Presented are suggestions for speech therapists to use in auditory perception training and screening of language handicapped children in kindergarten through grade 3. Directions are given for using the program, which is based on games. Each component is presented in terms of purpose, materials, a description of the game, and directions for increase of difficulty or complexity. Presentation is in the following sequence: attending to sound through awareness of silence versus sound, awareness of surrounding sounds, and concept building; localizing sound in all geometric coordinates and through interrelationships of distance and direction; identifying and discriminating nonspeech sounds through increased attention span and more complex receptions; increasing auditory memory through temporal order sequencing, increased processing of an oral message, and development of figure-ground skills; and focusing on sound as a response through development of correct and spontaneous language flow, internalization of sentence plans (through play experiences and pictures), and organization and formalization. Given for kindergarten through grade 3 are auditory discrimination, auditory memory, and auditory figure-ground screening procedures. An example of a game used in identification of nonspeech sounds is progressive moving of a toy animal on a board (like a checkerboard) each time the child imitates the animal's sound correctly.
SUGGESTED OUTLINE FOR AUDITORY PERCEPTION TRAINING

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FLORIDA DEPARTMENT OF EDUCATION
DIVISION OF ELEMENTARY AND SECONDARY EDUCATION
BUREAU OF EDUCATION FOR EXCEPTIONAL STUDENTS
SUGGESTED OUTLINE FOR AUDITORY PERCEPTION TRAINING

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AUDITORY PERCEPTUAL TRAINING:

1. Attending to Sound
   a. silence vs. sound
   b. becoming more aware of sounds around us
   c. concept building

2. Localizing Sound
   a. in all geometric coordinates
   b. interrelationships of distance and direction

3. Identification and discrimination of non-speech sounds
   a. increased attention span
   b. more complex receptions of content, tempo and pitch variations

4. Auditory Memory
   a. temporal order sequencing
   b. increased speech of processing an auditory (oral) message
   c. figure-ground skills: ability to scan a background while being engrossed in a foreground, and vice versa.

5. Sound as a Response
   a. development of correct and spontaneous natural flow of language
   b. internalizing sentence plans: meaningful play experiences and pictures
   c. organization and formulation
The following outline is based on the processing of sound as it occurs in the normally developing human being. The children with whom we are working have irregularities in development. The following suggestions may be helpful in producing a more effective auditory perceptual level. It is perceptual "know-how" that allows us to perform in varying degrees of adequacy and comfort. The children with whom we work are almost without exception impaired to some degree in regard to communication.

Before he can communicate efficiently, a child must cover certain ground developmentally in respect to sound; (as well as other developmental processes). In regard to sound, he must start with sensitization: (one or more of his gustatory, olfactory, tactual kinesthetic, auditory and visual channels) must be brought to a receptive state. Secondly, there must be transmission of incoming data. Thirdly, the information must be symbolized and sorted among existing concepts. Fourthly, existing concepts are thus enriched and increased, and lastly, abstractions are derived. Perception cannot take place without the entire sequence. (See Figure I.) The whole is dynamic, in constant operation, and does not take place in a sequence of one well defined step after another even though we cannot arrive at abstraction without the preceding levels.

Although the following program progresses from the lowest to the highest level of auditory perception, it should not be considered static, in that a child must "perform" or respond in a certain manner at one level before moving to another. The whole program is based on games. If the spirit of play can be maintained, it will be more effective than it could be approached in any other way. The object of each item in this suggested program is to help the child develop good listening habits.

One of the best ways we can help the child achieve this is to remember to praise him for his efforts. If the games are interesting and fun for you, they will be fun for the children. Before you begin any game, be sure that the child understands the material being used and exactly what you want him to do. Go over the materials to be used; let the child watch and listen and feel the object or any vibrations it may produce.

Always present visual and auditory clues simultaneously when directions indicate they are to be used together. It is critical that the child receive the visual and auditory stimuli at the same time. Remember that concentrated listening can be very tiring, and should not be carried on for too long a time. Short, frequent sessions with these games are more valuable than long, tedious ones.

Even though the child may not have a hearing loss, you may find it helpful to use some techniques that are used with such children; for example: talking close to the child's ear (approximately 1/2 inch in front of the ear opening, in a natural tone -- or a cupped hand, a megaphone, a cardboard tube -- never with increased volume.)

The child's response too must be considered. For a child who has little language, a single word or sound response may be acceptable.

In playing games involving placement of material between children and teacher,
it may be helpful to have the children keep their hands in front of them on the table. Outlining the shape of the child's hands on the table in chalk may promote interest in keeping the hands in one place, so that the child is not as apt to select material closest to his hands instead of correct material. Do not, however, be rigid about this.

One word more: try to set the pace for as rapid a game as you can within the limits of the children's ability to respond. If you present the game too slowly, the child will imitate you, and his own responses and progress will be slow. You must, however, not present it so rapidly that you leave him irretrievably behind.

I. ALERTING: HEEDING RESPONSE TO SOUND:

Purpose:
To help the child discriminate between silence and sound, and to make him more aware of sounds around him.

Materials:
Alarm clock with a healthy alarm; cardboard in shape of clock, with numbers on it; some bits of cereal or popcorn.

Game:

Teacher and children sit facing each other. Teacher explains they are going to listen to the clock. Show clock and compare it to cardboard clock. Put bits of cereal on 5 or 6 consecutive numbers on the cardboard clock. Place children's (or one child's) fingers on the alarm clock and say, "Now we are going to listen". Turn on alarm and say, "It's on; I hear it". Then take a bit of cereal and turn off the alarm. Do these things fairly quickly. Tell the child the next piece of cereal is for him, but he must listen. Place his fingertips on the alarm clock. Say, "It's off; I don't hear anything". Turn the alarm on and go through the procedure described above, helping the child to make the response by taking the cereal when he hears the sound. He may eat the cereal when he has responded appropriately (with a grunt and expression or grunt alone, if this is all he is capable of at this time).

