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ABSTRACT

The document describes the ALPS (Advanced Learning Packages) program for teaching gifted students. Introductory materials provide information on teacher requirements, school requirements, ALPS teacher orientation responsibilities, orientation week, field trip procedures, gifted money available, ALPS costs, ALPS evaluations, the Structure of Intellect, and various forms and checklists. The remainder of the document contains lesson plans in 27 program areas including biology, prehistoric mammals, ancient civilizations, probability and statistics, photography, career education, and Egyptology. A list of recommended books and games for gifted students is also provided. (SBH)

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ADVANCED  
LEARNING  
PACKAGES

1978-79

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\*To be added

SAN JUAN UNIFIED SCHOOL DISTRICT  
Gifted Programs

ALPS TEACHERS, THEIR UNITS AND GIFTED STUDENTS

The ALPS teachers put a great deal of time and thought into developing their units into original, creative, exciting programs designed to capture and hold the gifted students' interests.

The ALPS teachers' programs and teaching strategies are many and varied. All the teachers are interested in challenging gifted students. All are enthusiastic about their subjects and employ a wide variety of methods to teach children.

Advisory groups in some of the schools have recommended different formats for the implementation of the ALPS programs. The options available are varied and were designed to meet the needs of the youngsters as outlined by their teachers and the school principal.

ALPS mini units were created by the ALPS teachers and left at each school for teachers to use in their instructional day.

The instructional design of each ALPS unit is focused on the STRUCTURE OF THE INTELLECT, (SOI). Each gifted student will be taught the five intellectual operations: Cognition, Memory, Evaluation, Convergent Production, and Divergent Production. The units will include learning centers based on SOI.

Participation in ALPS should broaden the students' areas of interest, increase their problem solving techniques and critical thinking abilities and to encourage them to continue individual studies in new areas. The longer the students' participation in ALPS, the wider the range of interest and abilities can develop. The students can grow to accept different teachers' personalities and teaching strategies. Their variety of experiences will increase with each rotation of units. The students new interests and enthusiasm should be encouraged and continued when they return to the regular classroom.

## A Look To The Future

The 200 minutes of qualitatively different instruction weekly is a minimum requirement set forth by the California State Department of Education. The full day instruction program must be considered, too. To admonish teachers to do better is counter productive. To provide teachers with help and support they identify as their needs, is productive. Teachers who work with gifted students, assigned directly to schools or going to schools on a rotating basis, should provide resource assistance for all teachers.

Among the services to be developed are:

- Teacher inservice, workshops using units to demonstrate teaching strategies and learner styles incorporating SOI
- Adult education classes for teachers and parents to promote understanding of the needs of gifted students
- Demonstration programs for all community members interested in the education of gifted students
- Work with individual teachers in the development of teaching units which follow through the presentations made by teachers during minimum required time
- ALPS Mini Units are placed in each school for teachers to use in their classroom. The units are developed to allow children to work at higher levels of conceptualization
- Learning Centers have been developed which are to be used with the ALPS units. The format of each is Structure of the Intellect

SAN JUAN UNIFIED SCHOOL DISTRICT  
Gifted Programs

TO: Parents of Gifted Students  
FROM: Judy Arrigotti  
SUBJECT: Advanced Learning Packages (ALPS)  
DATE: September 1978

For the 1978-79 school year, all or part of the 200 minutes of qualitatively different instruction for your gifted student will be developed through the ALPS program.

ALPS is designed to give individual children an opportunity to explore areas of particular interest and to investigate new areas, to discover new talents and abilities. In subject areas where students are already familiar, teachers must use new teaching strategies and materials. A creative teacher can give students a new look at an old subject. The introduction to subjects never before covered in the regular classroom will be a whole new experience for the students. Well qualified, resourceful teachers, teaching subjects about which they are enthusiastic and excited will transmit that enthusiasm and excitement to their students. The ALPS teachers have to be flexible and able to work under constantly changing conditions.

Your cooperation and support is extremely important in the following areas:

1. Parents should enthusiastically encourage their children to attend each ALPS unit, "TRY IT -- YOU'LL LIKE IT".
2. Parents should encourage their children to share their ALPS experiences with them.
3. Parents should impress on their children the importance of promptness.
4. Parents should be aware of the incidental requests for specific materials and help their children "remember".
5. Parents should contact ALPS teachers immediately when a question arises.

Working together we can provide the best possible educational program for your child. Thank you for your cooperation.

JA/rr

\*\*\*\*\*

(PLEASE COMPLETE AND RETURN TO SCHOOL)

My child \_\_\_\_\_ In Grade \_\_\_\_\_ Room \_\_\_\_\_ has  
permission to participate in the ALPS program at \_\_\_\_\_  
school for the 1978-79 school year.

\_\_\_\_\_  
Parent's Signature

## QUESTIONS FREQUENTLY ASKED OF THE ALPS TEACHERS

1. What does MGM mean?

Mentally gifted minor

2. What is a gifted student?

Education Code Section 6421 states: A mentally gifted minor means a minor enrolled in a public primary or secondary school of this state who demonstrates such general intellectual capacity as to place him within the top 2 percent of all students having achieved his school grade throughout the state or who is otherwise identified as having such general intellectual capacity but for reasons associated with cultural disadvantages has underachieved scholastically.

3. How can parents deal with the information that their child is now identified as intellectually gifted?

The child has not changed. The term intellectually gifted is an additional information now available to the parent. They can continue providing their child with opportunities to grow in many different areas as they have done in the past.

4. How do we help students to deal with the term intellectually gifted?

Everyone has strengths and weaknesses. Intellectually gifted students have strengths in ability to deal with abstractions. It is what you do with your abilities that makes a difference in what happens to you. It is a strength which need not be hidden or be ashamed to have, nor need it be something to brag about. It is simply a part of you which makes you a unique person.

5. Why is a student who is a high achiever often not identified as intellectually gifted minor?

Teachers often mistake high achievement for intellectually gifted. Intellectually gifted students may also be high achievers, but they may also vary in levels of achievement in different areas whether it be academically, socially, physically. A pupil who has good abilities who is conforming and highly motivated can be a high academic achiever in the classroom. The high level of abstraction and conceptualization is often missing when problems to be solved are of an open ended nature.

6. Should the identified intellectually gifted student who is underachieving in one or more academic areas be excluded from participation in special gifted activities?

A student identified as intellectually gifted has some unique needs which need to be met by other than only regular classroom instruction. Where a carefully thought out set of activities have been planned for the gifted students in a

classroom, then the needs of the gifted students may be met. Where no plans have been formulated for the students, then a "pull-out" activity can meet some of the needs.

7. Are IQ tests valid?

Yes, IQ tests are valid when used for the purpose they were made to do. Results do not confer magical properties or prophesy on anyone.

8. Are only verbal children screened for testing?

Generally, teachers and parents become aware of the highly verbal children. However, observant adults assess students who exhibit highly intellectual abilities which are not verbal in nature. This often occurs at the secondary level where students show divergent problem solving of a non-verbal nature.

9. When is the best time for screening to take place?

As soon as possible. Screening goes on at all levels all year round. Students who are identified early in school life are provided with uniquely appropriate experiences which will enable them to continue developing their abilities. Pupils who are not identified early may miss experiences which challenge and stimulate them.

10. What is the funding/source?

Education Code section 6426 states that the Superintendent of Public Instruction, if he approves, shall apportion to each applicant school district or county superintendents of schools an amount specified for each school year.

11. What are the funding limitations?

Education Code section 6426 states that the apportionment made during a fiscal year shall not be made on account of more than 3 percent of the units of average daily attendance of pupils during the preceding fiscal year credited to all kindergarten and grades 1 through 12 in all of the schools and classes maintained by school districts and county superintendents of schools.

12. What does 200 minutes of qualitatively different instruction mean?

The 200 minutes may be provided for each child by varied activities. The 200 minutes may include special activities such as field trips, seminars, weekend intensive mini-classes, interession classes, directed research, independent research and may also include instruction within the regular classroom which are geared to the needs of the gifted students.

13. What is the difference between quality and quantity given to students?

When you give more of the same work to the gifted student, i. e., 10 pages of computation to keep gifted student busy, you are giving quantity. When you plan the work so that he will be challenged and stimulated to learn more about something, you are providing quality (qualitatively) of a different nature than that given to an average student. The latter plan is to be preferred to the former plan. Acceleration may be applicable to some students. Others may profit from lateral expansion of a subject.

14. What is inappropriate subject for gifted students?

Craft type instruction is not fundable. If a craft activity is part of a well planned unit where the emphasis is not upon the craft, but upon expansion of knowledge, then it can be a part of the culminating activity.

15. What about supplies, equipment and materials?

Capital outlay may not be bought with gifted funds.

16. What is the value of field trips?

Field trips of value have been planned with care so that background research has been done by the students who are then looking for specifics, when on a trip. After the trip, there will be an evaluation of the trip. The full development of the perceptual abilities is as important as is the development of the cognitive abilities.

# SAN JUAN UNIFIED SCHOOL DISTRICT

## ALPS

### Teacher Requirements

Teachers who qualify to work with gifted students in this program will be able to:

1. Teach students in grades K-8.
2. Plan in advance eight (8) lessons with goals, objectives, teaching strategies, qualitatively different activities, supplies and evaluation spelled out.
3. Become familiar with all other programs to avoid repetition and provide for follow through.
4. Alter lessons or projects to maintain them at high levels, which are challenging, interesting, and exciting to gifted students.
5. Keep a Case Study Profile on each certified gifted student participating in ALPS.
6. Contact to share ideas with staff members.
7. At the beginning of each new rotation, send a description home to parents explaining each eight (8) week program.
8. Units with SOI learning centers.

SAN JUAN UNIFIED SCHOOL DISTRICT

ALPS  
School Requirements

The person responsible for the gifted education in the school will provide:

1. Schedules for the instruction of gifted students.
2. A maximum of 20 students in order to maintain qualitatively different instruction.
3. Room with appropriate work area and the number of desks and chairs (furniture) needed for the participating students.
4. Arrangements where required for storage of children's projects at the school site.
5. Information to the school community concerning the units taught.
6. Encouragement to the regular classroom teacher to pick-up and follow through with the content presented in order to integrate with the curriculum.
7. Observation of each ALPS teacher at least once during each rotation period and write a brief evaluation of the observation.
8. At least ten minutes between classes for cleanup and setup time.
9. Only certified gifted students in the class.
10. Class list for the teacher at the start of each rotation.
11. Maintaining and updating gifted students files.

REFERRALS, BLUE FOLDERS,  
AND BLUE RECORD CARDS

1. Referrals: There are 3 copies of the referral, the original and 1 copy are to be sent to Chifumi Kojima at Orville Wright School for her okay, she will then forward them to Robin Ruffner at the Gifted Office for setting up appointments for testing. The 3rd (green) copy is kept at the school. If the student is identified gifted the green copy goes into blue folder, if not identified gifted the green copy goes into the cum folder as a record of that student's referral.
2. Blue Folders: Will be sent automatically to the school with a copy of the psychologist's report, and a Blue Record Card. The very able card and goldenrod sheet (Notice of Psychological File) go into cum folder for the classroom teacher and act as a "flag".
3. If children have been identified, but have no blue folder at the school send a list of names, and their birthdates, and the psychological file number if you have it to Robin Ruffner so she can verify certification and provide folders and reports.
4. If you have blue folders for students who are not in your school, send them to Robin Ruffner with a note "These students no longer enrolled at \_\_\_\_\_ school".
5. File Number: This is the number assigned to that student's psychological file and can be found on the report itself or on the goldenrod (Notice of Psychological File), or the very able card.
6. Where should Blue Folders be kept?  
District guidelines state that psychological records are NOT to be filed with cum records so the Blue Folders must be filed in separate location.
7. Can psychological reports be kept separate from Blue Folders?  
Yes, if there is notification in Blue Folders. Secretary should have these "flagged" to insure forwarding complete records when students transfer within the district.
8. What to do when students from your school transfer: ON REQUEST, ONLY
  - A. In district transfer: Send cum folder, blue folder with psychological report to new school.
  - B. Out of District transfer: Send cum folder.  
Send Blue Folder with report to Robin Ruffner.

**Referrals, Blue Folders, and Blue Record Cards**

9. How do you find out if a transfer student is gifted?

There will be some evidence of testing in the students cum folder.

A. In district

Call previous school and have them forward complete records. (cum folder, Blue Folder with report)

B. Out of District

Have parent sign Release of Information Form and send to previous school of attendance asking for complete psychological record. Then send the report to Robin Ruffner so she can set up a psychological file in our district, and send you the Blue Folder.

Students CANNOT start in program until above information is received.

10. Students must have a signed permission slip every year to participate in the program. If parent decides to withdraw students from the program, that must also be in writing.

11. The blue record card must be maintained by everyone instructing gifted students in a special program. These cards will form the developmental case study profile that will be helpful in planning appropriate individual programs.

SAN JUAN UNIFIED SCHOOL DISTRICT  
Gifted Programs

ALPS

The first week of each rotation will be devoted to classroom and ALPS teacher contact to share and plan mutually effective teaching strategies for gifted students.

Suggested activities for your first day in each school:

1. Introduce yourself and your programs to the principal, gifted coordinator and classroom teachers
2. Review ALPS Book with principal step-by-step
3. Determine program preferences
4. Ditto program explanations for classroom teachers and parents
5. Communicate with principals, gifted co-ordinator and classroom teachers to promote better understanding about ALPS within the school community
6. Have principal complete Principal Checklist
7. Examine cumulative folders of gifted students
8. Observe gifted students in their regular classroom
9. Check out the facilities the school has provided for your program, to determine appropriateness
10. ANSWER QUESTIONS!!

There are many unanswered questions about giftedness and gifted programs among principals, staff members and parents. As ALPS teachers we will be expected to know all the answers. When you don't know the answer offer to find out.

SAN JUAN UNIFIED SCHOOL DISTRICT

ALPS

Orientation Week Information

School \_\_\_\_\_ Principal \_\_\_\_\_

Time in ALPS: 1st year \_\_\_\_\_ 2nd year \_\_\_\_\_ 3rd year 2

1978-79 schedule \_\_\_\_\_

Gifted program: Total ALPS \_\_\_\_\_ Partial ALPS \_\_\_\_\_ Other \_\_\_\_\_

If other, explain:

\*\*\*\*\*

Where is the key picked up?

Where are the ALPS supplies stored?

Person responsible for gifted program, of other than principal \_\_\_\_\_

Secretary \_\_\_\_\_

ALPS room: Library \_\_\_\_\_ Multipurpose room \_\_\_\_\_ Classroom \_\_\_\_\_

Other \_\_\_\_\_ Room # 7

During the orientation week, what would you like accomplished?

Procedure used to introduce new ALPS teachers and programs to staff and parents:

Meetings \_\_\_\_\_ Notices \_\_\_\_\_ Informal introduction \_\_\_\_\_ All \_\_\_\_\_

Method used for choosing ALPS programs?

Field trips: encouraged \_\_\_\_\_ discouraged \_\_\_\_\_

Procedures:

Preferred transportation: school busses \_\_\_\_\_ private cars \_\_\_\_\_

Orientation Week Information

ALPS Mail Box: yes \_\_\_ no \_\_\_ If yes, location \_\_\_\_\_

Procedure for film orders and pick up: Same for all teachers \_\_\_\_\_

ALPS procedure \_\_\_\_\_ If different, how: \_\_\_\_\_

Procedure for ALPS report card distribution: place in teachers' boxes \_\_\_\_\_

teachers' rooms \_\_\_\_\_ home with students \_\_\_\_\_ principal's office \_\_\_\_\_

prefer not to use a report card \_\_\_\_\_

Any unique procedures or philosophy that ALPS teachers should become aware of?

