away&quot; (-) money owed on a lay-away payment</td>
<td>Uses mathematical symbols to identify points carried / won (+) and penalized / lost (-) on game score sheet</td>
<td>Locates mathematical symbols (+, -, ÷, x) on a computer-based calculator</td>
</tr>
<tr>
<td>Associates mathematical symbols with the correct operation (&quot;+&quot; = add, &quot;x&quot; = multiply, etc.)</td>
<td>Records hours worked, to be added to pay total (+), and hours missed, to be deducted from total (-)</td>
<td>Hits the &quot;+&quot; key on calculator on grocery cart (when companion enters numbers) to keep a running total of purchases</td>
<td>Recognizes power doubler (multiplier) in a video game, as denoted by &quot;*2&quot;</td>
<td>Identifies temperatures as above (+) or below (-) zero, based on mathematical symbols</td>
</tr>
</tbody>
</table>

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### Extended Standard 1 – NUMBERS AND COMPUTATION

#### General Curriculum Standard 1 – Numbers & Computation

**Benchmark:** 4
The learner demonstrates an understanding of computation in a variety of situations.

**Indicator:** 7
The learner uses one or more computational methods to add, subtract, multiply, and/or divide whole numbers.

### EXAMPLES ARE NOT HIERARCHICAL

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<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Completes written assignment given in mathematics class (+, -, +, x)</td>
<td>Determines how many additional work tasks need to be completed to reach a pre-set quota (-)</td>
<td>Rounds $ and ¢ amounts to the next dollar figure to add the total of desired purchases (+)</td>
<td>Splits the group of friends / peers into equal teams (+)</td>
<td>Helps to keep a running record of the number of miles traveled on a family car trip (+)</td>
</tr>
<tr>
<td>Moves from whole number to whole number (skipping intermediate markings) on number line, when using finger/pointer to mark steps of computation process</td>
<td>Participates in figuring what the amount of his / her paycheck should be for the first pay period following a new pay raise (+ or x)</td>
<td>Computes the price per item when he or she encounters pricing written (2 for ____, 4 for ____ (+))</td>
<td>Totals the number of collector cards in his or her collection by calculating the number of pages X the number of cards per page (*)</td>
<td>Subtracts the amount of time he or she has just watched TV from the total allotment of viewing time he or she has, to see how much time remains.</td>
</tr>
<tr>
<td>Participates in keeping track of classes or credits completed at the end of each semester's work (+)</td>
<td>Computes the number of items to be packed per box when the job coach instructs him or her to pack only 1/2 as many</td>
<td>Figures out the necessary departure time, in order to arrive at a school or community event punctually (-)</td>
<td>Keeps score at a sporting event (+)</td>
<td>Participates in doubling a recipe when guests are coming for dinner (*)</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

General Curriculum Standard 1 – Numbers & Computation

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator: 8
The learner performs computations with money amounts.

**EXAMPLES ARE NOT HIERARCHICAL**
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</tr>
</thead>
<tbody>
<tr>
<td>Keeps a running total of lunch items selected, so as not to exceed the amount of money he or she has available</td>
<td>Multiplies the number of hours worked by his or her hourly wage, to determine the amount of money to expect in next paycheck</td>
<td>Subtracts withdrawals made from savings account to determine remaining balance</td>
<td>Pays for two admission tickets - one for self and one for invited friend (movie, sporting event, concert)</td>
<td>Participates in developing a personal budget: savings, gifts for others, personal entertainment</td>
</tr>
<tr>
<td>Calculates the total late fee due for overdue library materials</td>
<td>Determines the appropriate amount of postage required for outgoing mail</td>
<td>Figures appropriate tip to leave for waiter or waitress in restaurant</td>
<td>Adds shipping and handling costs to a purchase he or she helped a peer / family member make from a catalog or the Internet</td>
<td>Totals personal profits from the family's garage sale</td>
</tr>
<tr>
<td>Works with peers in a cooperative group to total profits/losses in an &quot;exchange city&quot; / economics / business class project</td>
<td>Brings his or her checking account up to date following automatic deposit of payroll check</td>
<td>Tracks money spent at the laundromat doing laundry over a designated period of time (1 visit: 1 month)</td>
<td>Participates in totaling the amount of money raised from a team fundraising activity</td>
<td>Participates in figuring out how many weeks he or she will have to save allowance in order to have enough money to make a major personal purchase</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION
General Curriculum Standard 1 – Numbers & Computation

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator: 9
The learner performs one-step practical word problems.

EXAMPLES ARE NOT HIERARCHICAL
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<tbody>
<tr>
<td>Asks for the correct number of additional items needed when asked to distribute same to classmates, but comes up short (I need more)</td>
<td>Determines how much time he or she has to complete a designated task, given job start and end times</td>
<td>Determines correct amount when companion asks, &quot;How much more money would you need to buy a second _____?&quot;</td>
<td>Figures out the number of bowling pins needed for a &quot;spare,&quot; given the number he or she knocked down with first ball</td>
<td>Answers parent's question regarding how many loads of laundry have been completed</td>
</tr>
<tr>
<td>Calculates the amount of money he or she needs to borrow from a peer (to add to own money) in order to purchase a special school spirit item</td>
<td>Responds with correct answer when supervisor asks, &quot;How many more tables do you need to restock?&quot; (salt, napkins)</td>
<td>Answers the question, &quot;How many more stamps do you need to get a free _____?&quot; (from frequent buyer card)</td>
<td>Calculates the amount of remaining money he or she has to spend after making a purchase at a hobby / sports store</td>
<td>Determines how much money can be spent on each family member's gift, from his or her shopping fund, in order to have a gift for all</td>
</tr>
<tr>
<td>Determines the number of his or her cooperative group has remaining to turn in a major social studies project by the due date</td>
<td>Figures own new hourly rate of pay after seeing employee class raises posted</td>
<td>Calculates the time for departure, in order to reach his or her destination punctually, when given travel time</td>
<td>Calculates a correct answer to the question, &quot;How long have you been on the phone?&quot;</td>
<td>Determines what time a dish (he or she has put into the oven) should finish baking, given required cooking time</td>
</tr>
</tbody>
</table>

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Extended Standard 1 – NUMBERS AND COMPUTATION

Benchmark: 4
The learner demonstrates an understanding of computation in a variety of situations.

Indicator:

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</tbody>
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Standard 2
Algebra

The learner uses algebraic concepts and procedures in a variety of situations.

Clarifying Examples

Clarifying examples show how a learner MIGHT demonstrate an indicator, using practical, real-world examples. Clarifying examples are NOT listed in hierarchical order.

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Extended Standard 2 – ALGEBRA

Benchmark: 1
The learner demonstrates an understanding of relationships in patterns in a variety of situations.

Indicator: 1
The learner identifies patterns presented in a variety of formats: numerical, visual, oral, kinesthetic, pictorial, tabular, graphical, or listing.

EXAMPLES ARE NOT HIERARCHICAL

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</tr>
</thead>
<tbody>
<tr>
<td>Uses a combination lock on locker (right to left to right pattern)</td>
<td>Points out that chairs are all stacked in uniform groups (4 high, 6 high)</td>
<td>Understands that numbered streets go one way and named streets go the other, in community's downtown area</td>
<td>Recognizes the patterns that indicates a game he or she is playing has been won (three-in-a-row; all alike)</td>
<td>Comments that silverware on the dinner table is arranged in same traditional pattern by each plate</td>
</tr>
<tr>
<td>Points out similarity of units' digits in any given column on a hundreds chart</td>
<td>Identifies a packet of printed materials that is not the same as the others</td>
<td>Identifies the weather pattern forecast on television news</td>
<td>Recognizes the dot pattern that represents each numeral on a number cube</td>
<td>Calls sibling's attention to refrigerator magnets arranged in a pattern (A-B-A-B)</td>
</tr>
<tr>
<td>Identifies a pattern of notes played on an instrument in music or chorus class</td>
<td>Identifies an entry that is out-of-order in alphabetic or numeric file (braille or Arabic)</td>
<td>Recognizes that house numbers are odd on one side of street and even on the other side</td>
<td>Comments on the repetitive nature of the movement pattern in a prescribed dance step</td>
<td>Notices digital time displays that comprise particular patterns (12:12, 3:33, 11:11)</td>
</tr>
</tbody>
</table>

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**Extended Standard 2 – ALGEBRA**

Benchmark: 1
The learner demonstrates an understanding of relationships in patterns in a variety of situations.

Indicator: 2
The learner creates a pattern.

**EXAMPLES ARE NOT HIERARCHICAL**

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Plays a repetitive beat on a musical instrument in music / band / orchestra class</td>
<td>Schedules deliveries according to some logically patterned route</td>
<td>Arranges shopping list in correspondence with aisle sequences and item locations in grocery store</td>
<td>Plants flowers to result in some type of decorative arrangement (color, height, type)</td>
<td>Arranges personal stuffed animal / beans collection on shelves according to criterion of choice (size, type, animal family)</td>
</tr>
<tr>
<td>Constructs a reasonable schedule for re-visiting his or her locker between classes</td>
<td>Shelves items by ordering the same variety of items according to some criterion (small to large, large to small)</td>
<td>Creates a decorative design with colored napkins, on the serving table, for a reception or club party</td>
<td>Arranges craft materials (quilt pieces, tiles, appliqué) to create a product with an alternating color / texture pattern</td>
<td>Participates in labeling own clothing according to what, together, would comprise a coordinated outfit</td>
</tr>
<tr>
<td>Creates a word family by combining various initial consonant cards with ending &quot;word chunks&quot;</td>
<td>Participates in the creation of a mnemonic rhyme / saying to help him or her remember key steps of a work routine</td>
<td>Determines a series of patterned movements that will allow him or her to active handicapped entrances switches to gain access to community buildings</td>
<td>Lines peers up, for a game, in order of height (ascending / descending)</td>
<td>Produces a series of patterned sounds with computer multimedia software</td>
</tr>
</tbody>
</table>

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 2 – ALGEBRA

Benchmark: 1
The learner demonstrates an understanding of relationships in patterns in a variety of situations.