After the child responds well in this way, have him move his fingers away from the clock. As this is a game that should be repeated many times, you may wish to use some variations in order to maintain interest. Suggestions follow to which you will be able to add many more of your own. Use raisins or little plastic figures or buttons in place of cereal; allow child to place a peg in a pegboard as a reward; strips of colored paper may be taped or pasted together to form a bracelet or belt or crown; marbles may be placed on the clock face numbers and the child may put a marble into a container as his response; the cardboard clock may be turned face down, and the child may turn it over as his response; the child may pretend to be asleep, and raise his head as his response; children may be supplied with finger or hand puppets, and show the puppet is awake as their response. N.P. allow the children to take turns in ringing the alarm. When the child rings the alarm, the teacher makes the response.
To Increase Difficulty:

Move the alarm farther away. Lastly, have children put heads down and ring alarm behind them in turn.

Purpose:

To help the child become aware of the telephone ring, and to clarify the concept of the telephone and its function.

Materials:

A real telephone, if possible. If not, a toy telephone and a recording or tape of a telephone ringing and pictures of people who may call (mother, grandmother, father, etc.) and an appropriate voice, at the end, saying, "Hello".

Game:

Show the children the picture of the person who is going to "call". Place one child's hand on the phone and tell him to listen. Say, "The telephone is not ringing. I don't hear the telephone". When the phone rings, say, "The telephone's ringing. I hear the telephone." Let the phone ring a number of times before answering it. After you say, "Hello", tell the children who is calling and show the picture of the person. Give one child the phone and ask him to say, "Hello" or "Hi". If a child does not want to involve himself in this activity, he may be willing to use a puppet or a doll to do it for him.

Other variations are: draw a large telephone; cut out the receiver and paste a long piece of yarn to the base to take the place of the cord. Use the tape or record of a phone ringing, and have the child pick up the "receiver" when it rings and say, "Hello".

Make a simple "book" of pictures of several telephones; the first picture shows a phone not ringing, simply the telephone, in its cradle. The second picture shows the phone off the cradle with a "bzzzz" or wiggly lines coming from it, indicating sound; the third picture is a phone with a detachable receiver as described above. Be sure the children understand the meaning of each picture before proceeding. Each child, in turn, turns to the appropriate pictures, and after he has responded to the ringing on the tape or record player by turning to the last picture, he picks up the receiver from the page and says "Hello". At the first picture, he is expected to say that the phone is not ringing (in whatever way he is using to communicate); at the second picture he is expected to indicate that the phone is ringing; at the third picture, he is to say "Hello" or "Hi", etc.

To Increase difficulty:

Turn volume lower on recording or tape.

To Increase Complexity:

Tell children you are going to call someone (another teacher in the room or one of the children). Dial the number, let the phone ring several times before
it is answered, drawing attention to the fact that "The phone is ringing. I hear the telephone". Start by having the child ask the person who is being called if he or she will come to visit. The person will answer, "Yes" or "No". The child repeats this and says, "Goodbye". There should then be a follow-through, with the person having been called coming to "visit". Many variations can be made upon this theme, extending the child's ability to discriminate and use correct language. The activity should not be used to encourage the child to play with the phone.

Purpose:

To help the child become aware of various inarticulate human sounds; to be able to differentiate among them and to learn appropriate behavior accompanying these sounds.

Materials: A doll that will sit up.

Game:

Teacher, "Watch me and listen to me. I'm going to cough". Let children see you cough with your hand partly over your mouth. Say, "I had to cough. Now we are going to let the doll cough". Cover the doll's mouth with its hand as you cough. Tell the children that they may help the doll cough, but first they must listen. If a child does not want to cough, let him cover the doll's mouth as you cough. Next, hide your mouth behind a sheet of paper when you cough as the child covers the doll's mouth. Next, move away, then behind the child and proceed as above. Variations: instead of covering the doll's mouth with the hand, the child may hold a handkerchief or scarf to the doll's mouth or turn its head to one side or turn over a picture of someone coughing or covering the mouth of a picture of a person coughing or say, "Excuse me"; take turns, letting the child cough and the teacher making the responses.

To Increase Difficulty of Discrimination:

A new sound may be introduced when you feel the child is responding accurately to a sound already worked on. After the cough sound, the kissing sound may be introduced. Before attempting comparisons, do several activities using the kissing sound alone. For example: show several pictures (drawn or cut from magazines) of a mother kissing a child; (or any family members) or pictures of babies and allow the child to kiss the pictures; or allow the child to kiss a doll.

Next, combine the two sounds (coughing and kissing) and work to discriminate between them. Sight clues should be used until consistently accurate responses are being obtained. Then move the sounds away, and then behind the child or cover your mouth with a piece of paper. Let the child cover the doll's mouth for the coughing sound; kiss the doll for the kissing sound; let the child point to the correct picture of persons coughing or kissing; let the child use a hand puppet and make the coughing sound at the appropriate sound from you or kiss you at the appropriate signal; take turns, with the teacher using the pictures, dolls or puppets at the signal from the children.

Two more sounds to be compared next are walking and jumping. The same procedure as that described above may be used to introduce and set the concepts. When the child can accurately discriminate, move on to two more sounds: tearing paper and sweeping the floor, for example. Continue, using various combinations of any two sounds you can make. Try to choose sounds that can be produced naturally,
and will not sound artificial. Do not present these sounds in a fixed pattern; alternately, that is, as the children will be aware of this.