---

FOR INTERMEDIATE SCHOOLS

How are your gifted students scheduled into ALPS classes:

# SAN JUAN UNIFIED SCHOOL DISTRICT

## ALPS

### Field Trip Procedures

1. Consult principals about field trips during orientation week.
  - A. Do they encourage or discourage the field trip idea?
  - B. Are there any planned school functions that might affect your field trip plans?
  - C. Do they prefer the use of school busses or private cars for transportation? Do they have money left in the gifted budget to pay for busses?
2. Each student leaving the school grounds must have a completed permission slip informing the parent of:
  - A. Where they are going (destination).
  - B. When they are leaving, date and time.
  - C. When they are returning, date and time.
  - D. How they are getting there (transportation-school busses or private cars\*).

\*Name of licensed and insured driver providing the transportation.
3. List of students participating should be left in office with the principal to inform him/her of students leaving school, when and how long.
4. Field trip supervision.
  - A. When setting up transportation, the teacher should inquire as to number of people safely transported in each car provided.
  - B. Driver should have a list of students riding in car. (Not to exceed number prescribed.)
  - C. Students should wear name tags, with school name, for quick identification.
  - D. Students will ride in same car coming and going.
  - E. Driver will supervise the students he/she transports throughout field trip.
5. Teacher should check in at office to report safe return.

If you are not willing to take the time and energy required to properly plan and supervise field trips, I would recommend that you not take them.

The responsibility you are assuming when you transport students away from their schools is ENORMOUS.

Gifted Money Available Based On

55

~~225~~ Per Gifted Student\*

Number of Students	Amount of Money	Number of Students	Amount of Money
5	\$ 325	55	\$3, 575
10	650	60	3, 900
15	975	65	4, 225
20	1, 300	70	4, 550
25	1, 625	75	4, 875
30	1, 950	80	5, 200
35	2, 275	85	5, 525
40	2, 600	90	5, 850
45	2, 925	95	6, 175
50	3, 250	100	6, 500

\*Only students participating in program will be funded

**Wages, Retirement, and Workmen's Compensation**

Based On \$11.00 Per Hour

Hours Each Week	1 Hrs/Wk	2 Hrs/Wk	3 Hrs/Wk	4 Hrs/Wk	5 Hrs/Wk	6 Hrs/Wk	7 Hrs/Wk	8 Hrs/Wk	9 Hrs/Wk	10 Hrs/Wk	11 Hrs/Wk	12 Hrs/Wk
1st 9-weeks	\$ 99	\$ 198	\$ 297	\$ 396	\$ 495	\$ 594	\$ 693	\$ 792	\$ 891	\$ 990	\$1089	\$1188
2nd 9-weeks	\$ 198	\$ 396	\$ 594	\$ 792	\$ 990	\$1188	\$1386	\$1584	\$1782	\$1980	\$2178	\$2376
3rd 9-weeks	\$ 297	\$ 594	\$ 891	\$1188	\$1485	\$1782	\$2079	\$2376	\$2673	\$2970	\$3267	\$3564
4th 9-weeks	\$ 396	\$ 792	\$1188	\$1584	\$1980	\$2376	\$2772	\$3168	\$3564	\$2960	\$4356	\$4752

Cost of Materials and Supplies

	1 Day A Week	2 Days A Week	3 Days A Week	4 Days A Week	5 Days A Week
1 9 Weeks	\$20	\$ 40	\$ 60	\$ 80	\$100
2 9 Weeks	\$40	\$ 80	\$120	\$160	\$200
3 9 Weeks	\$60	\$120	\$180	\$240	\$300
4 9 Weeks	\$80	\$160	\$240	\$320	\$400

**TOTAL COST OF ALPS**

Wages  
\$11 Per Hour

+  
Materials and Supplies  
\$20 per 9-week program

+  
Administrative Costs  
(8% of Other Costs)

**ALPS PACKAGE**

**SALARIES**

1st year ALPS teacher - - - \$9.01  
2nd year ALPS teacher - - - \$9.43  
3rd year ALPS teacher - - - \$9.87

*Inservice Cost*

STUDENT EVALUATION OF ALPS

Gifted Program

ALPS STUDENT QUESTIONNAIRE

School 23 schools 505 students

Grade 4-8

1. What programs would you like to have added to ALPS?  
\_\_\_\_\_  
\_\_\_\_\_

2. Did you wish ALPS lasted longer than 8 weeks? Yes  302 No  77  
If Yes during what program? \_\_\_\_\_

3. Some schools have the same ALPS teachers all year, others have ALPS teachers that rotate every 8 weeks.

A. Which schedule do you have?  
Same ALPS teachers all year  34  
ALPS teachers rotate every 8 weeks  335

B. Which schedule do you prefer?  
Same ALPS teachers all year  103  
ALPS teachers rotate every 8 weeks  319  
Why? \_\_\_\_\_

4. If I could change ALPS I would \_\_\_\_\_

5. Do you learn things in ALPS that help you in your other school subjects?  
Yes  317 No  116 Explain \_\_\_\_\_

6. Does ALPS help you to think better?  
Yes  330 No  64 Explain \_\_\_\_\_

7. Do you ever share you experiences in ALPS with:

A. Your class room teacher?

Often  41 Sometimes  192 Seldom  118 Never  89

B. With your classmates?

Often  77 Sometimes  200 Seldom  92 Never  50

C. With your friends?

Often  114 Sometimes  181 Seldom  72 Never  40

D. With your parents?

Often  264 Sometimes  119 Seldom  31 Never  14



8. I attend ALPS

Before school  After school  During school

9. I would prefer attending ALPS

Before school  After school  During school   
Why? \_\_\_\_\_

10. My favorite subject in school is \_\_\_\_\_

Why? \_\_\_\_\_

11. My favorite ALPS program was \_\_\_\_\_

Why? \_\_\_\_\_

12. I enjoy being in ALPS because \_\_\_\_\_

PROGRAMS YOU WOULD LIKE ADDED TO ALPS

- |                   |                  |                       |                    |
|-------------------|------------------|-----------------------|--------------------|
| Authors           | Farm Animals     | Measuring             | Money              |
| Mammals           | Language         | Future                | Mountains          |
| Animals           | Animal Husbandry | Florida               | Map Making         |
| People            | Oceanography     | Geography             | Foreign Countries  |
| Dinosaurs         | Computers        | Ancient Gods          | Minerals           |
| Birds             | Space            | Electronics           | Braille            |
| Sculpture         | History          | Puppetry              | Amazone River      |
| Cartooning        | Math             | Energy                | Geology            |
| Speed Reading     | Shells           | Zoo Animals           | Film Making        |
| Nature            | Bee Keeping      | Symography            | Aeronautics        |
| History           | Dissection of    | Creative Writing      | Algebra            |
| Chemistry         | Animals          | Monsters              | Anthropology       |
| Foreign Countries | Cooking          | Weather               | Herpentology       |
| Drama             | Survival         | Inventions            | Indians            |
| Astronomy         | Archetecture     | Vocanos               | Paleontology       |
| Mythology         | Camels           | Known-Unknown         | Sex Educations     |
| Ananamy           | Archeology       | Law                   | Coins              |
| Brain             | Medicine         | Music                 | Witches and Ghosts |
| Plants            | Model Rocketry   | Planets               | Philosophy         |
| World War I, II   | Photography      | Ballet                | Wild Life          |
| Sign Language     | Story            | Armed Forces          | Politics           |
| The US            | Insects          | Animal Communications | Reptiles           |
| Puz 13            | Magic            | Anasazi               | Explosives         |
| Brain Burners     | Great Disasters  | Nutrician             | Sewing             |

J.A.S.I.  
3-13-78

PRINCIPAL EVALUATION OF ALPS

Principal \_\_\_\_\_

School \_\_\_\_\_

Number of gifted students in your school \_\_\_\_\_

1. What is your present ALPS schedule? \_\_\_\_\_
2. Has your present ALPS schedule been satisfactory? \_\_\_\_\_
3. Would you be interested in changing it next year? \_\_\_\_\_
  - a. rotate ALPS teachers every 9 weeks \_\_\_\_\_
  - b. rotate ALPS teachers every semester \_\_\_\_\_
  - c. ALPS teacher stays all year \_\_\_\_\_
4. Do you plan on participating in ALPS next year? \_\_\_\_\_
5. Have you had any positive or negative feedback from students? Explain. \_\_\_\_\_
6. Have you had any positive or negative feedback from parents? Explain. \_\_\_\_\_
7. Have you had any positive or negative feedback from your staff? Explain. \_\_\_\_\_
8. Would you like ALPS teachers to keep the gifted students 1 day a week for 2 hours instead of 2 days a week for 1 hour? \_\_\_\_\_  
This would provide better opportunity for the ALPS teachers to individualize instruction and classroom teachers programs would only be affected 1 day a week.
9. Would you like the same ALPS teachers to be scheduled at your school 2 days a week? \_\_\_\_\_
  - a. to teach 2 different programs \_\_\_\_\_
  - b. to teach the same program, offering more opportunity for individualization \_\_\_\_\_

10. ALPS teachers have had extensive training in Bloom's Taxonomy and Structure of the Intellect. Would you like the ALPS teachers to be scheduled for an extra hour:

each week \_\_\_\_\_

twice a month \_\_\_\_\_

each month \_\_\_\_\_

to inservice your staff in Bloom's Taxonomy and S, O. I. ? \_\_\_\_\_

11. Do you have any suggestions to improve next year's program?

PRINCIPAL EVALUATION OF ALPS TEACHER

ALPS CLASSROOM OBSERVATION REPORT

Teacher \_\_\_\_\_

Class \_\_\_\_\_

School \_\_\_\_\_

Grade \_\_\_\_\_

Observer \_\_\_\_\_

Date \_\_\_\_\_

\*\*\*\*\*

1. Organization of Lesson Presentation

A. Exceptionally well organized

B. Satisfactorily organized

C. Poorly organized

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Degree to Which Objectives Are Met

A. Objectives were clearly defined and met by most of the students

B. Objectives defined and met by some of the students

C. Objectives were not clearly defined

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Variety in Classroom Techniques

A. Uses effective and varied classroom methods and techniques

B. Occasionally changes method

C. Uses one method almost exclusively

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# ALPS CLASSROOM OBSERVATION REPORT

## 4. Ability to Arouse Interest

- A. Most students seem highly interested
- B. Students seem mildly interested
- C. Most students seem generally uninterested

Comments:

---

---

---

## 5. Skill in Handling Teacher-Student Interaction

- A. Makes effort to involve total group with the classroom activities
- B. Gives students some opportunity to become involved with the classroom activities
- C. Gives students little or no opportunity for involvement

Comments:

---

---

---

## 6. Skill in Handling Student-Student Interaction

- A. Effectively involves students with one another in classroom activities
- B. Gives students some opportunity to interact with one another in classroom activities
- C. Gives students little or no opportunity for interaction with one another

Comments:

---

---

---

## 7. Classroom Climate

- A. Class is orderly--students respecting each other and teacher
- B. Class is usually orderly--students usually respecting each other
- C. Class is disorderly. Students lacking respect for each other and teacher

Comments:

---

---

---



# ALPS CLASSROOM OBSERVATION REPORT

## 8. Classroom Control

- A. Teacher treats pupils with respect and courtesy, yet is firm and consistent
- B. Teacher has difficulty maintaining classroom control

Comments:

## 9. Suggestions for Improvement

- A. Better preparation
- B. Experiment with new and original ideas
- C. Balance between lecture and student participation
- D. Provide for individual differences through a variety of learning experiences
- E. Better understanding of the emotional and social needs of the age group being taught
- F. Manage behavior problems

Comments:

Observer's Signature \_\_\_\_\_

Teacher's Signature \_\_\_\_\_

# SAN JUAN UNIFIED SCHOOL DISTRICT

*in Suburban Sacramento*

3738 WALNUT AVENUE • CARMICHAEL, CALIFORNIA 95608 • Telephone 484-2301

## EVALUATION OF ALPS STUDENT

Date \_\_\_\_\_

Student's Name \_\_\_\_\_

Subject \_\_\_\_\_

In order to provide the best possible educational experience for your child in ALPS, these characteristics, qualities and behavior traits will be expected by the teachers:

- \_\_\_\_\_ Attends ALPS classes regularly
- \_\_\_\_\_ Is punctual for ALPS classes
- \_\_\_\_\_ Uses time in ALPS to maximum advantages
- \_\_\_\_\_ Uses ALPS supplies and equipment productively
- \_\_\_\_\_ Is well prepared
- \_\_\_\_\_ Shows cooperation with fellow students
- \_\_\_\_\_ Shows cooperation with teachers
- \_\_\_\_\_ Shows respect for other students
- \_\_\_\_\_ Is eager to begin the class immediately
- \_\_\_\_\_ Participates enthusiastically in class

In the event that the student is not measuring up to these expectations, we will notify you by checking those areas about which we have concern. A subsequent meeting with all involved adults and the student will be called to map out a plan to help remedy the situation.

Please initial below and return this letter to the ALPS teacher.

\_\_\_\_\_  
ALPS Teacher

\_\_\_\_\_  
Parent

\_\_\_\_\_  
Classroom Teacher

\_\_\_\_\_  
Principal

Date \_\_\_\_\_

# STRUCTURE OF THE INTELLECT (SOI)

A Very Brief Presentation - Prepared by Elaine Swanson\*

The instructional design of each ALPS unit is focused on the STRUCTURE OF THE INTELLECT. Each gifted student will be taught the five intellectual operations: Cognition, Memory, Evaluation, Convergent Production, and Divergent Production. The units will include learning centers based on SOI.

## THERE ARE 5 WAYS OF OPERATING INTELLECTUALLY:

1. C - Comprehending (Cognition)
2. M - Remembering (Memory)
3. E - Evaluation (Making judgements)
4. N - Convergent Production (The answer, as in school learning)
5. D - Solving Problems (Creativity, Divergent Production)

## NO MATTER HOW WE THINK, WE USE THREE TYPES OF MATERIALS:

- F - Figures (Pictures of actual things)
- S - Symbols (Numbers, dollar sign, musical notes)
- M - Words, ideas or semantics
- B - Behavior (not yet identified by known as social intelligence; the SOI test does not deal with this area.)

EVERY OPERATION - C, M, E, N, D -

Composed of - F, S, M, B IS ORGANIZED!!!

## FROM SIMPLE TO COMPLEX:

	F	S	M	
Units				One thing
Classes				Groups of similar things
Relations				Relationships among things
Systems				Complete system of facts, sentence, paragraph.
Transformations				Creative change
Implications				Working on partial information

(Most teaching is implication, semantic, convergent.)

(What if a person has gaps in how his intelligence functions?)

SOI presents a theory of intelligence. It is a profile of specific abilities; not a score. SO -

**THERE IS NOT ONE IQ SCORE. THERE ARE 120 KINDS OF MEASURABLE INTELLIGENCE!**

This is no particular pattern to "giftedness."

We can strengthen the good abilities and develop the ones that are weak. The necessary skills can be taught (and learned).

We know which kinds of intelligence underlie reading, doing math, being creative, being successful in particular lines of work.

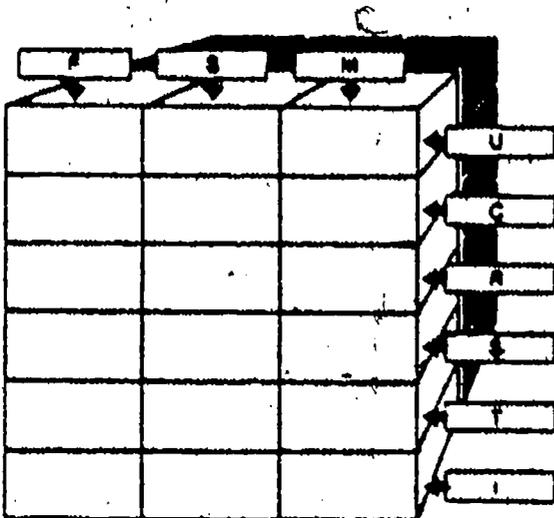
With effort, our "profile of learning abilities" can become almost flat at a consistently high level. Indicating we have developed to our true potential.