Indicator: 3
The learner matches or generalizes patterns.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moves to his or her new position correctly, following rotation pattern, during volleyball game in physical education class</td>
<td>Stores tools used on the job by replacing them in the appropriate form-fitting plastic holders / designated silhouette outlines at the conclusion of a day's work</td>
<td>Determines which direction to walk on the street, to locate a certain address, by taking note of the progressively increasing /decreasing street numbers</td>
<td>Duplicates the arrangement he or she creates for elements of a personal collection in every subset of that collection (card sequence in each set, dates of each coin denomination)</td>
<td>Prepares the dining table for his or her family's evening meal by duplicating the model place setting set-up by parent or sibling at each family member's seat</td>
</tr>
<tr>
<td>Follows the established number pattern to complete empty cells in a hundreds chart</td>
<td>Cuts materials into designated lengths from marked pattern(s) (plastic, fabric, wire)</td>
<td>Locates the up or down escalators on each floor of a particular store by familiarity with their locations on other floors</td>
<td>Constructs a model according to the schematic provided in craft kit</td>
<td>Loads dishwasher at relative's home following the same guidelines that he or she uses to load own family's dishwasher at home</td>
</tr>
<tr>
<td>Places food in designated sections of divided lunch tray when working on serving line in school cafeteria</td>
<td>Scans each column or row (in a bank of mailboxes) utilizing the same pattern when attempting to locate a particular mailbox</td>
<td>Prepares flyers for mailing by tri-folding papers through a series of patterned movements</td>
<td>Repeats a particular move in game (board game, sporting event) that, in the past, proved to be successful for him or her</td>
<td>Folds all hand towels and bath towels according to pattern demonstrated by parent or sibling</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 2 – ALGEBRA

General Curriculum Standard 2 – Algebra

Benchmark: 1
The learner demonstrates an understanding of relationships in patterns in a variety of situations.

Indicator: 4
The learner generalizes cyclical patterns.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School/Community</th>
<th>Vocational Career</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Understands that four seasons must past before his or her next birthday</td>
<td>Understands that he or she goes to work and gets off at the same time each work day</td>
<td>Understands that most stores open in the morning and close in the evening</td>
<td>Realizes that an amusement park ride will return to the point where he or she got on</td>
<td>Identifies that the morning is when he or she gets up to go to work or school</td>
</tr>
<tr>
<td>Understands the routing of going to school Monday through Friday and staying home on Saturday and Sunday</td>
<td>Understands that he or she receives a paycheck after every two weeks of work</td>
<td>Anticipates viewing holiday lights and decorations after the Thanksgiving season</td>
<td>Follows the sequences for completing a ceramic project at the community center</td>
<td>Understands that after a room is cleaned, it will get dirty and will need to be cleaned again</td>
</tr>
<tr>
<td>Follows class schedule when moving from class to class</td>
<td>Recognizes that he or she will be dropped of at home according to the same route (after Mary, before John)</td>
<td>Realizes that when a traffic light turns yellow, red will follow shortly</td>
<td>Realizes, when playing a game with three friends, that he or she will have every fourth turn</td>
<td>Prepares for menstrual cycle needs each month</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
**Extended Standard 2 – ALGEBRA**

**Benchmark:**  1
The learner demonstrates an understanding of relationships in patterns in a variety of situations.

**Indicator:**  5
The learner recognizes patterns involving two changes or two simultaneous changes.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tr>
<td>Realizes that on early dismissal days, a particular caregiver will pick him or her up because his or her parent will still be at work</td>
<td>Understands that, when he or she changes from a piece work job to one with an hourly rate, the amount of money earned will depend on number of hours, rather than productivity</td>
<td>Understands that special merchandising offers of &quot;Buy one, get a second for same price&quot; will involve his or her always having to pay for the more expensive item of the two</td>
<td>Realizes that the number of points each basket counts in a basketball game is determined by its nature (foul / regulation) and the location from which it was shot (relative to 3-pt.line)</td>
<td>Anticipates eating dinner at a restaurant, with all family members present on a particular day / time of the week</td>
</tr>
<tr>
<td>Attends classes in correct sequence on seminar / non-seminar school days</td>
<td>Re-shelves like items, arranging merchandise according to both color and size (hand &amp; bath towels of various colors)</td>
<td>Realizes that museum hours of operation vary by both day of the week and special holiday schedules</td>
<td>Recognizes that rules of some sports competitions change during an overtime period (first team to score wins, free kicks series)</td>
<td>Realizes that, when parent is working second or third shift, his or her caregiver / sibling will prepare evening meal</td>
</tr>
<tr>
<td>Participates and contributes to cooperative learning project when he or she is assigned a new role as class groups are re-configured</td>
<td>Realizes that the list of clean-up responsibilities to be completed during a particular work shift will be dependent upon the day of the week</td>
<td>Waits for bus at appropriate time and place, realizing that bus stop locations vary by days of the week (M - F, weekend) and different times of day</td>
<td>Understands that the amount of time a piece will be fired in a kiln will not always be the same, but is determined by its: size, stage in the process, medium</td>
<td>Cooperates with amount of television viewing time he or she is allowed, according to day of the week</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 2 - ALGEBRA

Benchmark: 1
The learner demonstrates an understanding of relationships in patterns in a variety of situations.

Indicator:

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 2 – ALGEBRA

Benchmark: 2
The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

Indicator: 1
The learner understands that a variable represents a single quantity that can change.

EXAMPLES ARE NOT HIERARCHICAL
This is evident, for example when the learner:

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<tbody>
<tr>
<td>Counts only the learners who are present to determine daily attendance that will be recorded</td>
<td>Realizes that the amount of money received in his or her paycheck is always determined by the amount of work he or she completes during a given pay period</td>
<td>Understands that the temperature outside changes throughout the course of the day and chooses clothing appropriately</td>
<td>Demonstrates patience with self while learning to perform some new motor skill (ride bike, play instrument) understanding that performance will improve with practice</td>
<td>Realizes that the number of family members home for dinner each evening will not always be the same, as siblings / parents will be away</td>
</tr>
<tr>
<td>Realizes that some choices on school food / salad bar will change from day to day (not available every day)</td>
<td>Understands that he or she may not be assigned with the same coworkers every day, thereby accepting changes in membership of work crew</td>
<td>Realizes that his or her favorite store will not be open for business every evening after dinner</td>
<td>Increases number of repetitions he or she performs of a given exercise (strengthening, ROM) over time</td>
<td>Sets the water level on washing machine to match the size of a load of clothing to be laundered</td>
</tr>
<tr>
<td>Understands that the teacher to whose class he or she is assigned for a particular subject may change from semester to semester</td>
<td>Realizes that the number of items to be packaged as a unit is determined by the model supplied by job coach / supervisor on any given day</td>
<td>Compares prices of a particular item he or she wishes to purchase, realizing that costs are likely to vary from store to store</td>
<td>Records the number of strokes it takes him or her to sink the ball for each hole on a miniature golf course</td>
<td>Understands that his or her age will change each time he or she has a birthday</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 2 – ALGEBRA

General Curriculum Standard 2 – Algebra

Benchmark: 2
The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

Indicator: 2
The learner understands that a constant represents a single quantity that remains the same.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<th>Community</th>
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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understands that a ruler will always be 12 inches in length, though items vary in length</td>
<td>Understands that, as an employee, he or she will always be required to file United States income taxes</td>
<td>Realizes that sales tax will always be added to the posted prices of items purchased commercially, for personal use</td>
<td>Understands that a strikeout in baseball will always consist of a batter receiving three pitches the umpire calls &quot;Strike!&quot;</td>
<td>Understands that it is never acceptable to put metal containers/items into microwave oven</td>
</tr>
<tr>
<td>Realizes that there are always seven days in a week, though the number of school days each week may vary</td>
<td>Realizes that he or she is required to follow the directives of the job coach and supervisor, even when he or she doesn't really &quot;feel like&quot; doing so</td>
<td>Understands that getting a hair cut at the barber/beauty shop always costs someone money</td>
<td>Realizes that his or her favorite television show will always be the same length, even though he or she would like it to continue longer</td>
<td>Understands that the date of his or her own birthday will always be the same, though the day of the week on which it falls will change</td>
</tr>
<tr>
<td>Understands that school attendance is not optional—he or she is expected to attend every day unless he or she is ill</td>
<td>Leaves the work site by the same entrance at the end of each work day, in order to meet his or her ride</td>
<td>Follows posted &quot;Keep Out&quot; warning in all situations, even when he or she is tempted to explore what is behind them</td>
<td>Understands that he or she is expected to stop his or her bicycle at every stop sign and red light</td>
<td>Realizes that Mom and Dad will always be his or her parents, even if they are not alive or do not live with him or her</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
### Extended Standard 2 – ALGEBRA

**General Curriculum Standard 2 – Algebra**

**Benchmark:** 2  
The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

**Indicator:** 3  
The learner understands the equivalencies of coins and currencies.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sees through peer's offer to give him or her a handful of pennies and nickels for his or her own $5.00 bill</td>
<td>contributes two dimes and one nickel to coffee jar in break room at work to cover the cost of a 25¢ cup of coffee</td>
<td>counts bills received back from bank teller when he or she has requested two fives for a $10.00 check</td>
<td>inserts nickels, one at a time, into vending machine until able to purchase an item priced with a &quot;$&quot; in the ones place</td>
<td>turns down sibling's request to exchange his or her quarter for ten pennies</td>
</tr>
<tr>
<td>Understands that the number of pennies required to equal a certain amount of money is exactly the same as the number of cents in that expression</td>
<td>asks coworker if he or she has five ones to exchange for a five dollar bill, in order to use vending machine</td>
<td>enters $1.00 on shopping cart calculator when places two items, each marked with a price of 50¢ into the cart</td>
<td>places four quarters in receptacle at entrance to an exhibition where sign is posted, &quot;Suggested donation, $1.00&quot;</td>
<td>counts out fifty pennies from own &quot;change jar&quot; to be rolled in a single 50¢ money wrapper, for exchange at the bank</td>
</tr>
<tr>
<td>Demonstrates four different ways to combine coins to equal $1.00 (four quarters, 10 dimes)</td>
<td>deposits two nickels in container by company's copy machine to cover the 10¢ cost</td>
<td>inserts one quarter and one dime in order to use pay telephone with posted charge of: local calls 35¢</td>
<td>selects five - 5¢ pieces of candy at a community carnival and gives the vendor one quarter</td>
<td>buys 25¢ drink at neighborhood lemonade stand, giving the children operating it one nickel and two dimes</td>
</tr>
</tbody>
</table>

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### Extended Standard 2 – ALGEBRA

**Benchmark:** 2
The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

**Indicator:** 4
The learner locates, matches, and/or plots distinct variables in sequence along a continuum.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<thead>
<tr>
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<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finds locker in a row of lockers numbered 1 - 20 outside of home room</td>
<td>Finds the correct numbered isle to restock items on the lower shelves at the job site</td>
<td>Locates own post office box by numbers on all boxes</td>
<td>Tells peer about the best fame he or she bowled in a completed bowling game</td>
<td>Checks off completed tasks (make bed, clean sink) on job chore chart</td>
</tr>
<tr>
<td>Crosses off completed events or tasks on a daily or weekly schedule</td>
<td>Inserts mail in the appropriate mailbox at the job site</td>
<td>Locates own transportation in parking lot when leaving the public library</td>
<td>Measures the growth of newly planted seeds with a ruler</td>
<td>Indicates height of helping dog compared to the height of his or her wheelchair</td>
</tr>
<tr>
<td>Places object on the appropriate number on the number line in math class</td>
<td>Returns videos to correct alphabetical location while restocking shelves at video store</td>
<td>Selects favorite food from buffet line in restaurant</td>
<td>Identifies the best inning in a completed baseball game</td>
<td>Opens correct day's medication box lid from a 7 day pill dispenser</td>
</tr>
</tbody>
</table>

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Extended Standard 2 – ALGEBRA

Benchmark: 2
The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

Indicator: 5
The learner solves and/or sets up equations with missing number facts, using addition, subtraction, multiplication, and/or division.