To Increase Complexity:

When the children are able to discriminate between pairs of sounds, accurately, move on to three and four sounds (already learned). For example: to utilize coughing, kissing, tearing paper and sweeping the floor -- use any usual methods for activities involving pictures (child points to appropriate picture at sound clue, or places a button on that picture, or turns that picture over or picks the picture up, or hands it to you, or drops it into a box, etc.); or place a baby doll and an adult doll, a piece of paper and a toy broom in front of the child and let him respond appropriately to the sound clue you give. He is to kiss the baby doll, cover the mouth of the adult doll or turn its head for coughing; pick up the paper and tear it for tearing noise; pick up the broom or pick it up and use for the sweeping noise. The clues, of course, must be given out of sight of the child. He may also underline or circle appropriate pictures as a response. If four sounds are too difficult, work with three. If discrimination without sight clues proves too difficult, return to the sight clues. Always be certain that the child understands the response he is expected to make before you make the sound out of his sight.

If possible, make use of a tape recorder after you have progressed to the place where the children are fairly certain of the various sounds. Tape the sounds, allowing sufficient time intervals between each sound so that responses can be made. Again, make the intervals vary, so that the child does not respond to a rhythm pattern.

II. LOCALIZING SOUND:

To introduce, you will work with visual clues, but the object is to arrive at the place where no visual clues are used.

Purpose:

To help the child locate sound in all the geometric coordinates and to establish interrelationship of distance and direction.

Materials:

Noise makers of all kinds, musical and nonmusical, and particularly two snappers or "crickets" that sound alike and two small flags or colored sticks or pom-poms made of net or other light-weight, easy to grasp material.

Games:

Two teachers are best, though one can do by changing position. The child sits on a chair, or on the floor, facing the two persons holding the snappers or crickets. He holds a flag (or stick, etc.) in each hand, at his sides or on the floor until he hears the sound of the noise maker. (Although a cricket is advised, any noise maker may be used, as long as it is used twice, or two making the same sound are used). As soon as the child hears the sound, he is to wave the flag (stick, pom-pom) on the proper side. When he is responding accurately, turn him around, so
that he does not see the noise makers and must make the response using hearing alone.

Endless variations are possible: use bells, drums, horns, clappers, snap your fingers, etc., and vary responses by letting the child hold a bit of cereal in each hand and eat the cereal when he has made the appropriate response or hold a ball, clothespin, beanbag, etc., in each hand and drop same into a box on the proper side; or simply raise the appropriate hand to indicate the direction from which the sound comes. The child may be blindfolded and walk in the direction from which the sound comes. The child may be blindfolded and walk in the direction from which the sound comes, or he may simply point in the direction of the sound. When the child is accurately responding to right and left direction of sound, move on the other geometric coordinates: above, (his head), below (his waist), in front of him, behind him, to the left back, to the right back, left front, right front. Always, if there is confusion, go back to visual clues. Keep it a game. He does not have to "pass" anything.

To Increase Difficulty:

Reduce the loudness of the sound; remove the sound in distance from the child and explain that it's "going away" or "coming closer".

To Increase Complexity:

The child names the noisemaker or instrument that produces the sound as well as the direction from which it came. The child names the number of times the sound is produced as well as the direction and the instrument. Two (and then three, if possible) different noise makers are used in different directions, and the child names the noise maker, and the directions. Two sounds are used simultaneously and the child tells the directions of each and the name of the instruments used.

The following concerns localization also, but deals with the voice.

Purpose:

To help the child locate sound in terms of the human voice. (N.B. although still within the localization level, this is another step in development, as it involves language).

Materials:

Two or more teachers; a blindfold or a paper bag with an animal or human face drawn on it.

Game:

The teachers stand at various distances around the child who is blindfolded or has the paper bag over his head. He is gently turned around several times so that he loses his sense of direction. One teacher calls out, "Where am I?" When the child points to the direction from which the voice is coming and says, "There you are". (Optional -- he may simply say, "There" or speak the person's name), the blindfold or bag is removed and the child discovers whether or not
he was right. One teacher, of course, may play this game, moving herself from one place to another, but it is more fun for the children, and a better discrimination exercise if there is more than one person. It may be possible to let other children in the group call out, "Where am I?" once the idea is thoroughly understood. Make certain that each child understands the method of the game and the response expected before he is blindfolded. There may be a child who will be fearful of being blindfolded or having a bag put over his head. In such a case allow him to play after other more venturesome ones have played blindfolded. If he is still fearful, allow him to play the game by covering his eyes with his hands or simply closing his eyes even if you feel he is "peeking". He may also be allowed to turn his back to the members calling out, "Where am I"? If being turned around after being blindfolded makes the child apprehensive, do not do it. Simply change your position quietly.

A. Variations:

Let the child correctly identifying the position of the voice change places with that person. Give each child a color chip or block or flag, stick, etc., and another each time he locates the voice correctly. Let each one pass out the new chip, flag, stick, etc., to the next one correctly locating the voice.

To Increase the Difficulty of Language:

The person who is calling out, may say, "I am by a table, Where am I?" The child responds, "Your are by a table", and points in the direction of the table. Further sentence structure changes may be used, as, for example: "I am standing by the teacher's desk. I am sitting in the red chair. I am sitting on the stool. I am leaning on the counter. I am standing behind the record player, etc."

Increasing Auditory Discrimination Difficulty:

The teacher may call in different degrees of intensity, from fairly loud to very soft; she may change the distance from which she calls, from close to far away; she may ask the child to speak her name, instead of saying, "You are standing by the table", he will say, "Miss _____ is standing by the table".