\* English-S.S. teacher and M&M Coordinator  
at Albert Einstein Junior High School, Sacramento City Unified School District 25.

Mary Meeker

S.O.I. Institute 214 Main Street El Segundo, California 90245

OPERATIONS		CONTENTS		PRODUCTS	
C	<u>C</u> ognition	F	<u>F</u> igural	U	<u>U</u> nits
M	<u>M</u> emory	S	<u>S</u> ymbolic	C	<u>C</u> lasses
E	<u>E</u> valuation	M	<u>s</u> emantic	R	<u>R</u> elations
N	<u>C</u> onvergent Production			S	<u>S</u> ystems
D	<u>D</u> ivergent Production			T	<u>T</u> ransformations
				I	<u>I</u> mplications



Each OPERATION involves 3 CONTENT dimensions and 6 PRODUCT dimensions.

### TEACHER TECHNIQUES

#### Cognition Questions (C)

#### Figural (F)

1.	What is it? Describe it to me.	U
2.	Which sounds (shapes) are alike?	C
3.	Which shapes go together?	R
4.	Listen and repeat.	S
5.	Find one like this but turned.	T
6.	Mazes.	I

#### Symbolic (S)

1.	Correct misspelled words.	U
2.	Alphabetizing.	C
3.	Letter relationships.	R
4.	Filing.	S
5.	Spoonerism.	T
6.	Number concepts, puzzles.	I

Semantic (M)

1.	Vocabulary, word definition.	U
2.	Classifying words, ideas.	C
3.	Word analogies (simple).	R
4.	Arithmetic reasoning, sequencing words.	S
5.	Synonyms, rebus.	T
6.	Implied meanings from partial information.	I

Memory Questions (M)

Figural (F)

1.	Memory of places on a map.	U
2.	Recall classes assigned to objects.	C
3.	Recall of figures paired for associated reason.	R
4.	Memory for tapped out rhythm or dance steps.	S
5.	Paper folding positions.	T
6.	Recall of figures paired for no associated reason.	I

Symbolic (S)

1.	Short term recall of numbers or letters forward.	U
2.	Memory for number classes.	C
3.	Memory for names.	R
4.	Digits backwards.	S
5.	Correct misspelled words.	T
6.	Computation facts.	I

Semantic (M)

1.	Recall words seen and removed.	U
2.	Recall classes of words shown and removed.	C
3.	Antonyms.	R
4.	Recall ideas in a story.	S
5.	Homonyms.	T
6.	Matching bits of information with previously studied concepts.	I

### Evaluation Questions (E)

#### Figural (F)

1.	Are these alike or different? Find the same one.	U
2.	Select a pair of figures or properties which best fit prescribed conditions.	C
3.	Find figure-parts which meet relative requirements.	R
4.	Find missing portions of pictures.	S
5.	Find the same figure among others in a different position.	T
6.	Magic squares; chess plays.	I

#### Symbolic (S)

1.	Select specified letters or numbers from a group.	U
2.	Identify same and different words or numbers series.	C
3.	Select word pairs from others with letter sequences.	R
4.	Select a number which is incorrect in a sequence of numbers.	S
5.	Make new words from a given word.	T
6.	Abbreviate words; reading map symbols.	I

#### Semantic (M)

1.	Evaluate whether meanings of words are the same or different; match a word to a picture.	U
2.	Classify concepts which mean the same as a given word.	C
3.	Circle the word that does not belong.	R
4.	Cross out sentences which don't make sense.	S
5.	Substitute one alphabet for another or translate from one to the other.	T
6.	What's foolish about this statement?	I

## Convergent Production Questions (N)

### Figural (F)

1.	Reproduce configurations upon presentation (eye-hand motor skill).	U
2.	Classify these pictures (things) according to shape, size, color, etc.	C
3.	Construct this kind of block design.	R
4.	String these beads according to this design.	S
5.	Camouflaged and hidden pictures.	T
6.	Sequence these pictures.	I

### Symbolic (S)

1.	Make contractions out of these words, write these symbols.	U
2.	Classify these numbers (letters) according to condition.	C
3.	Crossword puzzles; equations.	R
4.	Translating codes.	S
5.	Camouflaged letters and numbers.	T
6.	Solving math problems (without words) correctly.	I

### Semantic (M)

1.	Giving correct name (concept) to a series of ideas.	U
2.	Classifying tasks associated with jobs.	C
3.	Identifying parts of speech.	R
4.	Sequencing cartoon strips and/or sentences correctly in a paragraph.	S
5.	Reconciling oppositional words.	T
6.	Implied meanings to words, sentences.	I

## Divergent Production Questions (D)

### Figural (F)

1.	Make other things from this paper, clay etc.	U
2.	Classify items in many ways.	C
3.	Tie dyeing; make new faces from different parts.	R
4.	Use shapes to make new designs.	S
5.	Find the hidden shape in a picture; match stick problems.	T
6.	Make a picture out of a squiggle.	I

### Symbolic (S)

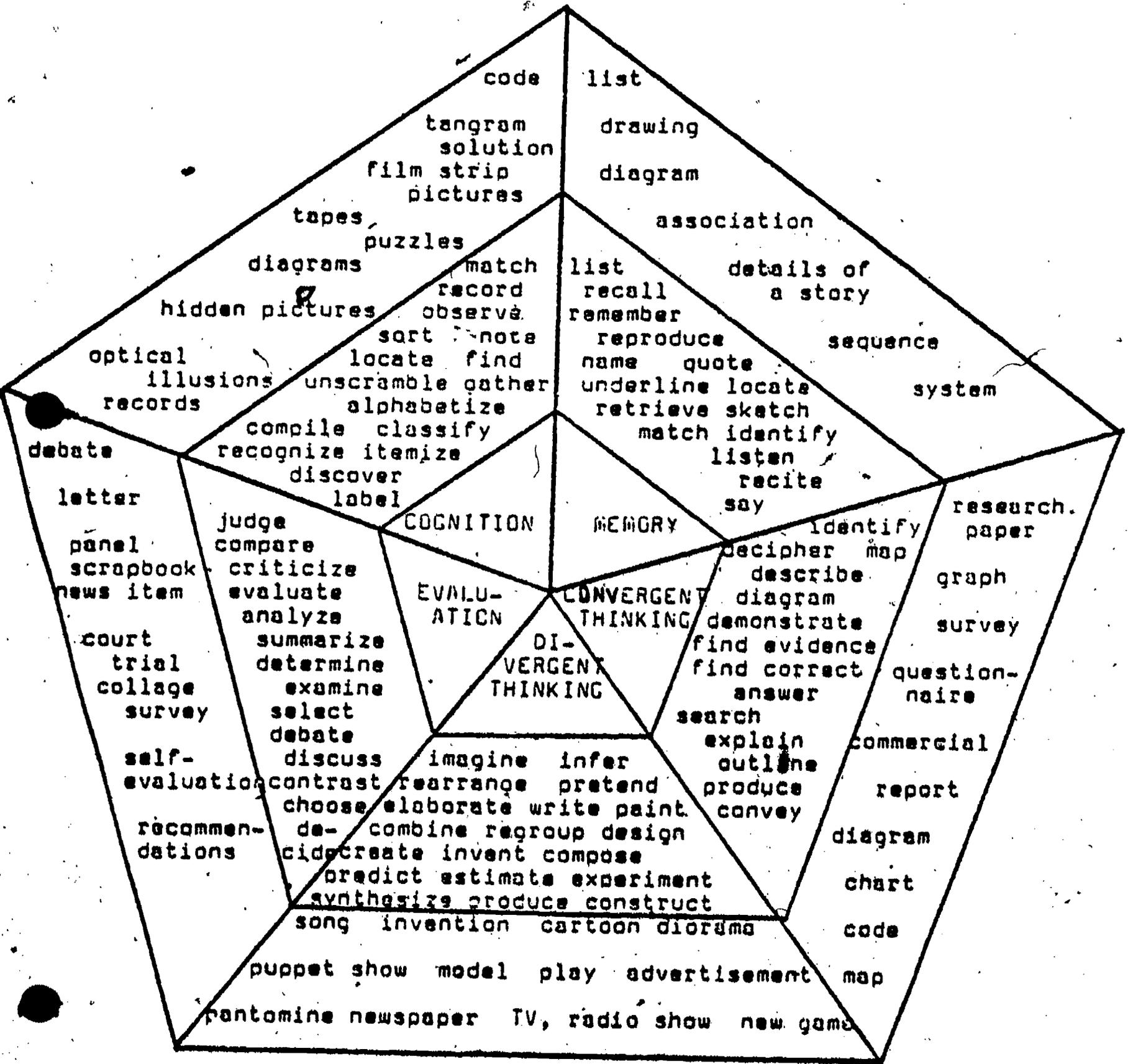
1.	Make many words with an <u>a</u> in the middle.	U
2.	Classify letters or numbers in many ways.	C
3.	Solving equations where any number can be used (commutation).	R
4.	Write many sentences with this sequence of letters to begin each word s <u>   </u> t <u>   </u> o <u>   </u> .	S
5.	Make a new word with the ending letter of a word.	T
6.	Write new equations.	I

### Semantic (M)

1.	Say or write many words beginning with a selected letter in one minute.	U
2.	List things that <u>                    </u> (move) (utensils).	C
3.	Rhyming.	R
4.	Write poems.	S
5.	Puns.	T
6.	What would happen if <u>                    </u> .	I

# CURRICULUM DEVELOPMENT BASED ON THE STRUCTURE OF INTELLECT

To plan a unit of study, a learning center or a daily assignment use the web below to select verbs (process) and nouns (product) when writing questions or planning activities. Each pie shaped piece represents one of the thought processes as defined in the STRUCTURE OF INTELLECT.



Knowledge to be gained.

--- The students will be able to recognize and describe each of the following:

1. Wheels.
2. Pulleys.
3. Levers.
4. Screw and Inclined Plane.
5. Wedges and Work.
6. Friction.

Skills to be developed.

--- The students will be able to use the following ideas and concepts to compute simple problems:

1. Mechanical Advantage.
2. Foot Pounds of Work.
3. Computing Velocity.
4. Mass and Weight.
5. Centrifugal Force.
6. Defining Work and Force.
7. Inertia.
8. Power.
9. Horsepower.

Attitudes and appreciation to be developed.

--- By understanding some simple concepts of physics the students will be able to appreciate many of the physical laws which govern our daily lives. Through this understanding the students will be able to observe the work of simple machines and understand their application to our own world.

LESSON I      Wheels

- a. What is a wheel?
- b. Wheels and axle.
- c. Wheels as gears.
- d. Gear ratios.
- e. Gears of an egg beater.

(C, E)

LESSON II      Pulleys

- a. Spring scale.
- b. Lifting a weight.
- c. Changing direction of force.
- d. Reducing force, movable pulley.
- e. Constructing pulley machine.

(C, N)

**Simple Machines, Frictions, and Physics**

**LESSON III Levers**

- a. Using a spring scale.
- b. Levers multiply force.
- c. Lever and Fulcrum.
- d. Scissors as levers.
- e. Recognizing levers.

(C, E)

**LESSON IV Screw and Inclined Plane**

- a. Using a spring scale.
- b. Inclined plane reduces efforts.
- c. Screw as inclined plane.
- d. Screw increases efforts.
- e. Nut and bolt.

(D)

**LESSON V Friction**

- a. Spring scale.
- b. Ways of moving things.
- c. Friction causes heat.
- d. Weight increases friction.
- e. Rollers reduce friction.
- f. Friction and lubrication.

(N, C)

**LESSON VI Wedges and Work**

- a. What is a wedge?
- b. Wedges and force.
- c. Recognizing wedges.
- d. Dividing work.

(E, M)

**LESSON VII Going Beyond Wheels**

- a. Gear review.
- b. Mechanical advantage.

**Going Beyond Pulleys**

- a. Block and tackle.
- b. Foot pounds of work.
- c. Centrifugal force.

(M, D)

**LESSON VIII Going Beyond Levers**

- a. Second class levers.
- b. Third class levers.

**Going Beyond Screw and Incline Plane**

- a. Computing velocity.
- b. Mass and weight.
- c. Something for nothing.

(M, D, E)

## Biology

Bruce Kinseth

### Knowledge to be gained.

- By studying these basic biological concepts, the students will learn about: tree growth rates, transpiration, maps of study sites, food webs and food chains, census techniques, and habitat.

### Skills to be developed.

- Calculating growth rates in trees.
- Measuring water loss in leaves.
- Construction of study site maps.
- Techniques for taking a population census.
- Recognizing different distributions within a habitat.

### Attitudes and appreciation to be developed.

- The students will learn to use and appreciate the techniques employed by biologists in understanding our own living world.

#### LESSON I

##### Food Webs and Food Chains

The students will learn through discussion the concept of a food web and its differences from a food chain.

Activity: The students will play Predator: The Food Chain Game. (C, E, M)

#### LESSON II

##### Tree-Growth Rates and Competition

In this lesson the teacher will demonstrate how to take cores from a tree using an increment borer to determine the age of the tree. The students will work in small groups to count growth rings of different trees. Comparisons will be made of different species as to their growth patterns and the effects of environmental factors in their development.

#### LESSON III

##### Bean Bugs: Quadrat Census Technique

The quadrat census technique is appropriate for estimating populations of organisms that move very slowly or not at all. Using this technique, the students will estimate the numbers of individuals (beans) in a population too numerous to count. (N)

#### LESSON IV

##### Animals in a Grassland.

The students in this lesson will be exposed to the diversity, interactions and inter-relationships of the animals they collect in a grassy area.

## Biology

### LESSON IV (Cont.)

The importance of returning all animals collected, alive and unharmed will be stressed. (E, N, D)

### LESSON V

#### Mapping a Study Site

The students will gain experience in mapping sections of a study site to be joined later for an overall view. The students will use a color-coded key to assure uniformity between different mapping teams. (N, D)

### LESSON VI

#### Plants Around a Building.

This lesson deals with the total environment and man's effect on it as he strives to alter his own environment. The students will look for specific conditions created by a building which affect the growth of plants. The students will observe several changes in the environment as a result of human existence. (E, C)

### LESSON VII

#### Sticklers: A Game Which Introduces the Concepts of Habitat and Distribution.

This lesson deals with and will familiarize students to the concept of plant and animal habitat and the three basic kinds of distribution (uniform, random, and clumped). (M, E, C)

### LESSON VIII

#### Moisture Makers: Transpiration of Leaves

Students will observe that transpiration is the evaporation of water from plant surfaces, primarily leaves, into the air. A simple experiment will be done to measure moisture released from different kinds of leaves. Utilizing cobalt chloride paper, a color change can be noted in 10-20 minutes, indicating a release of water from the leaves. (N, E)

## You And TV

Audrey Brush

### Knowledge to be gained.

- Understanding that TV has an impact on our lives (both positive and negative).
- Evaluating the effectiveness of advertising.
- Understanding vocabulary and rating system.
- Viewers can cause the industry to change their programming.
- Knowledge of SOI thinking levels.

### Skills to be developed.

- Learn to evaluate and become a critical TV viewer.
- Stimulate writing talents.
- Develop the ability to observe details and to reproduce them in another way.
- Learn to identify the SOI levels as related to our activities.

### Attitudes and appreciations to be developed:

- This unit will take a look at the world of TV.
- We will explore both the positive and negative effects of the media.
- I hope students will take a personal, critical look at their own viewing habits and make positive changes.

### LESSON I

Introduce the unit by brainstorming the effects that TV has on our lives.

Evaluate both the pros and cons that were listed.

Activity: "What Is Your Basic TV Diet"

Students will begin a log of their TV habits, hours per week, programs watched (alone or with family).

(E, C, M)

### LESSON II

Evaluate the impact of commercials on our life styles. Choose specific, common commercials to use.