EXAMPLES ARE NOT HIERARCHICAL

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</tr>
</thead>
<tbody>
<tr>
<td>Identifies how many students in his or her</td>
<td>Identifies how many hours he or she needs to work</td>
<td>Tells how many floors the elevator will pass</td>
<td>Identifies how many more coins are needed to make</td>
<td>Determines how to cut a pizza to serve</td>
</tr>
<tr>
<td>classroom are absent</td>
<td>before the end of the workday</td>
<td>before reaching desired floor when entering</td>
<td>a purchase from a vending machine</td>
<td>the number of friends at a sleep over</td>
</tr>
<tr>
<td></td>
<td></td>
<td>on the 3rd floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies how many bags of candy (10</td>
<td>Determines how many days worked this pay period when</td>
<td>Saves the correct number of seats needed for</td>
<td>Identifies how many more players are needed to</td>
<td>Doubles a recipe to serve twice as many</td>
</tr>
<tr>
<td>pieces in a bag) to bring to include</td>
<td>he or she has missed two days of work due to</td>
<td>friends joining him or her at a concert</td>
<td>make a complete team</td>
<td>people as stated when more friends than</td>
</tr>
<tr>
<td>everyone in the class (the learner, teacher)</td>
<td>illness</td>
<td></td>
<td></td>
<td>expected arrive for party</td>
</tr>
<tr>
<td>Cuts food item (cake, candy) in enough</td>
<td>Asks job coach for the correct number items needed</td>
<td>Determines how much money is saved on a single</td>
<td>Determines how many more theater tickets are</td>
<td>Identifies how many place settings to</td>
</tr>
<tr>
<td>pieces to share with two or three friends</td>
<td>to complete the task (3 more please)</td>
<td>item when he or she uses a coupon to lower the</td>
<td>needed when additional friends join the group</td>
<td>remove when the expected number of guests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>price of the desired item</td>
<td></td>
<td>do not arrive for dinner</td>
</tr>
</tbody>
</table>

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## Extended Standard 2 – ALGEBRA

### Benchmark: 2
The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

### Indicator: 6
The learner understands how changes in one variable affect other variables.

### EXAMPLES ARE NOT HIERARCHICAL
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<tr>
<td>Recognizes how favorite class may be canceled because of a school assembly</td>
<td>Understands that for piece-work, the more work he or she does the more he or she will get paid</td>
<td>Adjusts departure time when weather or construction could cause delays</td>
<td>Initiates new activity when planned activity is canceled or sold out</td>
<td>Adjusts his or her departure time when going shopping with a friend in accordance with weekend or weekday bus schedules</td>
</tr>
<tr>
<td>Understands that he or she cannot use the computer if it is broken (crashed, bad disk)</td>
<td>Understands that when he or she is absent from the job that he or she will have a decrease in pay check</td>
<td>Changes plans to go to a concert with a friend when the outdoor concert is canceled because of bad weather</td>
<td>Makes another selection when desired video is not in stock or has already been checked out</td>
<td>Understands that the plans for meals or food preparation may change with items that are available in pantry and / or refrigerator</td>
</tr>
<tr>
<td>Understands how bad weather affects school activities (recess, ball games, bus schedule)</td>
<td>Makes another selection from vending machine during break time when item of his or her first choice is not available</td>
<td>Demonstrates that he or she can use pay telephone when it is different than the telephone at home or at school (picture phone, large print key pad)</td>
<td>Adapts to consequences of misplacing his or her concert tickets (lost, forgotten, stolen)</td>
<td>Realizes that family illness can change the learner scheduled activities (family member has the flu)</td>
</tr>
</tbody>
</table>

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Extended Standard 2 - ALGEBRA

Benchmark: 2
The learner demonstrates an understanding of variables, equations, inequalities, and functions in a variety of situations.

Indicator:

**EXAMPLES ARE NOT HIERARCHICAL**

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 2 – ALGEBRA

**Benchmark:** 3
The learner demonstrates the use of models to show relationships in a variety of situations.

**Indicator:** 1
The learner demonstrates understanding of same and different.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
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<th>Community</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Recognizes a miniature 3-D object / photographic representation as the same essential item as the real object itself</td>
<td>Performs inspection job, pulling production items that do not match the model provided by job coach</td>
<td>Understands that the actual departments in a store / stores in a mall exist in the same layout as the one displayed on a kiosk / map</td>
<td>Turns own reversible uniform shirt to match the color of his or her teammates' shirts, and not the opposing teams'</td>
<td>Notices change in usual family routine (mealtime, nighttime) and calls it to parent's attention</td>
</tr>
<tr>
<td>Discriminates rhyming words from a list read by paraeducator or peer</td>
<td>Recognizes that empty and full packing boxes, though they appear the same, have different weights</td>
<td>Requests, of store clerk, a different size of the same clothing item to try on</td>
<td>Moves game piece along spaces of same color / number as card drawn on own turn</td>
<td>Follows parent's instructions to fold all towels in the same three-fold pattern</td>
</tr>
<tr>
<td>Stops scanning device when indicator reaches a choice that matches (is the same as) the item provided</td>
<td>Gives each plant in the greenhouse the same amount of fertilizer</td>
<td>Remarks having been at this same place before when returns to a theater / auditorium / arena for a show</td>
<td>Performs the correct movement sequence when told by dance instructor to, &quot;Do the same thing again&quot; (aerobics, square dance)</td>
<td>Tells family member that he or she is different when learner first encounters him or her with new hairstyle / cologne / outfit</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
**Extended Standard 2 – ALGEBRA**

**Benchmark:** 3
The learner demonstrates the use of models to show relationships in a variety of situations.

**Indicator:** 2
The learner demonstrates understanding of categorization.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tr>
<td>Classifies instruments as percussion / brass / string by their sounds, as these are demonstrated</td>
<td>Bundles mail for post office according to letter size</td>
<td>Identifies leaves that are alike, according to palmate or pinnate classification</td>
<td>Arranges collector cards according to a consistent standard in his or her notebooks or display</td>
<td>Puts clean dishes away, grouping items of like size / shape in kitchen cabinets (dinner plates, saucers, cups, glasses)</td>
</tr>
<tr>
<td>Uses a Venn diagram to sort objects / items according to two attributes</td>
<td>Sorts recyclable plastic materials according to triangled coding symbols imprinted on items</td>
<td>Uses department signs displayed in a discount store to help him or her locate items of particular type (hardware, garden, cosmetics, electronics)</td>
<td>Looks for videotape he or she wishes to rent in the appropriate section of rental store (sci-fi, new releases, children's)</td>
<td>Hangs like items together in his or her closet (shirts, slacks, dresses)</td>
</tr>
<tr>
<td>Sorts base ten blocks into groups of like manipulatives (units, tens, hundreds)</td>
<td>Restocks item bins by filling each with the appropriate contents</td>
<td>Sorts coins collected through patron donations according to denomination</td>
<td>Differentiates professional / NCAA / high school sports leagues and teams</td>
<td>Participates in planning a menu by selecting items from various food groups</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
### Extended Standard 2 - ALGEBRA

**Benchmark:** 3  
The learner demonstrates the use of models to show relationships in a variety of situations.

**Indicator:** 3  
The learner recognizes the same situation can be represented in more than one way.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Realizes that a number line, manipulatives, or a calculator can all be used to compute a correct answer to an addition / subtraction problem</td>
<td>Understands that a productivity graph represents the work he or she has produced in a given period, just as do the tally marks he or she records on the job</td>
<td>Recognizes that a situation in which he or she needs to exercise particular care might be indicated by flashing yellow light or a direct &quot;Caution&quot; sign</td>
<td>Inserts batteries correctly (in CD player, TV remote) whether connections are marked with &quot;+&quot; and &quot;-&quot; or &quot;pos&quot; and &quot;neg&quot;</td>
<td>Realizes that a &quot;correct&quot; place setting might include more than one fork (salad + regular) and more than one spoon (2 or 3) for a formal / holiday meal</td>
</tr>
<tr>
<td>Understands that written quantities may be represented by alphabetic (fifteen) or numeric (15) symbols or braille</td>
<td>Realizes that the check he or she receives on payday has the exact value of the same amount of money represented by coins and bills</td>
<td>Interprets the universal symbol &quot;Ø&quot; superimposed over a picture of an object to mean the same thing as &quot;NO&quot; (skateboarding, bicycling, smoking)</td>
<td>Realizes that votes from a consumer poll in which he or she participated might be summarized by pie chart, frequency table, or bar graph</td>
<td>Understands that the correct time may be represented by a circular clock (traditional, with /without numbers) and a digital / clock watch</td>
</tr>
<tr>
<td>Works assigned problems in mathematics class, whether these are presented in vertical or horizontal forms</td>
<td>Processes the steps through which he or she is to complete a work task, whether these are provided verbally, by job coach or in pictorial (graphics) form</td>
<td>Realizes that outdoor temperatures may be represented by numerals followed by a small raised circle (as on a time / temp display) as well as by various temperature gauges</td>
<td>Understands that whether his or her weekly allowance is provided in bills, coins, or a combination thereof, the $3.00 still has the same value</td>
<td>Recognizes that chores for which he or she is responsible might be indicated by &quot; &quot; beside his or her name on family chart and / or written on a separate list</td>
</tr>
</tbody>
</table>

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**Extended Standard 2 – ALGEBRA**

**Benchmark:** 3
The learner demonstrates the use of models to show relationships in a variety of situations.

**Indicator:** 4
The learner traces a route on a map.

**EXAMPLES ARE NOT HIERARCHICAL**
This is evident, for example when the learner:

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<tr>
<td>Counts and records steps to correspond with distances between all designated locations on a travel map, with orientation and mobility instructor</td>
<td>Traces the emergency exit route from own work station to safe location, from general safety procedures posted at his or her job site</td>
<td>Locates favorite stores in mall by returning to familiar base point after each store visit, then resuming travel to subsequent destination</td>
<td>Locates wheelchair accessible restroom on state fairground's map, and participates in planning a route to arrive there</td>
<td>Uses a highlighter pen to mark the highways on which the family will travel during an upcoming car trip, as parent points these out to him or her</td>
</tr>
<tr>
<td>Marks, with peer, the flow of the cafeteria line on a schematic of the school cafeteria</td>
<td>Marks on restaurant floor plan the sequence he or she will follow to ensure that each table's condiments are refreshed for next day's business</td>
<td>Makes note (written or mental) of stores he or she must pass in order to reach desired destination, by identifying start / end points from kiosk / mall map</td>
<td>Uses a map with numbered viewing stops to complete entire route of walking garden tour / fitness trail hike</td>
<td>Repeats to parent / caregiver the route he or she is to follow to evacuate the family's home in case of fire emergency</td>
</tr>
<tr>
<td>Discerns the route followed by a particular explorer on a color-coded map in a social studies unit</td>
<td>Develops, with job coach's assistance, a written / brailled sequence of room numbers to which he or she can refer when delivering</td>
<td>Assists in planning an efficient route for completing errands, using modified map of key community landmarks</td>
<td>Uses tactile cards, matched to tactile cues mounted in recreation center, to direct self to room for fitness / crafts class</td>
<td>Follows a parent's hand-drawn map, that includes colored houses (matched to own neighborhood) to reach neighbor's house on same block</td>
</tr>
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Extended Standard 2 - ALGEBRA

Benchmark: 3
The learner demonstrates the use of models to show relationships in a variety of situations.