To make the problem more complex:

Tell the child before you begin that you are going to be in one of two or three places: "I am going to call to you from the table or the chalkboard or the counter". To review, and also by way of maintaining interest and adding variety, you may use this same game with the noisemakers utilized at the beginning of this section, "Localizing Sound".

III. IDENTIFICATION AND DISCRIMINATION OF NON SPEECH SOUNDS:

(Increase of listening span, with more complex receptions of content, tempo and pitch variations).

Purpose:

To increase the child's ability to listen to and discriminate among animal sounds.

Materials:

For each child: 3 animal toys, such as a sheep, dog and cow; a 12" x 15" piece
of cardboard; cut from colored construction paper 3 circles about 2-2\%" in diameter; cut from same color, 3 strips 3" x 12". cut from a second color, 6 3" x 3" squares. Make a board by stapling or pasting the circles at equal distances at the top of the cardboard. Under each circle, secure a strip of colored construction paper. Divide strips into checkerboard sections by stapling or pasting the 3" x 3" squares on the strips, with 3" intervals between, thus --

![Diagram of a checkerboard with circles and strips]

**Game:**

Teacher and children sit facing each other, with board in front of each child. Teacher places cow (or dog or sheep, or whatever) on a circle on the board and imitates the animal by making the appropriate sound, "Bow-Wow!", "Moo", "Baa", etc. The children move the animal to a new square each time the sound is made. When the proper responses are achieved, proceed to a second animal. When proper responses are achieved, use either one of the two; when proper responses are achieved use the third animal, and then any of the three. Encourage language responses, i.e., "The sheep says Baa". "I heard the dog". "That's the Cow", etc.

**For Variety:**

Use standup pictures of animals; pictures attached to blocks, pictures attached to sticks and stuck into a piece of clay; place hurdles made of paper on each square, so that the animal must "jump" each one; a band of paper to fit the finger with a picture of the animal on it may be used, and the proper finger raised at each sound; pictures may be picked up or turned over for each sound; pictures may be held by the child and passed to the teacher for each sound; a flannel board may be used, with the child putting the proper animal on the board at each sound; the animals (or pictures of them) may be placed in a bag, basket or box, and the child may pick out the proper animal at each sound; toy animals may be placed on the table in a semicircle, and the child may pick up or point to each animal at the given sound.

The record, "Around the Farm" from the Album, "Sounds Around Us" may be used. This record has six animal sounds (horse, sheep, duck, chicken, cow, pig). If used, the entire record should be listened to first. Then it should be broken into parts and each animal sound should be presented alone. Each toy animal or picture of it should be associated with the sound on the record by placing the
needle at various points as needed. The children may respond in any of the ways already mentioned. There are other animal sound records and tapes that may be used.

**Increasing difficulty of discrimination:**

Present the animal sounds in a soft then very soft voice. Use combinations of animal sounds that are similar in number of syllables: quack-quack, gobble; meow; bow-wow, baa-baa. Use combinations of animal sounds that are similar in vowels: meow and bow-wow; peep--peep and tweet-tweet.

**Increasing complexity:**

Add one at the time, to the number of animal sounds to be identified and discriminated among. For example: to the original three (cow, do, sheep) add gobble, then quack, then cock-a-doodle-doo, then meow, etc., in whatever order you find convenient. Further; make two sounds, such as, "meow -- quack," and have the child respond in the correct order for each. Increase to three, if possible. Use different sounds for the same animal; for example: "Arf" as well as, "Bow-Wo." "Cheep-cheep" as well as "Tweet-tweet". Sounds for the baby and mother animals may also be used to add complexity: For example; the sounds made by a baby sheep and a mother sheep; a calf and a cow; a colt and a horse; etc. The record, "Around the Farm" does a good job on this, as well as Vol. II of "Sounds I can Hear".

**Discriminating pitch of non-speech sounds:**

The purpose of the following activities is to aid the child in distinguishing between high and low pitches.

**Materials:**

A piece of pegboard of acoustic tile for each child; strips of paper 6" x ½" wide (approximately); two plastic straws; a musical instrument (a piano, a harmonica, a guitar, a flute, even a comb and piece of waxed paper may be used).

**Game:**

Place the pegboard on end so the holes face both teacher and child to begin with. Put one plastic straw into one of the uppermost holes of the pegboard and the other into one of the lower holes. The straws should then be sticking out like pegs. The teacher then plays a high note on the instrument and shows the child how to put a ring on the uppermost straw. She then plays a low note and shows the child how to place a ring on the lower straw. Continue until teacher is certain the child understands the expected response. Holding one hand high at the high note and the other low at the low note at the same time may be helpful, as well as saying, "High", "Low" or "This is a high sound", "This is a low sound", etc., depending on the language level. As soon as the child comprehends the purpose, stand behind him, or have him stand or sit with his back to the instrument, so that he must make his choice without visual clues. If he makes an error let him correct it by seeing you give a hand signal.

**To add variety:**

A box with holes in it or a piece of clay or styrofoam may be used instead of...
pegboard; curtain rings or pipe cleaners or ribbons may be used instead of paper strips made into rings; the rings may be taken off instead of putting on straws; a long box (such as a shoe box) may be stood on end and have a hole cut into the upper part and another into the lower part, and the child may drop a marble or piece of clay or ping-pong ball into the upper hole for high, lower hole for low sound. A series of lines may be drawn on the chalkboard one above the other, and the child may make a chalk mark on the top line for the high sound and one on the lowest line for the low sound. A block may be placed on a table for the high sound, one on the floor for a low sound. Draw two pictures of the instrument being used on the chalkboard (one high, one low) and have the child point appropriately at the given sound. The teacher may sit on the floor in front of the children and let them roll a ball toward her each time a high note is sounded, but not roll it when a low note is sounded.