Evaluate:

--- What are they trying to sell?

--- Do you think it is a good product? Why or Why Not?

--- Why would you buy it?

--- Is it also trying to sell a life style? How?

Activity: Rewrite some of the slogans we evaluated in your own words. Choose one and begin to design a commercial to go with it (these will be presented at the next class). (E, D, M)

## You And TV

### LESSON III

Review our discussions about the impact of commercials and continue with exploring the elements of the commercial.

Such as:

- Musical jingles
- Background music
- Well-known personalities
- Factual information
- Slogan
- Humor
- Other

Activity: Students will incorporate some of these elements in the design and presentation of their commercials. Complete and present their own commercials. (C, M, D)

### LESSON IV

Evaluate and discuss why a program is scheduled at a certain time.

Students will explore:

- For what audience it is intended?
- Whether it should be changed to another time.

We will use real programs that are aired on local TV.

Activity: We will write a letter to a TV station president to find out how programs are selected for certain times. (E, C)

### LESSON V

Students will brainstorm and evaluate the effects of violence on T. V.

Evaluate in relation to:

- Why is violence negative?
- What might be the affect on people?
- Do we need exposure to violence?
- Is there any positive effect in being exposed to violence?

Activity: Students will write about how they feel when they watch something violent compared to watching something warm and funny-- a cartoon illustration might be included. (E, D, N)

### LESSON VI

Could you be a program planner for a new TV station?

Activity: Student will plan a TV schedule for 12 hours, (schedule to include different types of programs - news, comedy, game shows, etc.) We will also devise a rating system to evaluate each schedule. (D, E, N)

You And TV

LESSON VII

Write a new episode or sequel to one of your favorite TV programs - try to include both action and dialogue. Have your episode reflect a positive experience for the viewer. (Remember past discussions). (D, M, N)

LESSON VIII

Students will evaluate the topic: A World Without TV.

--- How would the world be different?

--- How would your TV time be spent?

--- Would no TV be positive or negative. Why?

Activity: Students will update the "logs" they kept of their TV "diet" and compare their viewing with a classmate's log. They will judge differences and likenesses. Also decide how they may change their viewing habits to gain more of the positive aspects of TV. (E, N, M)

## Whales

Audrey Brush

### Knowledge to be gained.

- Knowledge of the life and evolutionary history of whales.
- Knowledge of anatomy and physical characteristics.
- Knowledge of the history of whaling industry and present-day consequences.
- Knowledge of the different groups of whales and the whale relatives, the dolphins and porpoises.
- Knowledge of conservation techniques.
- Knowledge of SOI thinking processes.

### Skills to be developed.

- Identify different groups and types of whales.
- Understand their physical structure.
- Organize, label, chart and write up knowledge gained.
- Illustrate basic anatomy of whales.
- Understand and relate SOI language to unit activities and experiences.

### Attitudes and appreciation to be developed.

- To appreciate what happened through the ages, over the millions of years, to produce such an intricate, enormous creature as the whale.
- To understand the danger of extinction and the beauty of conservation and caring about life forms.
- The conservationist Noel Simon, warning of the plight of the whales in 1965, pointed to a sign at the Bronx Zoo - "You are looking at the most dangerous animal in the world. It alone of all the animals that ever lived can exterminate an entire species ---" Above the sign is a mirror!

### LESSON I

#### An Ancient and Mariner

Introduce the life history of the whale using a geological time chart. The main concept will be the evolutionary changes from a land animal to a sea creature.

Activity: Students will evaluate what happened through the ages to produce such an intricate, enormous creature. They will fill in their own versions of the adaptations on a time chart.

(C, D, E, N)

## Whales

### LESSON II

Introduce the anatomy and characteristics of whales. These will include:

1. Whales as mammals.
2. How whales breathe.
3. How whales keep warm.
4. How and what they eat.
5. Baby whales.

Activity: Students will illustrate the basic anatomy and write about how it would feel to experience one of the characteristics explored. (Ex: What would it feel like to breathe through a blow hole.) (M, C, D)

### LESSON III

#### The Different Kinds of Whales

Begin with the Baleen Whales - divided into three groups:

1. The Rorquals.
2. The Right Whales.
3. The "Devil Fish".

Learn characteristics and differences of each group. Students will evaluate why these groups do not have teeth and why they developed baleen. They will illustrate and label the differences. (C, N, E)

### LESSON IV

#### The Toothed Whales

Learn facts about:

1. Sperm Whales.
2. Beaked Whales.
3. The Beluga.
4. The Killer Whale.
5. The Unicorn of the Sea.

Activity: Students will make comparisons on a chart of the two main groups studied (The Baleen Group and the Toothed Group) and make judgments about which group has the easiest or most difficult existence in the Sea. (M, C, E, N)

### LESSON V and LESSON VI

#### Whale's Relatives - Dolphins and Porpoises

Classes will explore the main areas of:

1. Their intelligence.
2. Their communication systems.
3. Their happy, gentle nature.
4. Why scientists are studying them.

Activity: Students will be introduced to the research of Dr. John C. Lilly. They will evaluate his findings and judge their importance. They will also write what it would be like if we could communicate with these creatures.

## Whales

### LESSON V and LESSON VI (Cont.)

We will also read one of the many Greek or Roman legends that tell of a boy locked in a friendship with a dolphin. They will write their own legend about such a friendship. (M, E, D, C)

### LESSON VII

#### Man Against the Whale

Introduce the history of whale hunting (from early men risking their lives to hunt whales to our modern sophisticated methods). Explain why the whaling industry developed and evaluate the present-day consequences.

Activity: Students will take their knowledge of the industry and list substitutes to replace whale products. (M, C, E, N)

### LESSON VIII

#### And Then There Was One

Explain the extinction danger of whales and the conservation necessary to save them. Evaluate why we should save a form of life that is the result of 100 million years of painstaking change.

Activity: Students will make conservation posters and possibly write letters to legislators to share their feelings. (E, D, N)

## Important People

Carolyn Martinez

### Knowledge to be gained.

- Familiarity with the different people who are important and why they are.
- By studying American women contributors the students will learn about: Women's Rights, successful American women and how they became famous.
- Students will recognize the important roles women and men have in our society.

### Skills to be developed.

- The students will be able to recognize and describe some important people; both women and men,
- The students will be able to apply the SOI thinking levels to this course.
- Ability to evaluate that being famous or important is not essential to life.

### Attitudes and appreciation to be developed.

- To develop an awareness and appreciation of the many American women who have achieved success.
- To develop a positive self-attitude even though you may not be famous.
- Appreciation of famous people in our society and important people in their jobs.

### LESSON I

#### "What Does Important Mean?"

A discussion on what being important means? How do people become famous? Pictures of famous people will be shown along with pictures of people who are important. Students will classify which categories each picture fits in and why. (C)

### LESSON II

#### "Landmarks and Milestones"

Today students will begin a study on American Women and their contributions to American Life. A chart on women's achievements will be passed out and discussed and a list of Women in Early American History. Susan B. Anthony, Pearl S. Buck, and Margaret Mead will be explored. (M)

## Important People

### LESSON III

#### "American Women" Continued

A continuation of lesson II will begin today's lesson. We will add Jacqueline Cochran, Dixy Lee Ray, and Shirley Chisholm to our list of Women Contributors. How did they become important? (E)

### LESSON IV

#### "Women and Men"

We will continue on women contributors today with Gloria Steinem and Billie Jean King. Stories on their lives and hardships will be read. Student will interpret how their own life could become "important". Famous Men will be introduced into the lesson beginning with a list of men and their achievements. Students will match the important men to their correct achievement. (M, N)

### LESSON V

#### "The Rest of the Story"

Today's lesson will consist of stories by author Paul Harvey, who writes about famous or important people's lives. Students will create their own stories about an important person. (D)

### LESSON VI

#### "Important People We Know"

Everyone knows important people. Students will produce a list of ten important people they know. We will discover who some of the important people are in our society. A mystery guest speaker who is a very important person will visit the class. (N, E, D)

### LESSON VII

#### Would You Want To Be Famous?

Discussion and debates on how it would feel to be famous? What would the pros and cons be? Each student will pick one famous person they'd like to be and identify why. A film will be shown, if available, on Important and Famous People. (C, M)

### LESSON VIII

#### "Famous For A Day"

Each student will be able to role-play the person they would want to be for half the lesson. Each student will create a "bibliography" of their "short day" they were famous. (C, M, E, N, D) "I'm An Important Person" will be given to each ALPS student.

# Creatures of the Night

Carolyn Martinez

## Knowledge to be gained.

- Who are the "creatures of the night?"
- Understanding how the nocturnal animals survive in darkness.
- Comparisons between man's five senses and nocturnal animal's senses.
- The students will compare the different nocturnal animals and their various life styles.

## Skills to be developed.

- SOI levels of thinking as related to the course.
- Ability to classify and recognize nocturnal and diurnal animals.
- Ability to evaluate animal survival.

## Attitudes and appreciation to be developed.

- Develop an awareness and appreciation of nocturnal animals and their needs for survival.
- To realize that animals are a large part of the web of life.
- To become more aware of the importance of man's senses and animal's senses.

## LESSON I

### "The Animal World Comes To Life At Night"

What does nocturnal mean? A discussion on who are the nocturnal animals, and what they do at night. Learning centers will contain information and activities on cave, fish, cave-dwelling salamanders, amphibians, and night-active reptiles. An introduction to the levels of SOI will also be presented.

## LESSON II

### "Birds of the Night"

The meaning of nocturnal and diurnal will be discussed. Charts and posters of the importance of eyes and ears to the nocturnal birds will be available. Work in centers will continue with information and activities on owls, night-jars, kiwis, shearwaters, and petrels. If available, a film on owls will be viewed.

## Creatures of the Night

### LESSON III

#### "The First Nocturnal Mammals"

What is a marsupial? Differences will be discovered between kangaroos and opossums through diagrams, pictures, and film. The Australian marsupials will also be observed. Pictures of animals will be drawn and a short story about the animals will be written. Learning centers will be set up containing activities on the wombat, wallabies, kangaroos, Australian sugar glider and the Tasmanian devil.

### LESSON IV

#### "Echolocation By Bats"

How it works; judging direction; judging distance; some different bats. All bats do not rely on sonar will be discussed. An understanding of how bats senses are developed and employed will be presented. A film on bat's will be shown, if time allows. Centers will be set up with information on bats and their prey. (C, E, D,)

### LESSON V

#### "The Insect-Eaters and Their Allies"

Ant-eaters, armadillos, sloths, pangolins, aardvarks, hedgehogs, moonrats, shrews and desman will be the topic of today's lesson. Students will make a collage of nocturnal animals. Books will be available on the above animals. (M, D)

### LESSON VI

#### "The Desert Burrowers"

The mole: hunting by touch and special senses, what smell is to the mole; directions from smell; tracking by listening. Life in the burrows, food storage, water conservation, and some characteristics of rodents will be explained using pictures, posters, and books. If time, a story on moles will be read. (D, E, N)

### LESSON VII

#### "The Night Hunters and Their Prey"

Animals have enemies almost all the time. The prey of the predators will be observed; as will survival techniques. Students will be presented with dilemmas and will evaluate the best way of survival. (E, C, M)

### LESSON VIII

#### "The Most Intelligent Nightshift"

Raccoons are the brightest animals. Can lorises possibly have stereoscopic sight? What is a angwantibo and a potto? Other intelligent nocturnal creatures are the bushbaby, lemurs, tarsiers, and the night monkeys. Conclusions will be made by students on which nocturnal animals they would like to be and why. (C, M, E, N, D)

# Mystery And Monster Madness

Roxanne Battiste

## Knowledge to be gained.

- Study of the origin of the most well known movie monsters.
- Sightings and background information on the Nazca Lines of Peru, the Abominable Snowman, Maya Civilization, and Mysteries of the Deep-Sea Monsters.

## Skills to be developed.

- This course is intricately involved with SOI-Structure of the Intellect. Every lesson has in mind teaching the students different thinking levels, i.e. Cognition, Memory, Convergent Production, Divergent Production and Evaluation. These are the main skills I will be working with.

## Attitudes and appreciation to be developed.

- I hope to stimulate interest and encourage the students to develop an appreciation for the history behind movie monsters.
- Also I plan to promote a better understanding about several unsolved mysteries in our world.
- Finally I will encourage the students to make a complete study on any subject, before they settle on opinion or make an evaluation and to become aware of the differences between fact and fiction.

## LESSON I

The students will be introduced to SOI and the program Mystery and Monster Madness. I will explain what the program is about and what we will be doing throughout the eight weeks. SOI will be explained in detail - levels of thinking, color coding, and learning centers. The word "mystery" will be defined. We will explore in detail the mystery of the Nazca Lines in Peru. (C)

## LESSON II

What does Abominable mean? Who or what is the Abominable Snowman? Students will be asked to recall previous information they have assimilated on the Abominable Snowman. The students will be asked to state their opinion as to whether the Abominable Snowman exists in reality, and to list any possible reasons they have for its existence. All possible information will be presented to the students. (M)

## Mystery And Monster Madness

### LESSON III

#### Mysteries of the Deep - Sea Monsters.

The students will be asked to contribute any information that they may know about Sea Monsters and to state their opinions whether or not Sea Monsters exist in reality. The subject will be explored and studied using all possible data. (N)

### LESSON IV

#### Mystery of the Maya Civilization

Who were the Mayas? Where did they live? Why did the civilization seem to vanish? What did the Mayas structures mean? An indepth study of this lost civilization will be the topic of this lesson. The students will be encouraged to express their opinions and evaluations about the Maya Civilization upon completion of the study. (D)

### LESSON V

#### Monster Madness

Who invented movie monsters? What are the most famous movie monsters? Why were they created? The students will be encouraged to answer the above questions. A close study of the origin of Frankenstein, Bride of Frankenstein, Dr. Jekyll and Mr. Hyde will be explored in this lesson. (E)

### LESSON VI

#### Dracula and Vampires

What is a Vampire? Do vampires really exist? What is Dracula? Who was Dracula? Was Dracula a real person? What effect does stories about Dracula and Vampires have on people? All possible information about Dracula and Vampires will be presented to the students. (C, M)

### LESSON VII

What is a mummy? Who is the Creature? Who is the Phantom of the Opera? Hunch Back of Notre Dame— what is it? Why were these monsters created? When were they created? Who created them? The students will be encouraged to express any knowledge they have about these monsters. The history of these monsters will be presented to the students. (N, D)

### LESSON VIII

#### King Kong, Gadsilla and Werewolf

What are they? Who are they? When were they created? How would you feel if you were a monster? As stated in the other lesson, the students will be encouraged to assimilate any knowledge about the subject matter. The history of these monsters will be studied. (E)

## Pre-Historic Mammals

Roxanne Battiste

### Knowledge to be gained.

- The history of pre-historic mammals and early man.
- The detailed development and ancestry of the present day horse, cat, elephant and camel.
- The history of the earth's geological formation from 70 million years ago to the present - including the most recent Ice Age.
- The process of Fossilization and knowledge of present day living fossils from Cenozoic Era.

### Skills to be developed.

- This course is intricately involved with SOI - Structure of the Intellect. Every lesson has in mind teaching the students different thinking levels, i. e., Cognition, Memory, Convergent Production, Divergent Production and Evaluation. These are the main skills I will be working with.

### Attitudes and appreciation to be developed.

- I hope to develop for the students a better understanding of the earth's geological formation and the development of the mammal. I will also stress the importance of the animal kingdom in our world. The students will be encouraged to pursue their interests and study of pre-historic mammals and the earth.

### LESSON I

The students will be introduced to SOI and the program-Prehistoric Mammals. I will explain what the program is about and what we will be doing throughout the eight weeks. SOI will be explained in detail levels of thinking, color coding and learning centers. What are the ages of the earth? What does pre-historic mean? Why did the dinosaurs die out? All of these questions will be answered in detail. (C)

### LESSON II

#### The Age of Mammals-Cenozoic Era

The terms era, period and epochs will be explained and discussed. An indepth study of the climate, major geological events, and rocks, major features of plant life and major features of animal life of the Cenozoic Era will be completed in this lesson.