Indicator:

**EXAMPLES ARE NOT HIERARCHICAL**

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Standard 3
Geometry

The learner knows and uses geometric concepts and procedures in a variety of situations.

Clarifying Examples

Clarifying examples show how a learner MIGHT demonstrate an indicator, using practical, real-world examples.
Clarifying examples are NOT listed in hierarchical order.

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Extended Standard 3 - GEOMETRY

**Benchmark:** 1
The learner demonstrates an understanding of geometric figures and their properties.

**Indicator:** 1
The learner matches three-dimensional shapes.

**EXAMPLES ARE NOT HIERARCHICAL**
This is evident, for example when the learner:

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<tbody>
<tr>
<td>Inserts appropriate disks into various computer disk drives (floppy, CD)</td>
<td>Shelves folded laundry with like items in linen supply (sheets, blankets, gowns, towels)</td>
<td>Inserts coins into appropriate slots on parking meter, according to size of opening</td>
<td>Identifies spherical shapes in environment when playing 20 questions game and shown a model sphere</td>
<td>Puts dishes away grouping similarly sized glasses, plates together</td>
</tr>
<tr>
<td>Returns laboratory equipment (test tubes, Petri dish) to proper location at conclusion of science class by matching items to those that remained in storage</td>
<td>Separates letters from parcel post packages in mail sorting room</td>
<td>Locates #2 can of a particular vegetable on supermarket shelf when companion provides a #2 can of different item, and the request, &quot;Get one this size&quot;</td>
<td>Matches type of music/movie source he or she wishes to play with the appropriate piece of equipment (compact disc with CD player, videotape with VCR)</td>
<td>Inserts electrical plug correctly into outlet, aligning three prongs with three holes or widths of connectors on polarized two-prong plug</td>
</tr>
<tr>
<td>Groups similarly-shaped attribute blocks, as requested by teacher/paraeducator (cylinders, spheres, cubes, pyramids)</td>
<td>Sorts silverware he or she removes from dishwasher</td>
<td>Adjusts pencil sharpener guide to accommodate size of the pencil he or she wishes to sharpen</td>
<td>Puts away game pieces at the conclusion of a board game, matching like pieces with the model peers placed in each storage slot</td>
<td>Stores tools he or she used in a building project with a sibling by replacing them in the appropriate form-fitted locations of tool box</td>
</tr>
</tbody>
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Extended Standard 3 - GEOMETRY

Benchmark: 1
The learner demonstrates an understanding of geometric figures and their properties.

Indicator: 2
The learner sorts three-dimensional shapes with specific attributes.

EXAMPLES ARE NOT HIERARCHICAL

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<tbody>
<tr>
<td>Separates objects into two classes -- those that roll and those that do not roll</td>
<td>Stacks clean linens with similarly sized items - bath towels, hand towels, washcloths</td>
<td>Separates US coins, video game tokens and bus tokens</td>
<td>Separates jigsaw puzzle border pieces, which have at least one straight edge, from those that do not</td>
<td>Locates appropriately sized batteries for replacement in CD player / flashlight / remote control / smoke alarm</td>
</tr>
<tr>
<td>Sorts rock samples into groups of those heavier than a designated weight and those lighter</td>
<td>Restocks dowel rods in hardware/ hobby store by diameter</td>
<td>Sorts recyclable materials by primary medium (glass, plastic, cardboard, paper)</td>
<td>Moves only one game piece while playing checkers with a friend</td>
<td>Pairs up laundered white tube socks according to their lengths</td>
</tr>
<tr>
<td>Returns balls to proper storage location at the end of physical education class according to ball size / type</td>
<td>Separates screws (pointed end) from bolts (flat straight end)</td>
<td>Returns clothing he or she has tried on to sales racks, according to garment size</td>
<td>Differentiates chairs that do / do not have arms, and stacks those that do not in preparation for closing time at recreation center</td>
<td>Groups similar canned goods in family's pantry / kitchen cabinets</td>
</tr>
</tbody>
</table>

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Extended Standard 3 - GEOMETRY

Benchmark: 1
The learner demonstrates an understanding of geometric figures and their properties.

Indicator: 3
The learner recognizes and/or labels shapes.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Answers the question, &quot;What shape is the earth?&quot; in social studies class</td>
<td>Brings customer a package of napkins of the shape he or she requested for purchase</td>
<td>Recognizes traffic signs by their shapes (Stop, Yield, Railroad Crossing)</td>
<td>Identifies the shape of a baseball stadium's infield as a diamond</td>
<td>Chooses appropriate baking dish that is called for in recipe (square, round)</td>
</tr>
<tr>
<td>Gives the name of a shape shown him or her, when asked to identify same by teacher or paraeducator</td>
<td>Follows job coach's request to select a particular work item from a variety of shapes</td>
<td>Selects for purchase the shape(s) of throw pillows that correspond with mother's request (square, cylinder, circle)</td>
<td>Locates geometric shapes in hidden pictures activities</td>
<td>Brings parent/caregiver the laundry basket(s) he or she requested by shape</td>
</tr>
<tr>
<td>Participates in playing shape bingo - either by covering the shapes called or by calling the game</td>
<td>Fills order, from a written requisition (specified in words) with the appropriately shaped picture frames</td>
<td>Recognizes the various shapes painted on a gymnasium floor - circle rectangle (lane), half circle (free throw area)</td>
<td>Makes clay shapes, as requested by instructor during pottery/ ceramics class</td>
<td>Recognizes that dog's pen in backyard is a representation of a particular shape</td>
</tr>
</tbody>
</table>

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Extended Standard 3 - Geometry

Benchmark: 1
The learner demonstrates an understanding of geometric figures and their properties.

Indicator: 4
The learner combines and/or separates shapes into different configurations.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Completes Tangrams exercises, using manipulatives and design outlines</td>
<td>Stacks boxes only to a prescribed height in work storeroom</td>
<td>Helps to push adjacent empty tables together in a restaurant, in order to accommodate large party, of which he or she is a member</td>
<td>Combines tiles of a variety of shapes to create a pleasing mosaic design</td>
<td>Participates with parents or sibling(s) in creating photo collage pages for a family album</td>
</tr>
<tr>
<td>Utilizes a pull-down menu when working on the computer in a familiar software application</td>
<td>Inserts/ removes cardboard box dividers, as directed by job coach, to accommodate the number of items to be packed for shipping</td>
<td>Realizes that if he or she selects a food package from the bottom of a grocery store display, the entire display is likely to fall</td>
<td>Makes a variety of structures with construction set materials</td>
<td>Cuts shapes from a baked rectangular cake, then reassembles pieces to create a new design before icing it</td>
</tr>
<tr>
<td>Cuts pizza into pieces, as designated by school cafeteria workers (wedges, squares)</td>
<td>Assembles/breaks down cardboard boxes in warehouse</td>
<td>Assists with rearranging tables and chairs according to a particular configuration for an upcoming meeting</td>
<td>Participates in combining a variety of small quilting pieces to create one large design</td>
<td>Builds a snow person with sibling</td>
</tr>
</tbody>
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Extended Standard 3 – GEOMETRY

General Curriculum Standard 3 - Geometry

Benchmark: 1
The learner demonstrates an understanding of geometric figures and their properties.

Indicator:

EXAMPLES ARE NOT HIERARCHICAL

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**Extended Standard 3 - GEOMETRY**

**General Curriculum Standard 3 - Geometry**

**Benchmark:** 2
The learner estimates and measures using standard and nonstandard units in a variety of situations.

**Indicator:** 1
The learner orders by a geometric attribute.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Orders manipulatives in mathematics class from shortest to longest</td>
<td>Puts away curlers (hair rollers) on posts in beauty salon storage compartment according to size</td>
<td>Sacks groceries, putting heaviest items on the bottom of the bag and lightest ones on top</td>
<td>Arranges baseball bats in bat rack according to length</td>
<td>Reassembles series of take-apart decorative wooden figurines, one enclosing the next, without having any left over when he or she is finished</td>
</tr>
<tr>
<td>Assumes correct position in line-up of all classmates, by height</td>
<td>Stores pans used for baking tiers of wedding cake by nesting them according to diameter</td>
<td>Stacks firewood at local park / campground by size -- largest logs on bottom, medium logs, kindling, tinder on top</td>
<td>Fills jars / bottles with liquid to varying heights in order to create different tones when the containers are struck</td>
<td>Maximizes cabinet space by stacking empty plastic food storage containers of same shape (but different sizes) one inside the other</td>
</tr>
<tr>
<td>Plays hand bells in sequence, according to tonal quality (high to low, low to high) during music / orchestra class</td>
<td>Stocks fishing rods on store shelves, according to length</td>
<td>Makes winter decorations for nursing / retirement home by stacking styrofoam balls, by size to create snow people</td>
<td>Returns free weights / dumbbells at fitness center to original locations, according to weight progression</td>
<td>Returns all sockets (from socket wrench set) to slots in correct order by size</td>
</tr>
</tbody>
</table>

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### Extended Standard 3 - GEOMETRY

**Benchmark:** 2
The learner estimates and measures using standard and nonstandard units in a variety of situations.

**Indicator:** 2
The learner selects and uses appropriate measurement vocabulary and/or tool(s).

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Realizes liquids may be measured in liters or gallons</td>
<td>Sets beeper on own wristwatch to alert him or her to the end of break time</td>
<td>Locates hanging scale to weigh produce priced by the pound in the grocery store</td>
<td>Uses measuring tape to measure distance in softball throw</td>
<td>Uses measuring cup to add number of ounces of ingredient called for in recipe</td>
</tr>
<tr>
<td>Selects a set of measuring spoons for adding small amount of ingredients (tsp., 1/2 Tbs.) to recipe in food class</td>
<td>Uses ruler to cut materials to desired centimeter length</td>
<td>Uses blood pressure monitoring machine in local store or mall to monitor own blood pressure</td>
<td>Refers to odometer on stationary bicycle to see how far he or she has ridden</td>
<td>Sets microwave timer to monitor time for cooking a frozen dinner</td>
</tr>
<tr>
<td>Understands that distances on maps (between cities) are reported in miles and or kilometers</td>
<td>Reports own height on job application in feet and inches</td>
<td>Steps on scale in physician's office or clinic to determine own weight</td>
<td>Understands that progress in a football game is measured in yards</td>
<td>Goes to get thermometer when parent or caregiver says, &quot;Let's take your temperature.&quot;</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 3 - GEOMETRY

General Curriculum Standard 3 – Geometry

Benchmark: 2
The learner estimates and measures using standard and nonstandard units in a variety of situations.