Purpose:
Same as above.

Materials:
Cardboard approximately 8" x 16"; a strip of ribbon or cloth about 33" long and 1" wide; another strip about 4" long and 1" wide; a small plastic or colored paper bird, bee, airplane, or butterfly. Grooves 1" wide should be cut out at the center of the 8" edges of the top and bottom of the cardboard. Put the 33" long strip of ribbon or cloth into the grooves. Pass it around the cardboard and staple or tape the edges together. The ribbon should move freely around the board. Put the bee, bird, airplane (whatever) in the middle of the 4" long ribbon and fasten it and the bee (bird, plane) to the ribbon that is in the grooves around the cardboard. The end of the 4" ribbon (to which the plane, bird, bee) is attached are to be used in pulling the object (bee, bird, plane) up and down. Thus:

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Proceed as above, using musical instruments, animal sounds (high peeping of birds, low mooing of cows), male and female voices (tape or records).

For Variety:
Any object (dolls, flags, sticks, toy animals) may be held high by the child for the high pitch, low for the low pitch. Children may stand for the high pitch; sit for the low. A doll or other object may be moved to the top of a toy ladder for the high pitch; to the bottom for the low. A picture of a ladder
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may be drawn on the chalkboard and the child may make a mark appropriately. A hill may be drawn and the child may move a toy car to the top or the bottom. A box may be placed on the table and one on the floor, so that the child may drop a marble or ball into the top or bottom box as is appropriate. Simple charts may be drawn for each child so that he may make a crayon mark in the appropriate space.

Increasing Difficulty:

Give the sounds softly. Give the sounds at various distances. Decrease the variation in pitch (make the high less high and the low higher). Use two high sounds and ask the child which was "high" and which was "low". Do the same with two low sounds. Fill two glasses with water to different levels, so they produce different pitches when tapped. Sand or rice may also be used.

Increasing Complexity:

Use high and low pitch before asking for a response; then ask child to indicate which was given first; then which was given first and second. Give high, medium and low pitched sounds and ask for the one given first, second and third.

Use a piano if possible, and give a high sound and then a low sound; then add loud and soft. When children are responding appropriately to the loud and soft differences as well as the high and low, a second instrument may be used for further discrimination. For example: a high, soft sound is given on the piano; a low loud sound is given on the harmonica. Again, visual clues should be used first; then the exercise should proceed without visual clues.

Purpose:

Learning to identify and discriminate among various environmental sounds (particularly household and common outdoor sounds).

Materials:

"Sounds Around Us", the record, "Sounds Around the House" (Scott Foresman Company, Atlanta) Pictures of a hammer, saw, sink with water running, vegetable brush, vacuum cleaner, broom, dog, door, flour sifters, mixing bowl, silverware, (knives, forks, spoons), eggbeater, stove, milk bottles, cookie pan: The pictures should be attached to cardboard for durability. A basket or box for containing the pictures is necessary.

Game:

Put the basket or box on the table in front of the children, with the pictures at one side, out of their reach. Begin with only the first four sounds: hammer, saw, water running and brush. Tell the children to listen and watch. Begin the record. When the sound of the hammer is heard, pick up the picture of the hammer, and say, "here is the hammer", and put it into the box. Gesture and say, "Listen". When sawing is heard, pick up the saw, and say, "I have the saw", or "There is the saw", and place it in the box. Proceed in the same fashion with the rest of the sounds. Then allow the children to take turns, helping only if a child does not know which picture to pick up and put into the box. When all are responding correctly, place the needle on the record in various orders: the water running first, the hammer second, etc. When correct responses are achieved
in this way, add another form of sound, using the same procedure. Encourage language responses according to the ability of the particular child.

**For Variety:**

Put all pictures into the box to begin, and have the child remove the proper picture. Make two sets of pictures, and have the children match pictures. Use toy articles and have child pick up appropriate objects on hearing the sound. Use real objects instead of the record, and make the sound, first with, then without visual clues. Place a raisin or a piece of cereal below each picture and allow child to eat same with each correct response to the sound produced on the record. Have child turn over proper picture or cover it with a piece of colored construction paper when he hears the sound. Besides the household sounds, there are many common outdoor sounds that may be used in the same way. I have a sound effects record that contains a great variety. In addition, there are other records available that contain many good outdoor sounds: "Sounds I Can Hear" (4 volumes), "The Little Fireman" (Young People's Records, 100 6th Avenue, N. Y., 13, N. Y.); "Muffin in the City" (same address).

**Increasing difficulty:**

Other household sounds that are not generally noticed because they are less loud, and are often heard in a background of other noises are: money clinking, clock ticking, drawer closing, refrigerator running. Other sounds, somewhat louder, but often lost in the background of other noises are: a door closing or being knocked on, something dropping or breaking, a washing machine running, a typewriter. These can be taped, and in some cases, the sound from the actual object itself may be brought to the child's attention. In any case, begin with the louder sounds, being sure that he sees the object, or a picture of it. Let him see how the sound is made; let him make the sound himself, if possible.

**Increasing Complexity:**

Increase the number of sounds as the child is able to discriminate among them. If he becomes confused, decrease the number. There may be parts of a record that the child can learn and repeat as the record is played. After the children are thoroughly familiar with a given record, it may be played and the arm lifted at given points to allow children to take turns completing a sentence with one certain word or several words or a complete sentence, or even the sentence that is to follow. The needle may be placed on the record at random spots and removed after one sentence. When the child would then be expected to repeat that sentence.

**Purpose:**

To introduce the children to the tools of sequencing (1, 2, and 3 in terms of non-speech sounds first).