(M)

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## Pre-Historic Mammals

### LESSON III

What is a reptile? What is a mammal? Who were the first mammals? What are the three types of mammals? What took so long for the mammals to develop? Which mammals were plant eaters? Which mammals were meat eaters? The students will make charts comparing and contrasting the reptile and the mammal after all the questions have been thoroughly explained and discussed. (N)

### LESSON IV

North and South American Mammals.  
Who were the North and South American Mammals? Why did the continents split and force some mammals into isolation and extinction? Why did the continents rejoin, separate and connect again? All possible data about the North and South American Mammals will be presented in this lesson. (D)

### LESSON V

This lesson will trace the development and ancestry of the pre-historic horse, elephant, cat and camel. Drawings of each animal from pre-historic to present day will be used to insure a better understanding of the development of each animal. (E)

### LESSON VI

A variety of mammals will be studied in this lesson. What mammal was the :

- |                        |                               |
|------------------------|-------------------------------|
| 1. Most intelligent    | 7. Mammal with a shell        |
| 2. Most dangerous      | 8. First herd and hoof mammal |
| 3. Largest land mammal | 9. Mystery mammal             |
| 4. First sea mammal    | 10. Shovel Tusker             |
| 5. Thunder Beast       | 11. Foolish-Footed Mammal     |
| 6. Cave Bear           |                               |

(C, M)

### LESSON VII

The Ice Age and Dying Out of the Pre-historic Mammal  
This lesson involves a close look at the reasons why an ice-age occurred, the pre-historic mammals died out and animals who survived the ice-age. A study of early man will also be discussed. Who were they? Where did they live? How did they live? (N, D)

### LESSON VIII

Fossils and Living Fossils  
What is a fossil? How is it formed? What is the process of fossilization? What present day mammals are living fossils from the pre-historic days? What is the most common fossil? (E)

# How The West Was Won

Kim Wilkinson

## Knowledge to be gained.

### An understanding of:

- Key individuals which played a major role in the opening of the American West.
- The reasons and methods for the development of growth in the West.
- How we came to be a part of the living historical West.
- The effects of the opening of the Wild West.

## Skills to be developed.

### The student will:

- Be able to evaluate American history by looking at its successes and failures.
- Be able to trace the American expansion westward using maps and symbols.
- Be able to research the American West by acquiring a vocabulary in this area.

## Attitudes and appreciation to be developed.

- A realization of the hardships and struggles that Americans of the past had to go through to open up the land we live on.
- That the American West has been opened up in relatively recent times.

## LESSON I

### Introduction and Exploration of the American West

A study into the purposes and reasons for westward expansion. Such expansion only took place after extensive exploration of the region, undertaken by Lewis and Clark. In tracing the footsteps of Lewis and Clark, one becomes aware of the vast and wild country which was to be settled.

Activity: Map reading the route of the exploration. A variety of activities will develop the vocabulary of the west. (C)

## LESSON II

### Trailblazers and Trappers

Trappers such as Ted Smith and Joe Walker, in their search for beaver skins were unconsciously blazing trails for millions to follow. The amazing skills of these mountain men is shown forth in our interstate highway system which almost parallels their journeys.

Activity: Listing, identifying, and remember the qualities of a mountain man, and the reasons why they opened the west up to the settlers. (M)

## How The West Was Won

### LESSON III

#### Traders and Missionaries

The followers of the trailblazers were the merchants and holy men. These people sought a better life, either of riches from furs or fulfillment of their prophecy. Establishment of out-posts throughout the West provided those who followed small areas of civilization.

Activity: Describing and reliving the conditions of life in the West before the onslaught of settlers.

(N)

### LESSON IV

#### Settlers and Wagontrains

The backbone of western expansion came with the settlers and farmers. They were looking for good agricultural land they had heard so much about in stories told by mountainmen. Packing all their worldly possessions, they came West in small contained-mobile homes, known as covered wagons.

Activities: Recreate life in a covered wagon, using pantomimes, models, and advertisements.

### LESSON V

#### Miners

Probably no other single event brought westward expansion more rapidly than the discovery of gold and silver. Miners flocked to the mine fields in California, Nevada, Idaho, and Montana. All that remains of many of these rich strikes are ghost towns, filled with tumbleweeds.

Activity: Examine and evaluate what it was that made sensible people leave everything and seek gold and silver. Evaluate who were the people that really struck it rich. (E)

### LESSON VI

#### Cowboys

The coming of the ironhorse allowed many businesses to send their goods easily and cheaply to eastern markets. The cattle industry flourished in states from Texas to Montana. Cattlemen saw the open range as not much good for anything but grazing cattle; tens of thousands of cattle.

Activity: Locating cattle trails; a variety of activities recalling the jargon of the cowpoke. Analyzing the cowboy by evaluating the true accounts of their lives.

(C, M, N, D, E)

LESSON VII

Indians

The westward movement seemed to be an answer for many people; but for the Nez Perce Indians it was their eventual downfall. The leader of the Nez Perce Indians, Chief Joseph, was forced to take his people to the reservation. Complications arose and Joseph was forced to lead his people to Canada. Unfortunately, the United States cavalry ended their flight for freedom.

Activity: Trace the flight of these people through illustration. Debate the ever important issue of what should happen to the American Indian. (C, M, E, N, D)

LESSON VIII

Civilization Reaches The West

Many factors are involved in the final transformation of the West: the completion of the transcontinental railroad, law and order from the district marshalls and judges, and finally the creation of major cities throughout the West.

Activity: Evaluate the progress of the westward movement. A crossword puzzle using the vocabulary words learned in the past seven lessons as a final examination.

## Ancient Civilizations

Kim Wilkinson

### Knowledge to be gained.

- The basic ideas of what makes a civilization.
- The contributions of the ancient world to our modern society.
- The differences of each great civilization.

### Skills to be developed.

- Be able to compare the ancient world's contributions with what we have today.
- Be able to evaluate our own civilization's contributions to history.
- Be able to hypothesize about future societies from the newly acquired knowledge of the past.

### Attitudes and appreciation to be developed.

- Realization of the ancient world's highly advanced culture.
- To be tolerant of other people's ideas and beliefs, regardless of how they differ from our own.
- To appreciate that what we have studied in the class is only a beginning and to seek more knowledge on their own.

### LESSON I

#### Introduction to Ancient Civilizations

Introduction to the study of ancient civilizations, its mysteries, its discoveries, and its contributions to our life. To begin the study of primitive man, the class will look at cave dwellers and the beginnings of Art.

Activity: Deciphering, classifying, and visual closure of ancient cave art. (C)

### LESSON II

#### Stonehenge

The mysterious series of stones in England's countryside has been thought by archeologists to be either an ancient observatory or a druid calendar. Hypothesizing about its possible uses can offer valuable insight into our present day interest in outer space.

Activity: Reconstructing Stonehenge as it looked nearly 4000 years ago. Understanding the contributions Stonehenge may have made to our modern day calendar. (M)

## Ancient Civilizations

### LESSON III Atlantis

The mythological story of a highly developed civilization that completely disappeared has intrigued archeologists for centuries. Today there is speculation that the story is not a myth, but a factual account of the destruction. Activity: Trace the events of the destruction as well as understanding what caused the disaster. Identify the factual evidence from that of the myth. (N)

### LESSON IV Indus Civilization

This civilization dates back over 3000 years, and yet it had advanced city planning. Streets were at right angles with each other and major city buildings were centrally located. These people seemed to understand the advantages both socially and culturally about having a well planned city. Activity: Designing a city center using techniques for good city planning. Brainstorm the possible advantages of city planning. (D)

### LESSON V Chinese Civilization

Similar to other ancient cultures the Chinese were greatly concerned with death. Recent excavations have shown that their elaborate burial chambers rival the tombs in Egypt. Studying ancient cultures not only reveals change and progress in physical terms, but even more in our beliefs. Activity: Comparing and evaluating our view about death with the ancient Chinese culture. Judging from the Chinese excavations, what contributions this culture passed on to us. (E)

### LESSON VI Celts

In contrast to the Chinese civilization, the Celts thought very little of death; it was merely a change in their physical form. This attitude made the Celts fearless in battle. In fact, entire Roman legions retreated in the face of a Celtic attack. The important lesson to be learned from these people could be their zest for life. Activity: Imagine living among the Celts. Diagram the possible voyage of discovery during the eighth century of the new world. (C, M, N, D, E)

# The World Of Make-Believe

Patty Shanley

## Knowledge to be gained.

- Knowledge of a variety of creative story types.
- An understanding of their different origins.
- To become acquainted with some of the little-known fairy tales.
- Knowledge that this literature is reflected in our lives.

## Skills to be developed.

- Thinking skills.
- Improve students' competency in writing creatively.
- Developing imaginations more fully.
- To develop the art of story-telling.

## Attitudes and appreciation to be developed.

- An appreciation of fairy tale literature,
- An appreciation that everyone is different; to have tolerance and acceptance of others' ideas.

### LESSON I

#### In the Beginning was Imagination!

Take an individual poll about imagination:  
What is it? When does it work best? Why?  
Is it always working?  
History of Creative Expression.  
Make a class journal for writings.  
(C, M, N, D, E)

### LESSON II

#### Story Types

Discussion of mythology, fables, fairy tales, folktales, tall tales, and so forth. Analyze differences and similarities.  
Class shares stories known.  
We classify stories into groups, based on what we've learned.  
(C, M, N, E)

### LESSON III

#### The Fable

Read aloud some of Aesop's Fables.  
Discussion of interpretations.  
Write an original fable.  
(C, M, D, E)

## The World of Make-Believe

### LESSON IV

#### Fairy Tales

Review the elements of a fairy tale.

Each child chooses one, learns it, and re-tells it to the class using any visual aids he or she has made.

(C, M, N, D)

### LESSON V

#### Grimms' Fairy Tales.

Exploration of some of the little-known tales.

Analyze story concepts and characters.

Rewrite one of the fairy tales by changing part of it, adding to it, rearranging it, combining two of them.

(C, M, D, E)

### LESSON VI

#### The World of Disney

Discuss character development and story themes.

Use of records or filmstrip to extend story.

Groups will follow through with a particular adventure by adding another dimension to the written word: acting out a scene, making a tape of sounds, making puppets, and so forth.

(C, M, D, E)

### LESSON VII

#### Down Through the Ages

Impact of fairy tale literature will be explored.

Grimms' Fairy Tales influenced other writings.

Begin writing own fairy tale.

(C, M, N, D, E)

### LESSON VIII

#### Creation Time!

Continue the development of own story.

Share it with the class.

(M, D, E)

## The Law and You

Patty Shanley

### Knowledge to be gained.

- Knowledge that laws have to be clearly stated, workable, and enforceable.
- Knowledge that laws are always changing and why.
- Familiarity with the framework of our country's court system.
- Knowledge of basic vocabulary words and terms used in the law.
- Familiarity with the many kinds of law enforcement agencies and their functions.

### Skills to be developed:

- Critical thinking.
- Ability to evaluate evidence and make a decision.
- Improve verbal and written communication skills.

### Attitudes and appreciation to be developed:

- Concern for justice.
- An appreciation for the many services provided by law enforcement officers.
- Appreciation and respect for the American Judicial System.
- Being aware that law-making is not an easy task.

### LESSON I

#### Introduction to Unit

Discussion: Are laws needed? What happens if laws are broken?

Have an unstructured race and analyse outcome. Tape discussion of basic knowledge of class (on laws, courts, etc.) (C, M, N, E)

### LESSON II

and

### LESSON III

#### How a Bill Becomes a Law

Discussion of the basic workings of the Legislature. Divide class into two groups, the Senate and the House of Representatives.

Students organise themselves within group.

Law-making process begins. Each group makes suggestions for laws. These ideas are written down and passed to the other House, where they are voted upon for the second time. Those bills which survive the process become laws.

Evaluate laws: How are we going to make them work? Will there be a need to add more, to restate or change the ones we have? Are any of the laws unclear?

(C, M, N, D, E)

## The Law and You

### LESSON IV

#### Laws at School and at Home

Establish a list of home and school rules.

Analyze them. How are they enforced? Do any seem unfair? Why? What would you do to change it?

Set up a debate on a controversial school rule.

(C, M, N, E)

### LESSON V

#### The American Judicial System

The Constitution as the foundation of law (exhibit copy).

Bill of Rights (small group pantomimes).

System of Courts (Chart).

(C, M, D)

### LESSON VI

#### Arrest Procedures and Law Lingo

Reading "rights".

Booking process; bail; arraignment.

Vocabulary words and terms.

(C, M, N)

### LESSON VII

#### Law Enforcement Agencies

Gather information brochures about all kinds of agencies.

Collecting evidence; doing fingerprints.

Guest speaker, a law enforcement officer.

(C, M, N, D, E)

### LESSON VIII

#### Super Sleuth Day!

Detective games and stories.

Design your own game or make your own story, and share it with the class.

Make a new tape as a culmination of everything learned.

(C, M, N, D, E)

## Law II

Patty Shanley

### Knowledge to be gained.

- Knowledge of the basic differences between state and federal law.
- Develop awareness of the student's rights and responsibilities as a citizen.
- Knowledge about laws in other countries.
- General knowledge of the great diversity of legal work performed by lawyers.

### Skills to be developed.

- Critical thinking.
- Ability to evaluate evidence and make a decision.
- Understanding the courthouse proceedings.
- Improve verbal and written communication skills.

### Attitudes and appreciation to be developed.

- Relate school-learned skills to the skills learned by people in the legal profession.
- Concern for justice.
- An appreciation for the many services provided by lawyers.
- Appreciation and respect for the American judicial system.

### LESSON I

#### WANTED Posters

Discussion (origin of WANTED posters and their use.) Create a set of laws. Design own poster for one of your own laws which was broken. (C, M, N, D)

### LESSON II

#### Lawyers

Lawyers on TV (game). Guest speaker; bringing out the many areas in which lawyers work (real estate, labor, tax, corporate, and so forth) and answering basic questions. Write thank you notes. (C, M, N, D, E)

### LESSON III

#### Juvenile Law

Role-playing and discussion about rights, one as a juvenile, and then as an adult. Go over "Bill of Rights" and arrest procedures. (C, M, N, D, E)

### LESSON IV

#### Debate Day

K-3 Situation given where individual gets trapped into violating a law.

4-6 Capital punishment. What do you think should be done? Why? Give reasons and support them.

Law II

LESSON V Courthouse Field Trip  
Go on tour of building (courtroom, judge's chambers, jury room). Observe proceedings. No learning centers. (C, M, E)

LESSON VI Follow-up on Field Trip  
Sharing questions, comments. Preparation for mock trial; assign roles; organize trial situation. (C, M, N, D)

LESSON VII Trial Day  
Delivery of trials. Verdict is decided upon. No learning centers. (C, M, D, E)

LESSON VIII Laws of Other Lands and Other Times  
Research done on Code of Hammurabi, Scotland Yard, Napoleonic Code, and others. Mini-reports on each given. (C, M, N)

## Got Your Number?

Connie Difuntorum

### Knowledge to be gained.

- Basic knowledge of the history of our number system.
- Knowledge of other number systems.
- Basic concepts and vocabulary used in the study of topology and symmetry.

### Skills to be developed.

- Computational skills and ability to use alternate methods.
- Use of compass and protractor.
- Ability to work independently in centers.

### Attitudes and appreciation to be developed.

- Math is not just a classroom subject, but is present in nature, architecture, and other facets of daily life.
- Students may look for and recognize symmetry, patterns, and other mathematical properties in their lives.
- An appreciation of math as an interesting and fun subject.

### LESSON I

#### One, Two, and Many

Students will learn about the origin of our number system. Other number systems will be presented and the students will perform operations in other systems. Students will then develop their own number systems and present them to the class.