Indicator: 3
The learner uses the calendar.

EXAMPLES ARE NOT HIERARCHICAL
This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locates the current month of the year / date on a calendar that has one month per page</td>
<td>Records the number of hours worked each day in the box for that date, on a monthly calendar</td>
<td>Locates calendar of events at community recreation center</td>
<td>Uses a calendar to keep track of scheduled entertainment events for which he or she has tickets.</td>
<td>Uses a calendar to count down how many weeks remain until an important date arrives / special event occurs</td>
</tr>
<tr>
<td>Marks due date for a major project of his or her cooperative group, so that work can be projected evenly throughout the available time period</td>
<td>Uses a calendar to keep track of the days he or she is scheduled to work during the upcoming week</td>
<td>Marks dates of his or her group's fundraising project on calendar, in order to estimate how much he or she will need to do each day to accomplish his or her goal</td>
<td>Records his or her sports team's practice schedule on a calendar so he or she will know when to report for practice</td>
<td>Marks family members' birthdays on a calendar, to keep track of how much time he or she has left in order to complete card / gift shopping</td>
</tr>
<tr>
<td>Refers to calendar to determine days physical education class is scheduled, so he or she will know to take gym shoes / uniform to school</td>
<td>Marks pay dates on the calendar, so he or she will know when to expect having additional money to spend</td>
<td>Records scheduled medical appointment times on a calendar to refer to in order to estimate required departure times for punctual arrival</td>
<td>Marks dates of future movie / video game releases on a calendar to count down the number of days until a favorite is available for purchase</td>
<td>Uses calendar to keep track of the day(s) on which he or she is to set out trash for pick up</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
## Extended Standard 3 - GEOMETRY

General Curriculum Standard 3 – Geometry

**Benchmark:** 2

The learner estimates and measures using standard and nonstandard units in a variety of situations.

**Indicator:** 4

The learner tells time.

### EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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</tr>
</thead>
<tbody>
<tr>
<td>Tells time by 5 minute, 15 minute, and / or 30 minute increments on an analog (traditional) clock</td>
<td>Identifies when it is his or her lunch time, by reading clock in work area</td>
<td>Determines how long it will be until a store / office opens, by comparing sign that displays business hours and current time shown on his or her watch</td>
<td>Tells friend the correct time that an entertainment event is scheduled to begin, after reading same in newspaper or flyer</td>
<td>Turns on television when clock shows the time his or her favorite program is scheduled to begin</td>
</tr>
<tr>
<td>Notices correct time(s) on clock that he or she is to report to the school clinic for medication or special health procedure</td>
<td>Uses own watch to attend to the time and return to work after taking a break of the length suggested by job coach / supervisor (&quot;Take a 10 minute break and come back...&quot;)</td>
<td>Watches for community van at appropriate time, as directed by driver in telephone conversation (look for the van right after 3:30)</td>
<td>Looks for guests at appropriate time, after having been told that their arrival will be sometime between 7:00 and 7:30</td>
<td>Sets alarm clock appropriately, in order to rise in time to arrive at school / work punctually</td>
</tr>
<tr>
<td>Understands the basic difference between A.M. and P.M (A.M. refers to morning; P.M. refers to afternoon or evening)</td>
<td>Understands that 30 minutes of work is equivalent to 1/2 hour of work (for reporting on time sheet)</td>
<td>Reads time correctly from digital clock or watch</td>
<td>Realizes that, at a sporting event, the displayed time clock counts time down (backwards)</td>
<td>Understands meaning of time-related terms commonly used by family members (noon, midnight)</td>
</tr>
</tbody>
</table>

---

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 3 - GEOMETRY

Benchmark: 2
The learner estimates and measures using standard and nonstandard units in a variety of situations.

Indicator: 5
The learner converts within the same measurement system.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Counts the number of days, weeks, months until school is out for summer vacation</td>
<td>Understands that 2 work weeks equal 10 days</td>
<td>Makes a $1.00 purchase using 4 quarters or a 1 dollar bill</td>
<td>Understands that during a game of bowling if when he or she knocks down 10 pins that it is a strike</td>
<td>Uses a calculator to double the ingredients in favorite cookie recipe</td>
</tr>
<tr>
<td>Counts the number of minutes until lunch or the end of a class period</td>
<td>Understands that 6 months equals the probationary or trial period on a new job</td>
<td>Counts the number of blocks to a mile</td>
<td>Understands that when he or she attends a double feature (2 movies) at 90 minutes each that he or she will be in the theater 3 hours</td>
<td>Goes to the store and purchases 2 quarts of milk when the single ½ gallon size is not available</td>
</tr>
<tr>
<td>Counts the number of rooms to get to the lunch room</td>
<td>Understands that his or her paycheck will convert to currency and coins when cashed at the bank</td>
<td>Understands that if you take the elevator or the escalator up or down one floor you end up on the same floor</td>
<td>Recognizes that at the community swimming pool, 3 feet of water is shallow and safe while 9 feet of water is deep and over my head (unsafe)</td>
<td>Understands that digital number time and the time on a clock face are the same (9:55 = 5 minutes until 10:00)</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 3 - GEOMETRY

Benchmark: 2
The learner estimates and measures using standard and nonstandard units in a variety of situations.

Indicator: 6
The learner estimates geometric quantities and checks reasonableness of results.

EXAMPLES ARE NOT HIERARCHICAL

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</thead>
<tbody>
<tr>
<td>Understands that when school has been in session for 4 days, that it is not time for winter break</td>
<td>Understands that if it is 9:00am that it is not time to go home</td>
<td>Estimates the size of a doorway to determine if wheelchair will fit through the door</td>
<td>Invites others to join in a game that requires several people to make the teams even</td>
<td>Estimates if wheelchair will fit under the table at a friend's home</td>
</tr>
<tr>
<td>Understands that he or she can't carry all of his or her books and supplies around the school building throughout the entire day due to the weight</td>
<td>Understands that he or she has to work for a while before it is break time</td>
<td>Determines that when 3 coins in coin operated washing machine even though 4 coin slots appear to be available that the washing machine will not work</td>
<td>Estimates if wheelchair will fold to fit in friend's trunk of car when normal van transportation is not available</td>
<td>Understands that the more people plan to come to his or her home to watch a move a larger pizza and more money will be needed</td>
</tr>
<tr>
<td>Estimates if the size of stage for school play allows enough room for wheelchair movement</td>
<td>Estimates that an object weighs 200 pounds that he or she will need to ask for help to lift it</td>
<td>Determines if he or she can walk / wheel to destination or if additional transportation is needed</td>
<td>Estimates the length of wagon ruts on the Oregon Trail based on the student's shoe length</td>
<td>Estimates the height of stair to assure that you are taking a large enough step</td>
</tr>
</tbody>
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Extended Standard 3 - GEOMETRY

Benchmark: 2
The learner estimates and measures using standard and non-standard units in a variety of situations.

Indicator:

EXAMPLES ARE NOT HIERARCHICAL

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Extended Standard 3 - GEOMETRY

Benchmark: 3
The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

Indicator: 1
The learner uses proprioceptive feedback to determine response.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Demonstrates awareness that his or her hands are parts of own body by which he or she can interact with environment</td>
<td>Adjusts body movements when carrying his or her table bussing tray, so as not to run into patrons as he or she moves about dining room</td>
<td>Stands / Positions self in wheelchair in line at movie theater without bumping into persons in front of / behind him or her</td>
<td>Maintains sitting balance when seated on backless bleacher</td>
<td>Retracts his or her arm, when reaching too far forward in an attempt to pick up an object causes him or her to start to lose balance</td>
</tr>
<tr>
<td>Uses appropriate amount of pressure to activate switch</td>
<td>Recognizes and maintains the appropriate personal distance from coworkers and customers</td>
<td>Raises food sufficiently high to step up on curb, when crossing street, without stumbling</td>
<td>Pedals exercise bike with reciprocal leg motion</td>
<td>Extends the extremity prompted by family member / caregiver in order to assist in dressing</td>
</tr>
<tr>
<td>Moves successfully across balance board in physical education class</td>
<td>Grips screwdriver sufficiently firm to turn screws (that have not been over-tightened)</td>
<td>Adjusts body posture to maintain balance when moving up / down at incline or ramp with walker / wheelchair</td>
<td>Uses legs in a pumping movement pattern to gain / maintain momentum in swing</td>
<td>Supports self upright, in standing position, to maintain balance to parent / caregiver can raise / lower the slacks he or she is wearing</td>
</tr>
</tbody>
</table>

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Extended Standard 3 - GEOMETRY

Benchmark: 3
The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

Indicator: 2
The learner recognizes the conservation of continuous / discontinuous substances.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Understands that he or she has the same amount of milk, whether it is drunk from a carton or poured into a glass</td>
<td>Recognizes that cutting an 8-foot piece of lumber into eight, 1-foot sections still leaves him or her with 8 feet of lumber</td>
<td>Realizes that a segmented candy bar, divided into individual pieces, is still the same amount of candy</td>
<td>Rolls skein of yarn into a ball, realizing that no yarn is lost, though its size may be physically smaller</td>
<td>Realizes that when an ingredient is poured into a mixing bowl from a measuring cup, it remains the same amount, but is just spread out</td>
</tr>
<tr>
<td>Realizes that he or she still has the same amount of cheese with which he or she prepared a sandwich, after cooking grilled cheese in family &amp; consumer science class</td>
<td>Understands that no more dog food exists when a large bag is divided among several dogs' dishes at the veterinarian's office</td>
<td>Understands that one dozen flowers collected in a single vase is just as many flowers as if each were displayed in its own individual vase</td>
<td>Understands that a completed jigsaw puzzle represents the same number of pieces as were in a heap before the puzzle was assembled</td>
<td>Understands that all the lather on his or her head, when washing hair, came from the small amount of shampoo used</td>
</tr>
<tr>
<td>Understands that ice transforms into water as it melts, and is not lost - the same amount of water remains</td>
<td>Assists with using a leaf mulcher, realizing that the leaves don't magically disappear - they just change shape</td>
<td>Recognizes that the amount of available seating in a room remains the same, regardless of how the same number of chairs is arranged</td>
<td>Realizes that he or she has no more clay when one large mass is divided into many smaller pieces</td>
<td>Realizes that fruits blended in a smoothie drink are still there even though they might not be recognizable</td>
</tr>
</tbody>
</table>

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Extended Standard 3 - GEOMETRY

Benchmark: 3
The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

Indicator: 3
The learner understands common spatial sense language.