**Materials:**

A drum and three small flags for each child. Flags may be made by gluing or tapping a piece of paper or cloth about 6" x 8" to a small stick. From paper of a contrasting color, cut 6 circles, about 1" in diameter and paste 1 circle to the first flag, 2 circles to the second flag and 3 circles to the third flag.
**Game:**

Teacher and children sit facing each other. Teacher explains game to children by striking drum once and showing flag with 1 circle on it; teacher then strikes drum twice and shows flag with 2 circles on it; lastly, teacher strikes drum 3 times and shows flag with 3 circles on it. Teacher then says, "Listen," strikes drum and encourages children to hold up the correct flag. Teacher should take care to strike the drum slowly enough so that children may differentiate 1, 2 and 3 beats. She should also allow children to use sight clues until they are completely familiar with the procedure and response expected of them. She may then stand behind the children or place the drum under the table or behind a box or screen.

**For Variety:**

Almost any kind of noisemaker may be used, such as rhythm sticks, triangle, horn, whistle, hammer, blocks, two pan lids, tambourine, crickets, etc. The children's responses may be varied by giving them duplicate noisemakers and repeating the pattern on them; by holding up the correct number of fingers; by knocking over previously arranged stacks of blocks in combinations of 1, 2, and 3; by placing the proper number of beads, marbles, pegs, blocks, etc., into a container; by turning over cards having pictures of 1, 2 or 3 similar objects on them; by clapping hands to correspond with the number of sounds heard; by placing the proper number of circles (paper, pipe cleaner, curtain ring) on a stick stuck into a ball of clay.

**Increasing difficulty:**

Sounds of varying rhythms may be combined (slow, fast, irregular); sounds of varying intensities may be combined (soft, loud, medium); when both of these steps have been mastered, they may be combined in sounds varying both in rhythm and intensity.

**Increasing complexity:**

The number of sounds may be increased; use several different noisemakers and have children tell how many sounds are made by each one; have child tell how many fast and slow sounds are heard; have child tell how many loud and soft sounds are heard.

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**IV. AUDITORY MEMORY SPAN, SOUND SEQUENCES:**

This section is concerned with auditory perception of temporal order sequencing, combined with and based on discrimination.

**Purpose:**

To help the child learn to "listen more rapidly" and to improve ability to scan within a background while being engrossed in a foreground and vice versa.

**Materials:**

Various noise makers, voices, music, animal noises, etc.
Materials:
Various noise makers, voices, music, animal noises, etc.

Game:
Teacher and children sit around a table. Teacher has two noise makers. For example: a bell and a wooden clapper or small hammer. She talks about and demonstrates both, and explains that they are going to listen for the different sounds. Within sight of the children, teacher then taps hammer or rings bell three times. "Which one (pointing) did you hear? How many times did you hear it?" When correct responses are achieved, teacher taps hammer twice and rings bell once. "What did you hear? How many times did you hear the hammer? How many times did you hear the bell?" Any of the usual procedures for responses and rewards may be used, as previously suggested. For example: children may be supplied with cardboard cutout facsimilies of the noise makers being used, or pictures of same, and place buttons, beads, colored circles, etc., on each picture for each tap or ring heard (after all have been heard, not as they are heard), or they may point to the correct picture and tap it the proper number of times, or they may be provided with two boxes, with a picture of the noise maker on the box and drop into it the correct number of beads, buttons, etc. As soon as all are responding well, teacher should remove the noise makers from sight, behind the children or under the table or behind a screen. When children are able to discriminate 3 to 4 different noise makers, teacher should then shift to. "How many were the same?" "How many were different?" For example: teacher taps hammer three times, and rings bell once, then asks, "How many sounds were the same?" When correct response is achieved, "How many were different?" Then increase number and variety of same and different sounds: 2 hammer taps, 1 bell, 1 hand clap, etc.

Increasing difficulty:
Work to help child determine the number of times a specific sound occurs in a background of other noises. For example: run a tape of animal noises or people talking and ring a bell or make a tapping sound or blow a horn or say one word at irregular intervals. This should first be done within sight of the children then, when correct responses are achieved, without visual clues.

Increasing complexity:
Shift the emphasis from the bell ringing or tapping or horn blowing or speaking of a word to the people talking or animal noises. For example: "How many times do you hear the people talking?" "How many times do you hear the animals?"

Further Complexity:
The ability to blend two or more sounds to make a word. For example: teacher and children sit facing each other around a table with one picture of a common object (man) facing the children. Teacher shows pictures and says, "You all know what this is." Waits for response from children. "Yes, it is a man." Can you say it this way? "m-a-n." Wait for response from children. "Good. You broke it up. Sometimes you break up crackers and put the pieces in soup, don't you? That's what we are going to do with words. Listen and watch." Teacher then places another picture of a common object on the table and repeats procedure. Teacher then says, "John, which one am I saying?" Continue, giving each child a
turn, alternating words irregularly, and allowing children to watch your face while you speak, and vocalizing each phoneme carefully and separately. When good responses are achieved, put a paper before your mouth or stand behind children.

When all are achieving good responses, increase number of pictures, but remain with words of 2 or 3 phonemes, each beginning with a different sound. Below are 5 groups of sounds following the schedule of critical stages in the development of the consonants and semivowel sounds of speech. Group I should be used first, Group II next, and so on. However, within any group the order is not important. The sounds should be used as the beginning sound of a two or three sound (not syllable) word. Examples will follow:

Group I: P, b, m, w, h. Think of these as symbols for sounds, not as letters. The sound for "p" is a voiceless (whispered) sound. The sound for "b" is a voiced sound with as little vocalizing as possible following the parting of the lips. For "m", the sound is made with lips closed. Vocalizing should not continue after lips have opened because the sound will be "muh". The sound for "w" is a voiced sound, with as little vocalizing as possible. The sound for "h" is a voiceless (whispered) sound produced by gently expelling air with the mouth open.