Activity: Centers. (C, M, E, N, D)

### LESSON II

#### Tricky Numbers

Depending on grade level students will be introduced to tests for divisibility and various methods of computing and checking their work. A practice worksheet will be completed. The class will then discuss and discover some interesting and amusing properties of numbers, such as palindromes. Finally several number tricks will be presented and the students will attempt to invent their own number tricks. Students will share their tricks in a magic show during lesson IV. (C, M, E, N, D)

### LESSON III

#### Rubber Sheet Geometry - Topology

Introduce topology with the "Great Loop and Jacket Trick." Students will attempt to remove a loop of yarn from a volunteer's arm without untying it. (The volunteer holds his hand in his pocket.) Discuss topology and explain why the trick was topological.

## Got Your Number?

### LESSON III

Cont.

Each student will use modeling clay to discover how, topologically, a square is equal to a circle, and a teacup is the same as a donut. Identify the genus of various objects.

Activity: Centers. Work on number tricks for magic show. (C, M, E, N, D)

### LESSON IV

#### More Topology

Students will make their own bands - a strip of paper with only one side - and will experiment to find the result of cutting the band in half. Several topological puzzles and mazes will be provided. Students will be asked to look for patterns and to chart their attempts at solving the mazes. Students will discover and apply a method of predicting whether or not a network can be traced.

Activity: Magic show. Centers. (C, M, E, N, D)

### LESSON V

#### Symmetry

Introduce line and point symmetry. Students will identify pictures of objects that have symmetry and will then go outside to look for symmetrical objects in nature and architecture. A symmetry game requiring memory and convergent thinking will be introduced and played. Students will design and complete symmetrical designs.

Activity: Centers. (C, M, E, N, D)

### LESSON VI

#### Geometry

Points, lines, angles, closed curves and polygons will be defined. Students will draw example of each and will practice identifying and remember the names of polygons. Compasses and protractors will be provided and students will learn how to use them correctly to draw angles and polygons.

Activity: Centers. (C, M, E, N, D)

### LESSON VII and LESSON VIII

#### Symmography

1. Introduce symmography - simple worksheets involving connecting numbers, points to form designs.
2. Follow direction for making designs.
3. Copy designs with no instructions.
4. Invent designs.
5. Combine designs.
6. Use needle and thread to create wall hangings.

Activity: Work on symmography. Centers. (C, M, E, N, D)

### NOTE:

Lessons VI, VII, and VIII will be paced according to grade level and prior knowledge of children. All students will not be expected to finish the six levels in lessons VII and VIII.

## Probability and Statistics

Connie Difuntorum

### Knowledge to be gained.

- Understand principles of the theory of probability.
- Be aware of ways we use probabilities in our daily lives.
- Become familiar with the vocabulary involved in the study of probability and statistics.

### Skills to be developed.

- Graphing and charting.
- Computing statistical averages (mean, median, mode).
- Estimating.

### Attitudes and appreciation to be developed.

- Statistics can lie-be aware of this fact and learn to read statistics critically.
- An appreciation of math as an interesting and fun subject.

### LESSON I

#### Introduction to Probability

The words "certain", "uncertain" and "impossible" will be introduced and students will identify and list samples of each. Students will predict the probability of drawing a red or blue cube from a box. Each person will choose a cube and the class will compile a graph to show the results. Students will then play a game in which each player has an equal chance of winning.

Activity: Students will be introduced to and will play probability-related card and/or dice games. (C, E, M)

### LESSON II

#### More Probability

The teacher will challenge the students to a game that she/he has the better chance of winning. The results of the game will be evaluated. In small groups, the students will perform a probability experiment involving the likelihood of one event happening, and will chart and graph their results.

Activity: Students will work in probability. (C)

### LESSON III

#### Combinations and Permutations

The teacher will again challenge students to an unfair game involving the likelihood of two events happening and will invite students to predict the winner. Combinations and permutations will be discussed and the students will practice finding all possibilities. Older students will learn formulas for finding a total number of combinations and permutations.

Activity: Students will work in probability. (M)

## Probability and Statistics

### LESSON IV

#### Estimating

A large jar of beans will be presented and the students will be invited to guess the number of beans in the jar. The words "guess" and "estimate" will be defined and compared. The students will be given estimation tasks and will then be assigned to find the exact answers. Two ways of estimating the number of beans in the jar will be discussed and tried. A prize will be awarded to the person who guessed closest.

Activity: Students will work in probability. (E)

### LESSON V

#### Introduction to Statistics

Statistics and samples will be defined and discussed. The students will perform experiments to see if sample size is related to fairness. Class will discuss ways statistics can lie and will learn how to read them critically. Actual statistics, graphs and tables will be presented and the students will evaluate their validity.

Activity: Students will work in probability and statistics. (C, E, M)

### LESSON VI

#### Are You Average?

The word "average" will be discussed. "Mean", "median" and "mode" will be defined, and students will attempt to discover what constitutes the average student (height, weight, age, etc.) More practice in computing mean, median, and mode will be included.

Activity: Students will work in probability and statistics. (N)

### LESSON VII

#### Take a Survey

Discuss television game show "The Family Feud". Make plans to play the game. Each student will survey 50 people to get the most popular answers to a question. Brainstorm questions for surveys. Prepare a chart on which to collect data.

Activity: Probability and statistics related to divergent production centers. Children will also attempt to develop their own games-may involve survey taking, estimating, averaging, probabilities, combinations, etc. (D, C)

### LESSON VIII

#### "The Family Feud"

Students will be given time to complete survey write-ups. Each survey should include a frequency distribution, graph and a statement as to whom the survey consisted of. Upper grade will also compute the mean, median, and mode answers to their surveys where applicable.

Activity: Organize and play game (C, M, E, D)

Apiculture  
(Beekeeping)

Sharon Ybarra

Knowledge to be gained.

- History of Apiculture and the influence it has had on modern day beekeeping.
- Anatomy of the honeybee and how it has adapted to its many activities. Activities and behavior of the honeybee, including communication, comb building, brood rearing, food transmission, robbing, fanning, nest cleaning, gathering and storing pollen, nectar, and propolis, swarming.
- Activities of queenless bees, of queens, drones, what are pheromones?
- Products of the hive, their composition, properties, uses, production, storage.
- Beekeeping equipment and how to use it.
- Hiving package bees and swarms. How to construct a hive and get started with your own bees.

Skills to be developed.

- How to build a skep hive.
- Identifying the main anatomical features of the honeybee.
- Ability to differentiate between the different tasks of bees in the hive by studying an observation hive.
- How to construct a hive, install package bees or a swarm and start your own hive.
- Ability to handle problems that may arise in your established colony.
- How to use beekeeping equipment.
- How to identify diseases and enemies of the honeybee.
- Fall management and wintering of colonies.
- How to extract honey.

Attitudes and appreciation to be developed.

- It's easy and fascinating to raise bees!
- Without the bees help in pollination our food sources would be limited.
- A colony of bees always works for the benefit of the hive rather than individual bees!
- Honey is one of the most delicious and "pure" (lack of insecticides) foods in nature.
- Honeybees act according to instinct.
- The worst enemy of honeybees is a negligent beekeeper.

LESSON I

History of Beekeeping

Beekeeping up to 1500, 1500-1851, 1851 and after. Includes races of bees, beekeeping equipment, different types of hives. Students will make skep hives with basketry materials.

## Apiculture (Beekeeping)

### LESSON II

#### Anatomy of the Honeybee.

Development of honeybee from egg-larva, pupa, adult. Main anatomical parts and uses. Microscopes used for identification.

### LESSON III

#### Activities and Behavior of the Honeybee

Activities related to age, communication, comb building, brood rearing, food transmission, robbing, nest cleaning, fanning.

Observation hive used.

### LESSON IV

#### Working Habits of Bees

Working habits of field bees including gathering and storing pollen, nectar, propolis. Swarming, activities of queenless bees, of queens, drones. Pheromones and their relation to bees' activities.

Observation hive used.

### LESSON V

#### Products of the Hive

Composition and properties, used and potential uses, production and storage of: honey, pollen, propolis, beeswax, royal jelly, bee venom.

Honey tasting. Candle making. Observation hive used.

### LESSON VI

#### Beekeeping Equipment/Hive Construction

How to build your own hive, including main box, supers, frames, hive stand, how to wire frames and put in foundation. How to use beekeeping equipment.

Class participation for interested students. Wood, nails, hammer, wirer, foundation, bee suit, veil, gloves, smoker, etc. used.

### LESSON VII

#### Fall Management and Wintering of Colonies

Honey extraction-simple equipment used for extracting honey without heat. What to do to get ready for winter. Also includes the use of bees for pollination, sources of nectar and pollen and apiary location.

Honey extractor (homemade) used. Plant identification of a few main sources of nectar and pollen.

### LESSON VIII

#### Diseases and Enemies of the Honeybee

What to look for and what to do about bee diseases and enemies of the honeybee.

Observation hive used.

## Herbs

Sharon Ybarra

### Knowledge to be gained.

- History of herbs.
- Important early herbalist.
- How to identify common herbs.
- Herbs used for "healing."
- Culinary herbs and some of their uses.
- Herbs that are aromatic and what can be done with them.
- Some herbs produce natural dyes.
- Cultivation requirements of herbs.
- How to plant herbs with other plants to repel bugs.

### Skills to be developed.

- Identification of common herbs.
- How to make some herbal "remedies."
- How to use herbs and foods together.
- How to make herbs sachets and pomanders.
- How to use herbs for dyeing.
- How to grow herbs.

### Attitudes and appreciation to be developed.

- Herbs have been used for at least 4,000 years for their medicinal and other properties.
- Herbs have many uses. They can improve the taste of our foods, make cosmetics aromatic, dye material, help repel insects, and perhaps soothe our body.

### LESSON I

#### History of Herbs

What is an herb? How did herbs get their names? Early uses of herbs. Herbs native to England, America, the Mediterranean, etc. Importance of Elizabethan herbalists Culpepper, Gerard and Parkinson. Common herb sample will be explained and kept in a notebook.

### LESSON II

#### Herb Identification

Identification of more common herbs as well as some lesser known. Pictures will accompany names and several herbs. Available locations are given. Selected herbs will be pressed and kept in the notebook.

## Herbs

### LESSON III

#### The Healing Herbs

Plants to aid the ears, eyes, teeth. Antiseptics, astringents. Plants for sores, stings, bites, burns, coughs, colds, fever, digestion. Emphasis is placed on consulting your doctor before using. Herbs examples will be brought in and students will make some of these "remedies." (Examples for notebook.)

### LESSON IV

#### The Culinary Herbs

Use of herbs in food preparation. Herbs to accompany vegetables, salads and salad dressings, sauces, desserts, breads, jellies. How to make herb vinegars, butters, salts, teas. (Notebook samples.) Students will make and taste different herbal teas.

### LESSON V

#### The Aromatic Herbs

Herbs used for breath sweeteners, pomanders, potpourris and sachets, insect repellents, herbal baths, sweet powders, exotic herb oils, perfume essences, scenting soaps. (Examples for notebook.) Students will make pomanders or potpourris and also dry herbs in a dryer.

### LESSON VI

#### The Colorful Herbs

Herbs used for dyeing. How to dye wool with herbs. Wool be used because of its great affinity for dyes. Several recipes will be given for student notebook. Dyeing with herbs will be done in class.

### LESSON VII

#### Cultivating Herbs

Climatic requirements. Soil requirements include soil preparation, drainage, compost, mulch. Plant propagation from seeds, cuttings, divisions. Insects and diseases. Indoor culture. Harvesting and storage. Herbs will be planted.

### LESSON VIII

#### The Companionable Herbs

Using plants for pest control. Companion planting: repellent and attractant herbs. Sprays made from herbs. An herbal bug spray will be made.

Sherrie Arendt

Knowledge to be gained.

- How to effectively use a camera.
- The scientific processes of photography.
- The various types of photography.
- The impact photography has on our daily lives.

Skills to be developed.

- Operate a simple camera.
- Construct an operating camera.
- Evaluate photographs and support opinions.
- Compose meaningful pictures.

Attitudes and appreciation to be developed.

- Develop a greater understanding of the science involved in photography.
- Appreciate the artistic talent in photography.
- Increased respect for the major role photography has played in preserving history.

LESSON I

Introduction to Photography

What are its uses? What role does it play in our lives? How has it preserved history? Discussion of the history of photography - its growth from primitive to permanent recordings.

Activity: Students will recreate and use historic optical inventions. (C)

LESSON II

and

LESSON III

The Science of Photography

Exploration of the scientific processes in photography.

1. Mechanics and physics - the basic camera and how it operates.
2. Optics - the lighting used.
3. Chemistry - chemicals used in making and developing film.

Activity: Students will take old cameras apart to study camera parts and operation. (M, N)

LESSON IV

Composition - The Art of Photography

What makes a picture look right? What gives it meaning? Discussion of the techniques for composing a meaningful picture.

Activity: Students will evaluate photographs using magazine pictures and snapshots collected by students and teacher. Students will make a display showing examples of pleasing and dull photography. (E)

# Photography

## LESSON V

### Careers in Photography

Brainstorming of the various fields of photography. Discussion of what each type does and why this specialty is needed. Identify the education and skills necessary for the different types of professional photographers.

Activity: Students will choose a photography career and design and/or improve the perfect camera for that type of photographer. Or choose an occupation (Doctor, spy, teacher, etc.) and design the perfect camera for that job. (D)

## LESSON VI

### Creating a Working Camera

Students will design and build pinhole cameras. In composing their pictures, they will make hypotheses as to the effect of such variables as time of exposure, size of pinhole, distance between pinhole and film, types of sunlight, etc. Students will create their own display design.

## LESSON VII and LESSON VIII

### SOI Centers

Lessons VII and VIII will consist of centers including all 5 processes of the Structure of the Intellect. Students will concentrate their time in centers adapted to their own individual needs. These two lessons also will be used for guest speakers and field trips.

## Career Education

Sherrie Arendt

### Knowledge to be gained.

- The variety of careers possible in the world of work.
- Recognize their own personal potential.
- How to get a job.

### Skills to be developed.

- Identify their own talents, skills, and interests.
- Develop decisions-making skills.
- Read want ads, fill out job applications, prepare for an interview.

### Attitudes and appreciation to be developed.

- Become aware of the many types of rewards and satisfactions for people who work.
- Recognize that individuals differ in their interests and abilities and to respect and appreciate those differences.
- Gain a positive self-attitude toward their own developing characteristics as they relate to the world of work.

### LESSON I and LESSON II

Introduction to the Working World  
Exploration of how our abilities, needs and desires affect our choice of a career.  
Activity: Through self-awareness inventories and personal interest activities, the student will become more aware and more confident of their individual interests, abilities and strengths. (C, M)

### LESSON III

Jobs at Home and in the Community  
What talents do you already have? What tasks do you perform for which others are paid? What jobs do your family members have? How important are the people who work in your community?  
Activity: Students will identify their present skills and write a commercial explaining a particular talent and why someone in their neighborhood should hire them. (N)

### LESSON IV

Career Clusters  
Discussion of the variety of jobs possible by studying the Career Clusters as designated by the United States Office of Career Education.  
Activity: Students will choose at least one career cluster and create a display of their choice to illustrate the many jobs possible in that clusters. They will also design a simple picture to symbolize their career cluster. (D)

## Career Education

### LESSON V

#### Getting a Job

How does one go about getting a job?

1. Reading want ads.
2. Writing resumes.
3. Job applications.
4. The interview.

Activity: Students will have the experience of filling out job applications from various career clusters. They will choose one career and write a resume telling the prospective employer why they want and need the job. (D)

### LESSON VI

#### Evaluating the Choices

Decision making is an important skill in choosing a career. As a group, the student will hear an unfinished story, then brainstorm possible solutions. The group will discuss and evaluate solutions and decision making procedures. (E)

### LESSON VII and LESSON VIII

Lessons VII and VIII will consist of centers including all 5 processes of the Structure of the Intellect. Students will concentrate their time in centers adapted to their own individual needs.