EXAMPLES ARE NOT HIERARCHICAL

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</tr>
</thead>
<tbody>
<tr>
<td>Follows instructor's directives for moving through an obstacle course in physical education (&quot;around&quot; the cones, &quot;under&quot; the rope)</td>
<td>Draws a circle &quot;around&quot; the pictures / words describing all the jobs that are of potential interest to him or her on a career awareness inventory</td>
<td>Complies with posted signs to clear &quot;off&quot; own table at shopping mall food court or in a fast food restaurant</td>
<td>Understands that he or she is to release the ball &quot;behind&quot; the foul line at the bowling alley</td>
<td>Identifies the &quot;front&quot; and &quot;back&quot; door of own / relatives' home(s)</td>
</tr>
<tr>
<td>Takes place in line, as requested to do by paraeducator / peer (&quot;between&quot; two designated persons, at the &quot;back&quot;)</td>
<td>Follows supervisor's directive to go and work &quot;beside&quot; a named coworker</td>
<td>Walks &quot;between&quot; the lines to cross a downtown street</td>
<td>Knows that the rules require a player to hit a volleyball / badminton birdie &quot;over&quot; the net</td>
<td>Understands mother's request that he or she vacuum &quot;under&quot; the table in order to clean all of the crumbs</td>
</tr>
<tr>
<td>Follows a picture schedule to return to put books and supplies &quot;into&quot; his or her locker</td>
<td>Stacks boxes &quot;on top&quot; of pallets, according to job coach's instructions</td>
<td>Puts right hand &quot;on&quot; heart during recitation of the Pledge of Allegiance</td>
<td>Understands the need to hit a croquet ball &quot;through&quot; a particular wicket in order to proceed in the game</td>
<td>Follows parent's / caregiver's request to put clothes &quot;in&quot; dresser / closet</td>
</tr>
</tbody>
</table>

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## Extended Standard 3 - GEOMETRY

### Benchmark: 3

The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

### Indicator: 4

The learner demonstrates ability to make necessary transformation in real-life situations.

### EXAMPLES ARE NOT HIERARCHICAL

#### This is evident, for example when the learner:

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</tr>
</thead>
<tbody>
<tr>
<td>Turns over-sized library book on its side in order to successfully re-shelve it</td>
<td>Angles or turns sideways, a double-wide janitorial push boom to sweep a relatively narrower space</td>
<td>Changes grip on handle of suitcase in order to carry it in different position while walking down aisle of bus / train / plane</td>
<td>Rotates folded game board 1/4 turn in order to put it away in a game board storage box</td>
<td>Turns own shirt / pants around if happens to put a piece of clothing on backwards</td>
</tr>
<tr>
<td>Maneuvers own wheelchair into appropriate position at table or desk</td>
<td>Adjusts own body position to allow another person to move past him or her in a crowded area</td>
<td>Turns table on its side when helping volunteers move it through a doorway</td>
<td>Rotates or turns over, videotape in order to successfully return it to its plastic case for storage</td>
<td>Rotates a packed box in order to have it fit in limited automobile trunk space</td>
</tr>
<tr>
<td>Inverts key, after first attempt to insert it into padlock on school locker fails</td>
<td>Moves push button latch (with thumb, typically) to open file cabinet drawer</td>
<td>Turns over, or rotates, one dollar bill in order to get vending machine to accept it for purchase</td>
<td>Angles own AFOs / braces to successfully maneuver them into locker at the swimming pool</td>
<td>Folds his or her own jeans in half, lengthwise to fit them into narrow dresser drawer</td>
</tr>
</tbody>
</table>

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### Extended Standard 3 - GEOMETRY

**Benchmark:** 3  
The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

**Indicator:** 5  
The learner recognizes two or three-dimensional objects as they would appear from near, far or different angles.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Selects the appropriate books and supplies for next class from his or her locker regardless of how the materials are arranged inside (standing on end, laying flat with spine out)</td>
<td>Matches inventory items to be restocked with those displayed appropriately on shelf, when packing box is opened from the top</td>
<td>Locates cash register, for the purpose of paying for purchases from any location in store from which check-outs are within eyesight / ear shot</td>
<td>Identifies his or her favorite amusement rides from their representation on a theme park map</td>
<td>Recognizes familiar person (parent, caregiver) from the front, back, side, regardless of the environmental context in which he or she encounters that person</td>
</tr>
<tr>
<td>Locates his or her own locker whether approaches it from the right or the left</td>
<td>Recognizes his or her safety glasses, whether these are laying on work service, hanging up, wrapped in elastic band</td>
<td>Recognizes general shape of restroom symbols from a distance</td>
<td>Recognizes the basketball hoop from various places on the court (free throw line, baseline)</td>
<td>Recognizes his or her school bus from the front, as it moves down the street toward his or her home</td>
</tr>
<tr>
<td>Identifies the actual item from a clear photograph of that item, taken for a variety of angles and / or top view</td>
<td>Recognizes own work station, regardless of the direction from which he or she approaches the area</td>
<td>Identifies pedestrian crosswalk from a distance, though painted lines appear narrower and not-parallel</td>
<td>Identifies various musical instruments when viewed from side, front, top (base drum, piano, cello)</td>
<td>Locates his or her backpack regardless of the position or place in which it was last left</td>
</tr>
</tbody>
</table>

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**Extended Standard 3 - GEOMETRY**

**Benchmark:** 3
The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

**Indicator:** 6
The learner gives or follows directions from one location to another.

**EXAMPLES ARE NOT HIERARCHICAL**

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<tbody>
<tr>
<td>Tells school visitor how to get to office through verbal description and pointing</td>
<td>Directs customer to the department regarding which inquiry is being made in referencing him or her to adjacent departments and departments to pass by</td>
<td>Responds to question re: the location of city park/tourist attraction by referring the person in its general direction and or to prominent landmarks</td>
<td>Explains to person seated next to him or her at an entertainment event how to find the concession stand where he or she purchased snacks</td>
<td>Gives pizza delivery person correct directions to a particular neighbor's house</td>
</tr>
<tr>
<td>Tells new student (peer) where to go to pay for purchases in school cafeteria</td>
<td>Inquires of job coach where he or she can find restroom at a new job site, and successfully locates the it (restroom)</td>
<td>Stops at service desk and makes inquiry re: where a particular item is located in the store then proceeds to find it</td>
<td>Asks uniformed zoo docent how to get to a particular animal exhibit then successfully locates it</td>
<td>Retrieves mother's purse from location she describes within the house / yard and brings it to her</td>
</tr>
<tr>
<td>Asks peer / media specialist behind library reference desk where he or she would find certain materials and finds correct location</td>
<td>Asks worker where he or she needs to go in order to turn in a job application, then follows turn right / left directions to personnel office</td>
<td>Follows usher's directions to the area of arena where a particular young adults' group is seated and joins them</td>
<td>Follows coded directional signs along a fitness / nature trail to complete the entire walking tour</td>
<td>Takes something to a designated neighbor's home, following directions based on familiar items as guideposts</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 3 - GEOMETRY

Benchmark: 3
The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

Indicator: 7
The learner uses map to find location.

EXAMPLES ARE NOT HIERARCHICAL
This is evident, for example when the learner:

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</thead>
<tbody>
<tr>
<td>Locates the state of Kansas on the map of United States</td>
<td>Recognizes landmarks at his or her place of employment and squares off at appropriate locations</td>
<td>Traces emergency exit route on motel floor plan with family members then executes it</td>
<td>Locates wheelchair accessible restroom on an amusement park map</td>
<td>Marks places / states visited on previous family vacations on a map of the United States</td>
</tr>
<tr>
<td>Locates his or her hometown and / or the nearest town of substantial size on a Kansas map</td>
<td>Participates with sibling on paper route, throwing papers only to those houses marked with an &quot;X&quot; on schematic of route</td>
<td>Uses the diagram of a department store's layout to locate the type(s) of items he or she wishes to buy</td>
<td>Accompanies peers in his or her youth group as they follow a treasure hunt map during a party</td>
<td>Uses a picture map of his or her neighborhood, coded with neighbors' pictures, to locate the person's house to which he or she is interested in going</td>
</tr>
<tr>
<td>Locates own classroom on floor plan of his or her school</td>
<td>Uses a modified copy of town's bus route(s) to determine when to exit bus in order to report for work</td>
<td>Locates elevator in community / office building from schematic</td>
<td>Uses a map of the campground / state park to direct self and companion to rangers' station</td>
<td>Rides bicycle only in areas designated on a map created for him or her by parent or caregiver</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 3 - GEOMETRY

Benchmark: 3
The learner demonstrates an understanding of spatial properties and relationships in a variety of situations.

Indicator:

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

<table>
<thead>
<tr>
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</tr>
</thead>
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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Standard 4
Data

The learner knows and uses concepts and procedures of data analysis in a variety of situations.

Clarifying Examples

Clarifying examples show how a learner MIGHT demonstrate an indicator, using practical, real-world examples. Clarifying examples are NOT listed in hierarchical order.

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Extended Standard 4 - DATA

Benchmark: 1
The learner uses probability to make predictions and decisions in a variety of situations.