Group II: d, t, n, g, k, ng, j. The sound for "d" is voiced, with as little vocalizing as possible as the tongue leaves the alveolar ridge; prolonged vocalization will result in "duh", which is not desired. The sound for "t" is voiceless, made in the same way as the sound for "d", but without voice (whispered). The sound for "n" is voiced, emitted through the nose, while the tongue is in contact with the back of the upper front teeth and or alveolar ridge. Sound "g" is not continued as the tongue drops down to the flange of the mouth. Otherwise the sound will become "ru", not desired. The explanation of the above sounds and those that follow will be made at a time when we can see and hear each other, so that the chances for misinterpretation will be minimized. For now, the sounds will simply be listed here in groups, necessarily shown as letters, but with the reminder that they should be thought of as sounds, not letters.

Group III: f

Group IV: v, th, (voiced), zh, sh, l.

Group V: z, s, r, th (voiceless), hw.

Examples of 2 or 3 phoneme words beginning with sounds from Group I: p-i-g, b-a-t, m-a-n, w-e-b, h-a-t.

Group II: d-o-g, t-o-e, n-o-s-e, g-u-n, k-e-y, (the "ng" sound never begins a word in English so this sound may be omitted from this section.), j-a-r.

Group III: f-o-o-t, f-a-n.

Group IV: v-a-s-e, th voiced "th" occurs initially in English only in word difficult to picture, such as this, that, there, they, etc., so it will be omitted from this section the "zh" sound does not occur initially in English words.
Group V: z-oo, s-u-n, r-oa-d, th-u-mb, wh-e-l.

It should be remembered, when playing this game, that the object is not to improve or correct speech, but rather to help the child improve his auditory ability to blend two or more sounds to make a word. It is his "listening", not his "speaking" that is critical here. The teacher's speaking is critical, in that she must produce the phonemes clearly, correctly and separately. When all are achieving good responses with any two phonemes, increase the number of pictures beginning with the same phoneme. For example: if good responses are achieved with three different beginning sounds in Group I (p,b,m) use two pictures beginning with "p" and one with "b" or one each of "b" and "m" i.e. a picture of a pig, a picture of a pan and a picture of a bat (baseball), and a picture of a man. In irregular order, produce the separate sounds for one picture and wait for a correct response before proceeding to the other three.

Always be sure the children are thoroughly familiar with the objects represented in the pictures before beginning the game. When they have achieved some skill, they may take turns with the teacher. Do not do this, however, unless the child is able, without difficulty to produce the sound correctly. If a given sound cannot be produced correctly, choose another that can be correctly produced, without trying to correct the child's production.

Purpose:

To accustom the children to listening to the distinguishing between two words having dissimilar combinations of vowels and syllables.

Materials:

Two box lids, turned up to form trays; one open box; 6 small balls (may be made of clay, but better, to begin with (if they are real balls, such as Jack balls); 6 miniature airplanes (may be pictures of planes, but better to begin with) if they are objects. Each child may use the materials in turn, or a set may be provided for each child.

Game:

Teacher and children sit facing each other. The teacher says, "Listen and watch." Then, "Ball," and drops a ball into the open box. Then, "Airplane," and drops an airplane into the open box. She then encourages the children to do the same. As soon as she is certain they understand and are responding correctly, she holds a paper before her mouth or stands behind them so that 'heir response must be made on hearing alone.

For variety:

Vary objects of pictures used. For example: book and television, umbrella and shoes, cooky and cake, horse and elephant, etc. Have child pick up and hold both objects or pictures before the words are spoken, and then drop the correct one into the box after he hears the word; children may choose the correct object or picture from a box or basket as he hears the word; children may turn over a picture of the correct object; children may hold pictures in their hands and
place the correct one on the table as the word is spoken; child may place proper picture on flannel board; a simple book may be made with one picture on each page, and the child may turn to the correct picture; simple line drawings may be mimeographed and the children may underline or outline the correct picture.

Increasing difficulty:

The use of two-word combinations having different vowels and the same number of syllables makes auditory discrimination more difficult. For example: Elephant and grasshopper; fish and can; airplane and baby; car and book; telephone and butterfly; chicken and turkey, etc. Added difficulty: Two word combinations with similar vowels and a differing number of syllables. For example: Lion and light; water and watch; balloon and moon; radio and rain; pillow and pill. Further difficulty: Combinations of two words with similar vowels and the same number of syllables. For example: Tree and key; banana and bandana; lady and baby; ship and fish, etc. Next level of difficulty: Combinations of two words that are similar except for a single sound in each one. For example: Cat and hat; soup and soap; moon and spoon; monkey and money; bar and car; book and hook; coat and boat; meat and feet; house and mouse, etc. Reduce volume by using a softer voice and also by moving farther away from the children.

Increasing Complexity:

Increase the number of words used together. For example: Bar, star and car; hat, cat and bat; coat, boat and goat; soup, soap and rope; meat, feet and beet, etc. Ask for a response of two or more words at a time. For example: The child responds in the same consecutive order as the teacher gives the words, i.e., he picks up a picture first of a coat, then a boat and then a goat.

Purpose:

To help the child distinguish two equal-length phrases having key-words of different sounds progressing to more complex discrimination.