## Inside And Outside

Debbie Veale

### Knowledge to be gained.

- The students will learn about various organs in their bodies.
- The students will be able to name the five senses and the organs associated with them.

### Skills to be developed.

- The students will prepare a graph.
- The students will learn basic dissecting techniques.
- The students will measure and record pulse and heart rates.

### Attitudes and appreciation to be developed:

- The students will learn to appreciate what it is like to be blind and/or deaf.
- The students will become more aware of their bodies and the intricate mechanisms within.

### LESSON I

#### Outside

The students will measure and record their bodies. The class will graph some of these measurements on a class graph. Discuss. The students will then draw their "ideal self" as an adult. (N, E, D)

### LESSON II

#### Outside

The students will discuss teeth and learn their names and functions. The students will make a model set of teeth to study and label. (N)

### LESSON III

#### Inside

The heart and its function will be discussed. The students will diagram the heart. The students will record heart and pulse rates at various stages of activity and graph them. The students will listen to their hearts with a stethoscope. (N, C, E)

### LESSON IV

#### Inside And Outside

The students will discuss and diagram the eye. The students will discover what it is like to be blind, and write about it. The students will dissect an eye. (N, E, D, C)

## Inside And Outside

### LESSON V

#### Inside and Outside

The students will discuss and diagram the ear. Deafness and sign language will be discussed also. (N, C, E, M)

### LESSON VI

#### Inside and Outside

The students will discuss the sense of smell and taste. The students will take the "sniff test". (N, C, M)

### LESSON VII

#### Inside and Outside

The students will diagram a tongue through dissection. What happens when you taste one thing and smell another? (N, C, E, D)

### LESSON VIII

#### Inside and Outside

The sense of touch will be discussed. The students will use the feeling box. Fingerprints will be done and compared. (N, M, C)

## Journalism

Debbie Veale

### Knowledge to be gained.

- The students will be able to state at least three differences between two local newspapers.
- The students will contribute at least one article for publication in the ALPS newspaper.
- The students will be able to write a news story in proper form using the 5w's.
- The students will read news articles and state whether they are grammatically correct as well as clear and concise.

### Skills to be developed.

- The students will be able to proofread.
- The students will be able to plan the layout of a newspaper.
- The students will do bookbinding.

### Attitudes and appreciation to be developed.

- The students will learn that there is a variety in various local newspapers and personal preference plays a large part in individual selection.
- The students will learn the difference between "good" journalism and "poor" journalism.

- LESSON I      Students compare two local newspapers. List the various departments the papers cover. Make up a list of departments we want our class newspaper to have. (E, N, D)
- LESSON II     Students write a news article using SOI. (D, C, M)
- LESSON III    Students proofread each others articles written last week. Correct. Prepare the paper for final printing. (N)
- LESSON IV     Paper is printed and assembled by students. Students evaluate their first attempt. (N, E)

## Journalism

- LESSON V Students design and create newspaper ads.  
Prepare second newspaper for final printing.  
(D, N, C)
- LESSON VI Paper is printed and assembled by students.  
Students compare their second attempt with  
their first and evaluate. (N, E)
- LESSON VII Students write and illustrate their own books.  
(D)
- LESSON VIII Students bind, and publish their books. (C, N)

## What's Ornithology??

Carol Cutshall

### Knowledge to be gained.

- Understanding of the evolutionary process of birds.
- Identification of bird language and its meaning.
- Familiarity with birds of the Sacramento Valley.
- Familiarity with birds from different environments.
- Familiarity with bird habits.
- Learn why a bird is efficient flying machine.

### Skills to be developed.

- Application of SOI thinking levels to course.
- Interpret the importance of birds in man's life.
- Classification of birds by families and orders.
- Recognize migrating and non-migrating birds.
- Analyze evolutionary process of birds.

### Attitudes and appreciation to be developed.

- The students will appreciate the adaptations birds have made.
- The students will develop an awareness of and appreciation for birds and their amazing habits.
- The students will discover a new way to view birds through knowledge that is attained through course.
- The students will appreciate the important roles that birds have played in man's development.

### LESSON I

#### Introduction, The Age of Birds

In many ways birds are the most successful group of animals living today. Discussion will be centered on the evolution of the bird and the adaptations birds have had to make. Photos of bird fossils and a classification chart of birds will help in the understanding of evolution and adaptation. Students will learn the important roles that birds have played in history, art, and symbolism of man. (C)

### LESSON II

#### The Framework for Flying.

Discussion of bird anatomy and how this specialized anatomy aids in flight. Students will view skeletal structures of 4 bird orders and compare and contrast the structures. Students will draw and label parts of birds from charts. (M)

## What's Ornithology? ?

### LESSON III

#### The Language of Birds

What are the kinds of vocal messages that birds send to one another? What are their functions? Why do birds communicate with each other through mime, dance and other body movements? Students will listen to various types of bird calls and songs, and students will distinguish between them and their meanings. Students will see a film on vocal and nonvocal communication. (C)

### LESSON IV

#### Territorial Behavior

What is a territory? Students will examine the purposes that territories serve in the bird community, and how birds defend that and protect their territory. (M, N)

### LESSON V

#### Courtship and Bonding, Egg Laying and Nesting

What are the reasons for the courtship rituals? What are the nesting habits of birds? What causes a bird to build a nest? How does an egg develop? Students will discover the reasons for these questions and others through discussion and a slide presentation. Students will examine several bird's nests and match the nest with the appropriate bird. (D)

### LESSON VI

#### Why Do Birds Migrate?

Students will understand how and why migration fits into a bird's life cycle. Students will participate in discussion and mapping migration routes for several birds. (M, D)

### LESSON VII

#### Intelligent Birds

Which are the intelligent birds and what can they do? A crow, mynah bird and parrot will be available for student observation. A bird trainer will be the guest speaker for this lesson. Students will examine and observe the birds, draw sketches of the birds, and identify what families the various birds come from. (E)

### LESSON VIII

#### The Study of Birds

A guest speaker from the Audubon Society will present a slide show of the types of birds that can be found in Sacramento Valley and bring preserved samples. Summary. Post Test. (C, E)

## Endangered Species

Carol Cutshall

### Knowledge to be gained.

- Understanding the causes for vanishing wildlife and extinct wildlife.
- Recognition of areas in California where endangered mammals and birds live.
- Learn why wildlife management and conservation are important.

### Skills to be developed.

- Researching for facts.
- The ability to hypothesize.
- The ability to analyze.
- The ability to evaluate.
- The ability to conclude.

### Attitudes and appreciation to be developed.

- Appreciation and awareness that man can work with nature instead of against it.
- Awareness of what each individual can do to prevent the obliteration of any more species.

### LESSON I

Explorers and pioneers: America Until 1880  
What does "endangered species" mean? What are some causes? Students will brainstorm ideas and reason out why mammals and birds became extinct or endangered prior to 1880. Using a map students will place animals that were present in the United States prior to 1880 and animals that remained after 1880. (C)

### LESSON II

Wildlife Conservation and Wildlife Management  
Why is conservation and management necessary?  
A look at conservation and management efforts that are being taken in California and in the United States. Students will analyze the success rate of conservation and management based on statistics and make recommendations based on their conclusions. Students will choose one animal that is on the endangered species list and do a mini research paper on their choice. Reports will be given during lesson VIII. (M)

## Endangered Species

### LESSON III

#### Endangered Mammals of California

Why has man exploited the mammals? There is a growing environmental crisis in California. Students will examine possible causes for man's abuse of mammals and construct a workable strategy to curb man's efforts to destroy the existing wildlife. Students will mark endangered mammals of California on a map. (N)

### LESSON IV

#### And Then There Were None

A film will be shown that depicts man's abuse of wildlife and how man upsets the ecological balance by his tampering. Students will write a reaction paper to film and analyze their feelings. (M, N)

### LESSON V

#### Endangered Birds of California

Discussion will be centered on the causes of endangered birds and solutions to the existing problems. Students will map the endangered birds in California. (D)

### LESSON VI

#### Speaker

A guest speaker from Audubon Society will bring preserved birds that are on the endangered species list and enhance students' understanding and appreciation for the plight of these birds through discussion and slide presentation. (M, D)

### LESSON VII

#### The Survivors

What makes an animal a survivor? An optimistic look at species of animals and birds in North America that have managed to flourish in the hostile environment. Students will analyze, hypothesize and evaluate what adaptations have been necessary for these animals to survive. (E)

### LESSON VIII

Animal research reports. Summary - How man's past mistakes have caused or threatened the disappearance of our wildlife and how we must strive to solve these problems. (C, E)

Knowledge to be gained.

- Understanding codes as part of the nature of language.
- Understanding the problems of human communication.
- Understanding ways of making and breaking codes.
- Knowledge of career opportunities in coding.
- Knowledge of Structure of the Intellect (SOI).

Skills to be developed.

- Developing a basic understanding of code design.
- Applying the basic rules of our language.
- Coding a message.
- Decoding a message.
- Working in small groups to achieve a common goal.
- Ability to use the five levels of thinking (SOI).

Attitudes and appreciation to be developed.

- Appreciating the difficulties of communication.
- Experiencing the joy of being able to communicate with codes.
- Understanding the frustration of being exposed to foreign codes.
- Recognizing that common codes are important to communication.

LESSON I

Overview of CODES and what we will be doing in this seminar.  
Discuss different codes that the students know about.  
Brain teaser "code for the day."  
Background on SOI.  
Code to work out in homeroom class and with family for next week.

LESSON II

Brain teaser "code for the day."  
Discussion on Cognition (C) using codes.  
Work on how codes are made and why it is a code. Learn the rules of making codes.  
Cognition Codes Centers.  
"The Take-it-Away Code" for in the classroom and in the home.

LESSON III

Brain teaser "Code for the day."  
Discussion on Memory (M) using codes.  
Devise ways to remember different codes both auditory and visual.  
Memory Codes Centers.  
"The Take-it-Away Code" for in the classroom and in the home.

Codes

LESSON IV

Brain teaser "code for the day."

Discussion on Convergent Production (N) using codes.

Discuss the precision of decoding.

Convergent Code Centers.

"The Take-it-Away Code" for in the classroom and in the home.

LESSON V

Brain teaser "code for the day."

Discussion on Divergent Production (D) using codes.

Making up your own codes for others to solve.

Divergent Code Centers.

"The Take-it-Away Code" for in the classroom and in the home.

LESSON VI

Brain teaser "code for the day."

Discussion on Evaluation (E) using different codes.

Why some codes are better than others?

Evaluation Code Centers.

"The Take-it-Away Code" for in the classroom and in the home.

LESSON VII

Brain teaser "code for the day."

Career education--computer programming; military coding etc.

Hands-on computer lab.

Work on above centers that students missed.

"The Take-it-Away Code."

LESSON VIII

Brain teaser "code for the day."

Evaluation of codes and decoding techniques used in the class.

Will our language be filled with even a greater amount of coding in the future.

## Advertising

Marilyn Cunningham

### Knowledge to be gained.

- Identifying various types of advertising propaganda.
- Identifying the audience for particular products.
- Identifying particular advertising techniques that will appeal to various audiences.
- General knowledge of Structure of the Intellect (SOI).
- Career education - advertising.

### Skills to be developed.

- Designing and laying out a billboard advertisement.
- Designing and laying out a magazine advertisement.
- Developing a television commercial.
- Writing and recording a radio commercial.
- Participating in group decisions.
- Using the five levels of thinking.

### Attitudes and appreciation to be developed.

- Appreciating the advertising career.
- Compromising in group decisions.
- Appreciation of advertising manipulation of audiences.

### LESSON I

Overview of this seminar on advertising. List different kinds of advertisements. What appears to students in the way of advertisements. Introduction to SOI.

### LESSON II

The magic of communication. Secrets of advertisers. Pick a product and begin work on a campaign; radio, TV, magazine, billboard, etc.

### LESSON III

Same as lesson II. Find out if school is having any event that needs to be advertised and have students prepare an ad for that.

### LESSON IV

Part of class can begin video taping commercials etc. Rest of class can work in SOI advertising centers.

### LESSON V

Reverse groups from lesson IV.

### LESSON VI

Part of class time spent on presentation of ads: SOI advertising Centers.

Advertising

LESSON VII Presentation of ad campaigns. SOI advertising centers.

LESSON VIII SOI evaluation center for all of class. What made one ad campaign better than the others? Evaluation of advertising campaigns of TV, radio, etc. Ways to make advertising better.

## Egyptology - Along The Nile, Through Time and Places

Betsy Miller  
Ann Emanuels

### Knowledge to be gained.

- Learn about the "Cradle of Civilization".
- Understand the influence of environment upon the development of a civilization.
- Understand how ancient Egyptians lived and maintained a stable civilization for over 3,000 years.
- Working knowledge of the SOI.

### Skills to be developed.

- Develop critical, creative and logical thinking.
- Improve map skills, creative writing ability and art appreciation.
- Improve thinking skills as defined by the SOI.

### Attitudes and appreciation to be developed.

- Recognize the contributions of another culture on the growth of civilization.
- Value the aesthetic principles in the treasures of Egypt.

### LESSON I

#### Geography

Map work - Where is Egypt, geographical features and modern cities of Egypt. Climate and its effect. The Nile. Trip to Modern Egypt. Time machine to ancient Egypt - map work.

### LESSON II

#### Archaeology

How do we find out an ancient civilization? Read descriptions of Howard Carter and Lord Carnarvon's looking for the tomb and finding it.

Pretend dig in school yard - Visit to site of an actual dig. Write daily log of dig, write scientific report of dig, send telegram announcing find, study findings and make decisions about culture found.

### LESSON III

#### Anthropology

Find out what life was like during Tutankhamen's time. Make a mural showing this, design your own jewelry, learn about hieroglyphics, design your own cartouche, learn, make and play some of the games of the time. Make a Rosetta stone.

Egyptology - Along The Nile, Through Time and Places

LESSON IV

Mythology

Learn about the Gods of ancient Egypt. Read the myths of ancient Egypt. Create and write your own myth. Illustrate myth.

LESSON V

Architecture

Learn about the houses the people of ancient Egypt lived in, how they were built, their design and purposes. Learn about the pyramids of ancient Egypt, how they were built, their design and purpose. Create one of the above.

LESSON VI

Treasures of Tut

Learn about the treasures found in the tomb. Activities designed to make the child "look" at the artifacts. Prepare a mummy. Make a sun box. "What would you include in your tomb?"

## Tide Pools

Andrea Fiske

### Knowledge to be gained.

- Knowledge of basic vocabulary
- Recognition of the intertidal zones
- Understanding the adaptability of sea life (plant and animal)
- Analysis and understanding of the need for conservation of our coastline

### Skills to be developed.

- To identify the intertidal region and understand the characteristics of the environment
- To identify and remember a variety of sea life (plant and animal)
- To classify sea life into the correct phylum
- To evaluate man's influence on the coastal environment

### Attitudes and appreciation to be developed:

- To develop an appreciation for the intricacies and adaptabilities of sea life
- To develop an appreciation for the beauty of the sea
- To enjoy stories, poetry, and myths of the sea
- To utilize the concept of the sea in creative expression (written and artistic)

### LESSON I

Introduce Intertidal Zones (Develop Bulletin board with children)

Discuss characteristics of each zone. Brainstorm all known sea life, place each sample in its proper zone, giving reasons.

Identify sample shells brought in by using research methods. Work in small groups.

Read poem: "Sea Fever" (C, E, M, N)

### LESSON II

Adaptation

Discuss adaptation and characteristics specific sea animals have to fit in to various environment.

Crustaceans: Observe live hermit crabs. Sketch what they see and discuss what they observe.