Indicator: 1
The learner understands cause and effect.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Realizes that pushing the bar / button on a drinking fountain will make the water available to drink</td>
<td>Squeezes lever on window cleaner spray bottle to get the solution to come out</td>
<td>Understands that automatic doors slide open because he or she has stepped on (wheeled chair on) mat</td>
<td>Depresses or releases switch to activate CD / tape player</td>
<td>Looks for light switch, upon entering a room in order to turn on the light</td>
</tr>
<tr>
<td>Understands that no snacks will be available from vending machine unless he or she puts designated amount of money in it</td>
<td>Activates handicapped switch at accessible entrance to place of employment to get the door to open</td>
<td>Realizes that if he or she pulls a fire alarm, sounds and lights will activate and the fire department will appear on the scene</td>
<td>Realizes that he or she can advance to first base in t-ball game only when he or she hits the beeper ball into fair territory</td>
<td>Understands that depressing the telephone receiver button when someone is on the line will result in the call being disconnected</td>
</tr>
<tr>
<td>Associates disciplinary action that finds him or her in principal's office with own previous behavior</td>
<td>Pushes elevator button that corresponds to desired floor in order to get the elevator to stop there</td>
<td>Uses button at pedestrian crosswalk to activate lights to stop traffic and make it safe to cross the street</td>
<td>Understands that the friend he or she is visiting will answer the door only after he or she rings the doorbell and / or knocks</td>
<td>Presses the &quot;Power&quot; button on the television remote and expects the TV to turn on</td>
</tr>
</tbody>
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Extended Standard 4 - DATA

Benchmark: 1
The learner uses probability to make predictions and decisions in a variety of situations.

Indicator: 2
The learner recognizes whether an outcome of a simple event is possible or impossible.

**EXAMPLES ARE NOT HIERARCHICAL**
This is evident, for example when the learner:

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<tr>
<td>Realizes that continuing to press the lever on ice machine in cafeteria, when nothing is dispensing, will not result in full glass of ice</td>
<td>Recognizes that mastery of the skills addressed in his or her transition plan should result in his or her getting the kind of job he or she wants after graduation</td>
<td>Chooses appropriate store to purchase a specific type of item (ice cream sundae)</td>
<td>Recognizes that if he or she goes out in the rain without an umbrella, he or she will get wet</td>
<td>Realizes that he or she will not be able to see the ending of a television program when parent says, &quot;Dinner in five minutes!&quot;</td>
</tr>
<tr>
<td>Recognizes that his or her request to check materials out from school's media center will not be honored without library card</td>
<td>Recognizes that he or she cannot walk home and return to work punctually when given only a ten-minute break</td>
<td>Recognizes that pressing harder and harder on button beside &quot;sold out&quot; light on vending machine will not result in a can of soda or pop</td>
<td>Recognizes that both teams in a championship game cannot take home the winner's trophy</td>
<td>Realizes that an electrical appliance will not work unless it is plugged into a socket or electrical outlet</td>
</tr>
<tr>
<td>Realizes that skipping class and / or failing to turn in work makes it impossible to earn high grades</td>
<td>Recognizes that repeatedly turning the knob on a locked door will not result in door opening</td>
<td>Recognizes that it is possible to be injured if street crossing rules are not followed</td>
<td>Recognizes that if he or she arrives at the theater 1/2 hour after show time, he or she will not see the beginning of the movie</td>
<td>Understands that reaching into a bag of apples cannot result in the retrieval of an orange</td>
</tr>
</tbody>
</table>

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2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
**Extended Standard 4 - DATA**

**Benchmark:** 1  
The learner uses probability to make predictions and decisions in a variety of situations.

**Indicator:** 3  
The learner recognizes the likelihood of possible results or outcomes of a simple event.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tr>
<td>Tells paraeducator or peer he or she not completing all of the assigned classwork</td>
<td>Calls the work site to report if he or she will be late or absent</td>
<td>Understands that when he or she removes a can from the bottom of the display stack the remainder of the cans will fall</td>
<td>Recognizes the likelihood of which team will win, when the score in the game is very uneven (52 - 10)</td>
<td>Refrains from placing a hot pad on top of the stove when he or she is cooking a snack, meal</td>
</tr>
<tr>
<td>Waits to pass through a door one at a time instead of all students cramming through the door</td>
<td>Accepts help from coworker when he or she is unable to complete task in predetermined time</td>
<td>Knows and follows safe street crossing rules when he or she is attempting to cross a street (crossing light, stop light)</td>
<td>Joins in when the crowd will cheer when points are scored at a sporting event</td>
<td>Asks parent or caregiver to place a lid on his or her drinking cup to avoid spills</td>
</tr>
<tr>
<td>Provides input into the outcome of his or her completing his or her behavior plan</td>
<td>Understands the importance of job skills training when participating in his or her transition planning during his or her IEP meeting</td>
<td>Understands that if he or she does not pay for desired items in store that the police will be called (shoplifting)</td>
<td>Quiets prolonged laughter at movie theater following a comical event on the screen</td>
<td>Takes his or her required medications at designated times</td>
</tr>
</tbody>
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Extended Standard 4 - DATA

Benchmark: 1
The learner uses probability to make predictions and decisions in a variety of situations.

Indicator: 4
The learner predicts what should happen in a given situation and compares what does happen.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tr>
<td>Marks his or her behavior chart to compare to acceptable standards</td>
<td>Expects to find work materials in a designated place and reports to his or her supervisor when items are not there</td>
<td>Recognizes when elevator stops on a floor different from the number button he or she has pushed</td>
<td>Understands that he or she cannot attend the baseball game since it is canceled because of rain but it will be rescheduled</td>
<td>Expects water on stove to boil when temperature is high enough, then adds desired ingredients (spaghetti)</td>
</tr>
<tr>
<td>Adjusts to not swimming on Friday because his or her school is not in session because of parent/teacher conferences</td>
<td>Reports to supervisor after attempting to complete his or her job task when job coach is unavailable</td>
<td>Makes another selection after he or she realizes that desired vending machine item is not available</td>
<td>Understands that he or she cannot attend an event when the desired event tickets are not available (sold out)</td>
<td>Expects that house will be warm on a cold winter day but the furnace is not working so the house is cold</td>
</tr>
<tr>
<td>Understands that his or her favorite seats are not available during an assembly when the front row of seats is reserved for special guests</td>
<td>Gets additional supplies independently when supply has not been replenished</td>
<td>Changes food order when wait person tells him or her that they are out of the special for the day</td>
<td>Understands that when the swimming pool temperature is too cool, that he or she will have to select another activity</td>
<td>Recognizes that when a different person answers the telephone that he or she may have dialed the wrong number</td>
</tr>
</tbody>
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Extended Standard 4 - DATA

Benchmark: 1
The learner uses probability to make predictions and decisions in a variety of situations.

Indicator:

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Extended Standard 4 - DATA

Benchmark: 2
The learner collects and uses data to make decisions and solve problems.

Indicator: 1
The learner makes a decision based on appropriateness or preference, given information on possible choices.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Participates in choosing the desired courses to take for the next school year during his or her IEP meeting</td>
<td>Participates in his or her person centered planning activity where job opportunities are being discussed to express own desires (work with animals, plants)</td>
<td>Chooses closest recreation center to bus line that offers the desired activities in which he or she would like to participate</td>
<td>Chooses preferred movie and time at a theater that is accessible when planning an outing for friends</td>
<td>Indicates preferences about food being prepared by sibling or caregiver</td>
</tr>
<tr>
<td>Chooses which peer to sit with at school assembly after surveying the crowd</td>
<td>Gives suggestions or opinions about employment options during transition IEP</td>
<td>Compares the prices of similar items at various grocery stores and chooses to shop at the store with the best values</td>
<td>Chooses desired extra curricular activity during his or her IEP meeting</td>
<td>Chooses own clothing to wear for a special occasion that he or she is planning to attend (prom, picnic, sledding)</td>
</tr>
<tr>
<td>Chooses his or her desired food from school cafeteria menu</td>
<td>Explains why one job choice is preferred instead of another</td>
<td>Chooses most appropriate seating for self and peer at community concert (front, middle, rear)</td>
<td>Chooses not to participate in activity suggested by his or her peers (personal choice)</td>
<td>Chooses recipe to prepare for sibling's special celebration (pie, cookies, milk shake)</td>
</tr>
</tbody>
</table>

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Extended Standard 4 - DATA

Benchmark:  2
The learner collects and uses data to make decisions and solve problems.

Indicator:  2
The learner gathers data related to familiar experiences by counting, tallying, observing, interviewing, etc., appropriate for the situation.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tbody>
<tr>
<td>Places marks on chart to record his or her personal data of own behavior</td>
<td>Interviews or observes people doing various jobs to determine his or her vocational interests</td>
<td>Records the number of days before the books on tape are due back at the library</td>
<td>Keeps own teams records when working as the team manager (strikes per person, number of baskets made)</td>
<td>Determines categories from which data could be gathered about family members (shoe size, color of eyes, etc.)</td>
</tr>
<tr>
<td>Participates in classroom data collection of a science experiment during cooperative learning activity</td>
<td>Reports the results of his or her behavior based on behavior chart at his or her person centered planning meeting</td>
<td>Calls bus station to inquire about the bus schedule to allow him or her the time needed to get to the matinee concert and return before dark</td>
<td>Asks peers their opinion about a movie before deciding if he or she would like to see the same movie</td>
<td>Marks days of a calendar leading toward his or her special event (days until graduation, days until family vacation)</td>
</tr>
<tr>
<td>Participates in school uniform survey by interviewing peers</td>
<td>Records one tally mark for each package of materials that he or she places in the correct slot in the shipping container</td>
<td>Counts items in grocery cart to determine if he or she has the correct amount of groceries to use the check out line for 15 items or less</td>
<td>Comments about the number of people attending a sporting event who are wearing the team colors (including him or her self)</td>
<td>Sets timer for the amount of time allotted for him or her to play videogames</td>
</tr>
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Extended Standard 4 - DATA

Benchmark: 2
The learner collects and uses data to make decisions and solve problems.

Indicator: 3
The learner records numerical relationships in tables.

EXAMPLES ARE NOT HIERARCHICAL
This is evident, for example when the learner:

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<tr>
<td>Records the noon time temperature of the days of the week with the highest and / lowest temperatures</td>
<td>Records actual hours that he or she has worked in the correct location on his or her time sheet</td>
<td>Understands that the goal of a community fund raising effort is near when the red line on the thermometer graph is near the top</td>
<td>Records the number of miles that he or she has walked when working toward a specific goal in his or her exercise program</td>
<td>Records his or her weight on wall chart while on fitness program to lose weight</td>
</tr>
<tr>
<td>Records results of class elections</td>
<td>Records the number of days on calendar that he or she is responsible for coffee clean-up (rinse pot, refill cups)</td>
<td>Records the number of individuals who have agreed to walk in the community walk-a-thon</td>
<td>Records the number of medals teams win in sporting events (Olympic teams)</td>
<td>Records the times and TV stations of favorite programs when new caregiver has been hired</td>
</tr>
<tr>
<td>Records the number of males and females who use the computers in the school library during the class period in which he or she is the library proctor</td>
<td>Accepts production award for the employee with the largest increase in the number of items completed or boxes packed on a given day he or she is at work</td>
<td>Records the number of people who attend each meeting of the community living organization's monthly meetings that he or she attends</td>
<td>Records the number of home runs hit by his or her favorite teams during the baseball season</td>
<td>Records the day, time, and hours that caregiver has worked each week</td>
</tr>
</tbody>
</table>

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Extended Standard 4 - DATA

Benchmark: 2
The learner collects and uses data to make decisions and solve problems.