Read from "Pagoo" by Holling C. Hollings (C, D)

### LESSON III

Symbiosis "Birds Of A Feather Flock Together"

Discussion of interdependence of various forms of sea life; hermit crabs and sea anemone, shark and pilot fish, barnacles and their hosts.

Creative writing exercise on the the student's own dependence on something or someone.

Read: Paul Harvey's "Perlorus Jack" (C, E, D)

## Tide Pools

### LESSON IV

#### Classification of Sea Life

Differentiate between various forms of sea life: arthropods, echinoderms, and mollusks.

Sort samples and pictures into classifications.

Present this as a game. Make a mobile of each classification. Read: "Tales of Neptune, God of the Sea" (C, N, E, D)

### LESSON V

#### Sea Mammals and Birds

See a movie on "Whales".

Make lists of words that relate to mammals and birds. Make a Seek and Find puzzle.

Creative writing: Write an illustrated story which justifies the need for protecting certain species; or, write a limerick relating facts about a mammal or a bird. (C, E, N, D)

### LESSON VI

#### Tides

Read tidal charts. Review high tides, mid tides, and low tides.

What is a Tsunami? (Tidal Wave)

Research and collect twenty facts about tsunamis.

Divide into groups and write skits about a Tsunami warning.

Make a wave machine. (C, N, D)

### LESSON VII

#### Coastal Ecology and Conservation

Develop the concept of ecology and conservation with the students.

Discuss pollution in coastal areas and its effect on sea life and plant life.

Show students a political cartoon: Discuss implication of cartoon, write a news article or an editorial comment on this implication. (C, E)

### LESSON VIII

#### Salinity and Aquaculture

Conduct an experiment on the freezing of salt or fresh water? Why?

Aquaculture and its importance. Investigate the process known as "seeding" an oyster bed. Make a picture to illustrate the findings. (C, E)

ADVANCED LEARNING PACKAGES  
(ALPS)

COURSE OUTLINE

COURSE TITLE A Bug By Any Other Name (Insects)

SUBMITTED BY: Andrea Fiske DATE SUBMITTED June '78

COURSE OBJECTIVES:

1. Knowledge to be gained.

- to be able to identify insects by their physical characteristics
- to be able to place insects into the correct classification
- to understand the life cycle of several insects

2. Skills to be developed.

- to collect, observe, and illustrate an assortment of insects
- to create stories and poems
- to utilize a microscope in observing parts of an insect

3. Attitudes & appreciation to be developed.

- to appreciate those insects that are helpful as opposed to those that can be harmful
- to appreciate the intricacies of insects and their relationships in their natural habitat

LESSON I. Brainstorm all known insects. Bring in insect specimen for students to examine. Note specific characteristics. List similarities and differences. Use magnifying glass or microscope to examine mouth parts. Look for variations in mouth parts: (different types) chewing, biting, piercing, and sucking. How would knowledge of these mouth parts be useful in planning an insecticide control for insects?

LESSON II. Make bug collectors with cans or plastic bags. Discuss ants. Collect some ants and start an ant colony.

LESSON III. Students observe and record ant colony progress. Discussion of insects that work together and how this affects their survival.

Take a walk and collect insects.  
Observe insects and look for identifying characteristics: three pair legs, one-two pair wings, one pair antennae, exoskeleton. Sketch for notebook.

**LESSON IV.** Collect more insects.  
Examine and make comparison chart likenesses and differences. Are they all insects? Classify.

**LESSON V.** Bean Bugs. Quadrat Census technique.  
Discuss estimating the number of individuals in a population too numerous to count. Using quadrat technique have children estimate number of beans in population. Record results on data board.  
Why take census of insects? Relate to helpful insects versus harmful insects.

**LESSON VI.** Metamorphosis.  
Discuss stage of metamorphosis of several insects. Which insects go through these changes? What other way could an insect reach adulthood?

**LESSON VII.** Creative writing.  
Read "Bug", Mary Ann Hoberman.  
Have students write poetry, limericks, or stories about bugs. (activity will depend on grade level.)

**LESSON VIII.** Identify insects on slides.  
Have students guess what they are looking at.  
Create an insect out of scrap material.  
They must have all insect characteristics.

#### **FIELD TRIPS OR SPECIAL CLASS ACTIVITIES:**

Possible trip to Jr. Museum or bring live tarantula from Jr. Museum (Compare spider characteristics with insect.)

#### **EVALUATE:**

Students should be able to describe(erally) insect characteristics as well as life cycles of several insects.

#### **METHOD OF ASSESSING/EVALUATING STUDENT ACHIEVEMENT:**

By student notebooks and oral testing.

SAN JUAN UNIFIED SCHOOL DISTRICT

Gifted Program-Bibliography

March 21, 1978

- EGGS by George Moran Workman Publishing Company  
NONSENSICAL NUANCES OF THE ABC'S by Joan Joy Alameda County School Department Books 1-15  
THE PRODUCTIVE THINKING PROGRAM (A course in learning to think) Charles E. Merrill  
MIND EVENT by Karen Muldoon and Dominic Capello-Enrichment Programs/Education Tools  
Instructional Materials Teachers Guide and Book 1-3  
PERCEPTUAL COMMUNICATION SKILLS by Selma E. Herr PH.D.-Equipment Distributors  
POT POURRI by Dianne Drazz Dandy Lion Publications  
BASIC THINKING SKILLS  
Analogies A-B-C-D, Antonyms and Synonyms, Antonyms, Synonyms  
Similarities and Differences-Conservation, Path and Miscellaneous  
Miscellaneous, Including Transitivity and Same person or not?  
Patterns-Think about it-What would you do? True to Life or Fratsy? by  
Harnadek - Midwest Publications  
EARTH SHAPE POSTERS by Joseph N. Portney Creative Publications  
CRITICAL THINKING by Harnadek Grades 1-2, 3-4, 5-6, 7-8 Midwest Publications  
CREATIVE PRESCRIPTIONS UNLIMITED East Whittier School District  
GUIDE TO CREATIVE ACTION by Parnes, Noller, Biondi Creative Education Foundations  
CONCEPTUAL BLOCKBUSTING by James Adams by W.H. Freeman and Company  
SOI WORKBOOKS-Cognition, Memory, Evaluation, Convergent Production, Divergent  
Production by Mary Meeker SOI Institute  
SCRATCHING THE SURFACE OF CREATIVE PROBLEM SOLVING by Ruth B. Noller  
SOLVE IT! Basic Problem Solving Activities by Thomas C. O'Brien Books 2,4,5  
CREATIVE COLORING Books 1 and 2 by Dianne Drazz  
CLASSROOM QUICKIES 2,3 By Harnadek  
APPLIED IMAGINATION by Osborn Scribners  
VISUAL ILLUSIONS by Luckiesh Dover Publications  
ABSOLUTELY MAD INVENTIONS by Brown and Jeffcott, Jr. Dover Publications  
A STUDY OF THINKING by Bruner, Goodnow and Austin  
OH, THE THINGS YOU CAN THINK by Dr. Seuss Random House Inc.  
IGNITING CREATIVE POTENTIAL PROJECT Implode Bella Vista  
STUDENT RESOURCE GUIDE Inglewood Unified School District  
AHA by Sidney Parnes  
72 WAYS-TO HAVE FUN WITH MY MIND by Leif Fearn Kaby Books  
BROODLES by Roger Price Price/Stern/Sloan Publications  
CROSSOVERS by Russ Fisher The Laughter Library  
THE CREATIVE PROCESS by Biondi The Creative Education Foundations Inc. Creative Educ.  
CREATIVITY: Unlocking Human Potential by Parnes  
CDB by William Steig Windmill Paper Backs  
ZERO TO ZILLIONS by Weiss Scholastic Book Services  
STORIES WITH HOLES A Manoala Book  
THE FOURTH 'R' REMEMBERING by Billie M. Hays  
HAVE AN AFFAIRE WITH YOUR MIND  
A COMPENDIUM OF LOGIC PROBLEMS by A.T. STUDENTS  
BRAINTEASERS GALORE by Carl Proojan Scholastics Books  
THE THINKING KABYN by Leif Fern Kaby Books  
Recommended Games  
OTHELLO BOGGLE TRACK FOUR  
DUEL MASTERMIND CAOS  
PATHFINDER MUG SHOT FOUR SIGHT  
IMPUZZLES SUPERFECTION

ALPS TEACHERS 1978-79

Sharon Ybarra 961-3905	Bee Keeping	Herbs	A	B	C	D
Andrew <del>Smith</del> 961-0513	Whales	T.V.	B	C	D	E
Carolyn Martinez 446-6212	Important People	Creatures of the Night	C	D	E	F
Kim Wilkinson 1-758-5913	How The West Was Won	Ancient Civilizations	D	E	F	G
Roxanne Battiste 446-3719	Pre-Historic Mammals	Mysteries & Movie Monsters	E	F	G	H
Patty Shanley 967-0817	Law I & II	Fairy Tales	F	G	H	A
Bruce Kinseth Unlisted.	Physics	Biology	G	H	A	B
Connie Difentorum 331-9519	Math	Probability & Statistics	H	H	H	H
Sherrie Arendt 487-4142	Careers	Photography	I	I	I	I
Debbie Veale 726-1158	Journalism	SOI	J	J	J	J
Ann Emanuels 481-1750	King Tut	SOI	K	K	K	K
Betsy Miller 489-5139	King Tut	SOI	L	L	L	L
Andrea Fiske 456-0507	Packaging	Marine Biology	M	M	M	M
Dancy Shall 362-2134	Creative Writing	Film Making	N	N	N	N

Bob Swain  
484-2694

<sup>1st</sup>  
482-5697

<sup>2nd</sup>  
482-1264

Judy Arrigotti  
484-2657

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

<u>Sierra Oaks</u> 6 hrs. 8:30	<u>Sylvan Gr. 7</u> 2 hrs. 9:00-11:00	<u>Sylvan Gr. 8</u> 2 hrs. 10:00-12:30	<u>Del Paso Manor</u> 2 hrs. 8:30-10:30	
	<u>Mariposa</u> 2 hrs. 12:30-2:30	<u>Grand Oaks</u> 2 hrs. 1:30-3:30		<u>In-service</u> 1½ hrs. 1:00-2:30
3:30				

17½

<u>Mission</u> 6 hrs. 8:30	<u>Skycrest</u> 2 hrs. 8:30-10:30	<u>Whitney</u> 2 hrs. 8:30-10:30		<u>Garfield</u> Semester 2 hrs. 9:30-11:30
<u>Semester</u> 3:30		<u>Littlejohn</u> 2 hrs. 12:30-2:30	<u>Creekside</u> Semester 2 hrs. 12:30-2:30	<u>In-service</u> 1½ hrs. 1:00-2:30

17½

<u>Skycrest</u> 2 hrs. 8:30-10:30	<u>Howe</u> 1 hr. 8:30-9:30	<u>Coyle</u> 4 hrs. 8:30	<u>Howe</u> 1 hr. 8:30-9:30	<u>Orange Grove</u> 2 hrs. 9:30-11:30
<u>Mariposa</u> 2 hrs. 12:30-2:30	<u>Dyer Kelly</u> 2 hrs. 10:00-12:00	3:30	<u>Coleman</u> 2 hrs. 12:30-2:30	<u>In-service</u> 1½ hrs. 1:00-2:30

17½

	<u>Edison</u> Semester 2 hrs. 8:30-10:30	<u>John Holst</u> 4 hrs. 8:30-12:30		<u>Thomas Kelly</u> 2 hrs. (all year) 9:35-11:35
<u>Oakview</u> Semester 2 hrs. 11:00-2:00	<u>Carmichael</u> 2 hrs. 12:30-2:30	<u>Billy Mitchell</u> All year 2 hrs. 1:30-3:30	<u>Cambridge</u> 2 hrs. 2:30-4:30	<u>In-service</u> 1½ hrs. 1:00-2:30

18½

<u>Pershing</u> 2 hrs. 8:30-10:30	<u>Woodside</u> 1½ hrs. 10:00-11:30	<u>Barrett</u> 4 hrs. 10:10	<u>Woodside</u> 1½ hrs. 10:00-11:30	<u>Winterstein</u> 2 hrs. 9:30-11:30
<u>Palisades</u> 2 hrs. 12:30-2:30	<u>Roberts</u> 2 hrs. 12:30-2:30	2:10	<u>Roberts</u> 2 hrs. 12:30-2:30	<u>In-service</u> 1½ hrs. 1:00-2:30

18½

	<u>Churchill</u> 4 hrs. 8:30-10:30	<u>Sierra Oaks</u> 6 hrs. 8:30		<u>Orangevale</u> All year 3 hrs. 8:30-11:30
<u>Greer</u> 2 hrs. 12:15-2:15	12:30-2:00	3:30		<u>In-service</u> 1½ hrs. 1:00-2:30

16½

<u>Northridge</u> 2 hrs. 9:30-11:30	<u>Fair Oaks</u> 4 hrs. 10:00	<u>Northridge</u> 2 hrs. 9:30-11:30	<u>Fair Oaks</u> 4 hrs. 10:00	<u>Kenneth</u> 2 hrs. 9:30-11:30
<u>Pasteur</u> 2 hrs. 12:30-2:30	3:00	<u>Pasteur</u> 2 hrs. 12:30-2:30	3:00	<u>In-service</u> 1½ hrs. 1:00-2:30

19½

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

Arlington 2 hrs. 9:30-11:30	Sunrise 2 hrs. 9:30-11:30	Lichen 2 hrs. 8:30-10:30	Arlington 2 hrs. 8:30-10:30	Sunrise 2 hrs. 9:30-11:30
Orville Wright 2 1/2 hrs. 1:00-3:00	Green Oaks 2 hrs. 12:15-2:25	Cowan 3 hrs. 12:00-3:00	Orville Wright 2 1/2 hrs. 1:00-3:00	In-service 1 1/2 hrs. 1:00-2:30

19 1/2

Connie Difuntorum

	Thomas Kelly 3 hrs. 8:40-12:00	Thomas Kelly 3 hrs. 8:40-12:00	Twin Lakes 5 hrs. 8:30-	Thomas Kelly 2 hrs. 9:35-11:45
			3:30	In-service 1 1/2 hrs. 1:00-2:30

14 1/2

Sherrle Arendt

Arden 2 hrs. S.O.I.	Cottage 2 hrs. 9:30-11:30	Arcade 4 hrs. S.O.I. 8:15-11:15	Arcade 4 hrs. S.O.I. 8:15-11:15	Cottage 2 hrs. 9:30-11:30
Pasteur 2 hrs. 12:30-2:30		Pasteur 2 hrs. 12:30-2:30		In-service 1 1/2 hrs. 1:00-2:30

19 1/2

Debbie Veale

	LeGette 4 hrs. 8:30-12:30	Mariemont 4 hrs. 8:30-12:30	Deterding 3 hrs. 8:30-	LeGette 4 hrs. 8:30-11:30
			1:30	In-Service 1 1/2 hrs. 1:00-2:30

16 1/2

Ann Emanuels

	Deterding 3 hrs. 8:30-	Pope 3 hrs. 9:30-11:30	Pasadena 4 hrs. 8:30-11:30	Starr King 2 hrs. 8:30-10:30
Marvin Marshall 3 hrs. 11:30-2:30	1:30	12:30-1:30	1:30-2:30	In-service 1 1/2 hrs. 1:00-2:30

16 1/2

Betsy Miller

	Cameron 3 hrs. 8:30-12:30		Cameron 3 hrs. 8:30-12:30	Mariemont 4 hrs. 8:30-12:30

11 1/2

Andrea Fiske

	Del Dayo 4 hrs. 8:30-11:30	Del Dayo 4 hrs. 8:30-11:30	Del Dayo 4 hrs. 8:30-11:30	Citrus Heights 4 hrs. 8:30-11:30
	1:30-2:30	1:30-2:30	1:30-2:30	In-service 1 1/2 hrs. 1:00-2:30

17 1/2