Indicator: 4
The learner answers questions about data.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

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<tr>
<td>Reports to the class the results of his or her group experiment in science class</td>
<td>Retrieves more shopping bags from supply room to replenish the supply of bags at each check out station or lane</td>
<td>Determines if the desired person in the community assistance office is available by reading the in/out board</td>
<td>Identifies who won the game after he or she has heard the scores reported on the local sports news broadcast</td>
<td>Reads family chore chart to determine if his or her daily responsibilities have changed</td>
</tr>
<tr>
<td>Assists with attendance reporting and answers questions about which of his or her peers are absent</td>
<td>Decides that there is enough time for him or her to complete current job task and begin another before lunch time</td>
<td>Purchases the correct postage that is needed for a package by reading the chart posted on the post office wall</td>
<td>Listens to the weekly weather forecast to determine which day he or she should go swimming</td>
<td>Adjusts thermostat for furnace in winter and air conditioning in summer</td>
</tr>
<tr>
<td>Explains improvements in chart of number of yards walked in PT session during his or her IEP meeting</td>
<td>Determines that additional time will be needed to complete a task since some of the work group members are not present</td>
<td>Determines that the dry cleaners is not open by reading the hours of operation posted on window</td>
<td>Identifies what exercises to complete by reading his or her individual exercise chart at local fitness center</td>
<td>Adds additional items that are needed to make a favorite dessert to parent or caregiver's grocery list</td>
</tr>
</tbody>
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**Extended Standard 4 - DATA**

**Benchmark:**
2
The learner collects and uses data to make decisions and solve problems.

**Indicator:**
5
The learner describes data with graphs, charts, or physical displays.

**EXAMPLES ARE NOT HIERARCHICAL**

This is evident, for example when the learner:

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<tr>
<td>Determines the number of children who have on specific colored shoes</td>
<td>Brings chart of hours worked at community job site for the semester to transition planning meeting and describes the contents of the chart</td>
<td>Realizes that there will be a long wait outside of the arena when he or she sees the long line of people waiting to purchase tickets</td>
<td>Completes his or her fund raising progress chart when desiring to raise money to join the team on a trip to amusement park</td>
<td>Completes graph of weekly behavioral goals</td>
</tr>
<tr>
<td>Places star stamp on the classroom attendance chart to record the number of students present each day</td>
<td>Places one object (marble) in a container with the completion of each step in the job task until entire job is complete</td>
<td>Selects the size of beverage that he or she would like to purchase from cups mounted or displayed on counter</td>
<td>Adds current victory to his or her team chart of season records</td>
<td>Arranges his or her shoes in accordance with weekly weather forecast (sneakers, boots, dress shoes)</td>
</tr>
<tr>
<td>Makes poster of group science project results with peers</td>
<td>Describes weather forecast when he or she notices that everyone at the job site has brought an umbrella to work that day</td>
<td>Describes how many more purchases are needed to get one free on restaurant punch card (buy 10 get one free)</td>
<td>Indicates when goal is reached for desired activity (reading a book, lifting weights)</td>
<td>Locates nutrition facts on food labels when he or she is recording the amount of salt they consume on a daily basis</td>
</tr>
</tbody>
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Extended Standard 4 - DATA

Benchmark: 2
The learner collects and uses data to make decisions and solve problems.

Indicator: 6
The learner recognizes credible sources, in contrast to misleading representations of information.

**EXAMPLES ARE NOT HIERARCHICAL**

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<tbody>
<tr>
<td>Understands that if his or her hearing aids are not working that the battery may be dead and need to be replaced</td>
<td>Submits a letter of resignation to leave his or her current position to take a more desired job offer</td>
<td>Exercises great caution when a stranger approaches him or her (moves to the side, checks locks on car door)</td>
<td>Listens to the radio to determine if the baseball / soccer game that he or she was planning to attend has been rained out</td>
<td>Seeks appropriate medical attention when what appears to be a minor illness does not improve</td>
</tr>
<tr>
<td>Asks peer to give him or her their glasses when working on group project in history class</td>
<td>Ask job coach or supervisor for clarification when coworker says that there is no work tomorrow and it is not a weekend or a holiday</td>
<td>Compares stories told by peers about community events to what he or she has heard on the local news broadcast</td>
<td>Re-tells jokes that a peer has told, as humor not a source of information or fact</td>
<td>Recognizes that an appliance may be unplugged and not broken when that appliance malfunctions</td>
</tr>
<tr>
<td>Asks teacher if he or she may leave classroom to return book that he or she has been using</td>
<td>Recognizes when coworker is spreading gossip about another coworker and does not repeat it</td>
<td>Listens to the issues that are important to him or her during political debate in order to determine for whom he or she should vote for in upcoming election</td>
<td>Understands that his or her student identification must be shown to get a discount (sporting events, movie)</td>
<td>Completes all of his or her prescribed medications even when symptoms have decreased</td>
</tr>
</tbody>
</table>

1. The extended standards are written to address a wide variety of response and communication modalities or methods used by learners who qualify for the alternate assessment. These are individually determined by the IEP team.

2. Demonstration of mathematical competencies may be mediated through any of the following: concrete objects, paper and pencil, calculators, assistive technology, and/or mental mathematics.
Extended Standard 4 - DATA

Benchmark: 2
The learner collects and uses data to make decisions and solve problems.

Indicator: 7
The learner recognizes appropriate conclusions generated from information collected.

EXAMPLES ARE NOT HIERARCHICAL

This is evident, for example when the learner:

<table>
<thead>
<tr>
<th>School</th>
<th>Vocational Career</th>
<th>Community</th>
<th>Recreation &amp; Leisure</th>
<th>Home</th>
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</thead>
<tbody>
<tr>
<td>Locates another place to sit in the cafeteria when peers are sitting in his or her usual spot</td>
<td>Recognizes the need to change his or her behavior when he or she sees the job coach or supervisor approaching the break room</td>
<td>Concludes that the vending machine is empty or broken after he or she has pushed all of the buttons</td>
<td>Locates the designated seating area for people in wheelchairs at the football stadium</td>
<td>Takes his or her umbrella on an outing to the mall after observing dark clouds and/or hearing thunder</td>
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<td>Chooses another activity during free time in PE class when all of the basketballs are being used</td>
<td>Refrains from opening the door upon reading the &quot;do not disturb&quot; sign on the supervisor's office door</td>
<td>Locates his or her caregiver's car by the row signs that are posted in the mall parking lot (A, B, 3, 4, Elephant, Cow)</td>
<td>Enters the correct line to order food or to order just ice cream by reading the signs</td>
<td>Realizes that he or she will have to use the extra dishes in the sink when the dishwasher is full</td>
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<tr>
<td>Understands that the number of snack items for him or her to bring to school on Fat Friday is the same as the number of students in the class</td>
<td>Realizes that he or she will not be able to take the same bus route when he or she has a new job on the other side of town</td>
<td>Realizes that there is a crowd at the concession stand and that you have to get into the correct line in order to get service</td>
<td>Asks librarian if favorite video is available when he or she is unable to find it in its usual location</td>
<td>Closes his or her bedroom window when the breeze is too cold</td>
</tr>
</tbody>
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Appendix A

Glossary of Terms
Extended Curricular Standards
Mathematics

Glossary of Terms

Augmentative communication - a communication system used by students who are unable to communicate through speech or writing; these systems include but are not limited to, manual signs, communication board, and high-tech electronic communication devices.

Braille - tactile system for reading and writing with an official code or "alphabet" composed of braille characters or braille cells that consist of various patterns of raised dots that roughly correspond to alphabetic letter, punctuation marks, and other symbols.

Child with a disability - means a child having mental retardation, etc., and who, by reason thereof, needs special education and related services. (Federal regulations definition, 1997)

Communication modalities or methods - Communication modes, modalities, or methods: an integrated group of components, including symbols, aids, strategies, and techniques used by individuals to enhance communication.

Communication device - a physical object or technology used to transmit or receive messages (e.g., communication book, board, chart, mechanical or electronic device, computer).

Data - Figures, facts, or information.

Eligible - qualified.

Extended or Extension - a part forming a continuation of addition.

Eye gaze - often referred to as visual fixation-able to regard a stimulus, which is in a fixed position.

Kinesthetic - self awareness of movement resulting from the synthesis of tactile sensations with motor activity; essential for acquisition of communication skills.

Large Print - print-size ranging from 18 to 24 points, may also have specially designed spacing between lines, special contrast between print and page.
Natural gestures - communication-non-vocal systems, which require movement of the body, typically the arms and hands, but do not require access to equipment or devices separate form the body. Gestures are non-symbolic, intentional communication forms that do not have a universal meaning except for the user and those who are familiar with the student.

Number - a mathematical idea contained in a set

Numeral - The symbolic representation of a number

Sign language - a visual-gestural system of language involving facial expressions, hand shapes, body movements, and gestures
Appendix B

References
References


Life Skills STARS Curriculum, Special Services Department, Blue Valley Schools.


Student Portfolio, a system for documenting the strengths, needs, and abilities of students who are deaf blind. Published by the Kansas State Board of Education, 1996.

Education Priorities for a New Century

The Kansas State Board of Education is charged with the general supervision of public education and other educational interests in the state. While clearly acknowledging the role and importance of local control, the State Board of Education has the responsibility to provide direction and leadership for the supervision of all state educational institutions under its jurisdiction.

With this in mind the Board has adopted the following mission:

The Kansas State Board of Education promotes student academic achievement by providing educational vision, leadership, opportunity, accountability, and advocacy for all.

The Board believes that focusing on this mission will lead to an educational system which is embodied in the following vision statement:

Schools will work with families and communities to prepare each student with the living, learning, and working skills and values necessary for caring, productive, and fulfilling participation in our changing society.

To this end the State Board has established the following priorities to guide its work to begin a new century:

- Improve teaching in Kansas schools utilizing performance measurement for teachers and creative approaches to effective teacher recruitment, preparation, and development.
- Raise the achievement of students with an emphasis on low achievers to acquire basic academic skills.
- Continuously improve state curriculum standards and assessments.
- Address the needs created by changing enrollment trends.
- Ensure that students read at the appropriate level, including diagnosis of skills and the use of effective interventions.
- Ready children to learn by supporting families with quality early childhood and primary programs.

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