Materials:

Pictures of a family, cut from magazines or workbooks and mounted on cardboard. Each figure should be mounted separately and should be relative in size. That is, the baby should be the smallest, the children larger, but smaller than the adults, etc. A large (approximately 18" x 18") picture of a house showing the rooms as if the front wall had been removed, so that we look into it as if it were on a stage. This can be simply done by drawing sections to represent rooms and pasting in appropriate pictures of standard items of furnishings. Another picture, the same size (approximately 18" x 18") showing the outside of the front of the house should be placed on top of the first one, not secured in any
way, as you will want to remove it shortly after the beginning of the game. Other pictures (which may be snapshots or pictures cut from magazines or simple line drawings, and may be smaller than the house pictures) should also be available. These should be places where men work, such as office buildings, service stations, trucks, schools, etc. These need not have the front wall removed.

Game:

Teacher and children sit facing each other at a table, with the two house pictures in front of the teacher, facing the children. The uppermost picture shows the outside of the house. Lined up beneath it, in front of the children, are the family figures. Off to one side, separated from the house is one picture of where men work. The office building may be best to begin with. The teacher says, "Daddy is at work," and places the figure of the father on the picture of the figure to its place in front of the children and lets one of them repeat her action and words, then says, "Yes, Daddy is at work. Mother is at home," and picks up the mother figure and places it on the picture of the house. Both figures are replaced in front of the children, and another child is encouraged to make the same response. As soon as all are responding appropriately, the teacher removes sight clues by placing a paper before her mouth and then by standing behind the children. When appropriate responses are achieved, teacher may allow children to place the mother or father figure under a picture when she is not watching. She then says, "Is Daddy at home?" If child replies, "No," she says, "Is he at work?" The teacher may hide the figures and let the child guess where Daddy or Mother is. Gradually, other members of the family are brought in. Animal figures may also be used, such as a family pet cat or dog. The picture of the outside of the house may be removed so that the various rooms are shown, and the game moves into the next phase: "Where is Mother?" "Mother is in the kitchen." "Susie is in the bedroom." "Spot is outside." "Dick lost his ball." "Daddy looked in the living room." "Mother looked in the kitchen." "Dick looked in his room." "Susie found it in the closet." Next, introduce the negative. "Susie wants to play with Fluffy (the cat)." "Fluffy isn't in the kitchen. She isn't in the living room. She is in Dick's room." Next, have the children respond to commands. For example: "Daddy, go to the living room." "Mother, go upstairs." "Dick, go to the kitchen." "Susie, go outside." etc. Next, give double commands. For example: "Dick, go to the kitchen and then to the living room."

When children are thoroughly familiar with the procedure, remove the pictures of the house and other buildings, but leave the family figures on the table. Say, "Now we will tell where Mother is without the pictures." The teacher then picks up the mother figure and holds it under the table, or otherwise out of sight, saying, "John, you may be first to ask where mother is." In response to the child's question, the teacher says, "Mother is at the grocery store," or, "at Grandmother's", or, "in the yard", or "at the movies, or, "on the porch," or, "at the drug store," or any other familiar place that has not previously been used. Children then take turns, choosing whichever family figure they wish and repeating teacher's actions. If child cannot think of a place for a figure, teacher may help by saying, "Is daddy at the gas station?" or, "Is daddy in the garage?" etc.

Purpose:

To help the child remember words in series, necessary for organizational skills.
Material:
The house showing the rooms as if the front wall were removed; separate pictures, mounted on cardboard of various typical home furniture and equipment together as they are commonly seen or used. For example: A stove, refrigerator, cupboards for dishes or canned goods, sink, cooking utensils, etc. stacked together for the kitchen.

Game:
Teacher and children sit facing each other with the picture of the house between them, facing the children. The teacher explains that they are going to find out how many things they can see and name in the kitchen (or bedroom or bath, etc.) Teacher then removes picture of house and asks for one child to name one object he remembers seeing. As the object is named, the teacher places a picture of it on the table, continuing until no more can be remembered. She then places the remainder of the pictures (if any) on the table and names them with the children. The pictures are then taken up by the teacher and again placed one by one on the table as each is named by a child. The pictures may be passed out 2 or 3 to each child, and the teacher may name them.

Purpose:
Materials:
Those used in the game of "Store", familiar to all teachers. Objects or pictures may be used. A basket, box or bag may be used to bring the objects or pictures "home." The teacher may be the "Mother" and tell the child one, two, three or more things to bring home from the store, or the children may make their own choices, taking turns being "store-keeper" or "Mother". A variation of this game that children also enjoy is the "Restaurant" game, in which pictures (mounted on cardboard) of food are placed on the chalkboard ledge and identified by teacher and children. Children take turns being "Waiter" or "Waitress" and "guests." Each guest orders one, two or three (or more, if eventually possible) items from the pictures on the chalkboard. The waiter or waitress brings the items and takes his or her place as a guest. Once the idea is established and correct responses are being made with a few simple items, increase the number of choices and begin to categorize. For example: Explain that we may have a choice of drinks, (milk, coffee, tea, chocolate milk, orange juice, Coca Cola) a choice of meats (steak, hamburger, pork chops, bacon, hot dogs, baked or fried fish, chicken, turkey, etc.), vegetables (beans, carrots, beets, etc.), fruits (bananas, oranges, apples, grapes, peaches, pears, etc.), breads (white and whole wheat bread, rolls, biscuits, toast), cereals (dry cereals, cooked cereals, rice, etc.), desserts (cake, pie, cookies, ice cream, sherbet, jello, etc.). Salads may be included in fruits or vegetables, depending upon the kind. Only two categories should be discussed to begin with, with three to four choices in each category. As correct responses are achieved, another category, and another etc., may be added. The "Peabody Language Development Kits" contain excellent material and lesson plans on this subject, but it is suggested that they not be used at this point, as it is felt that the material and methods will be useful later, at another level.
For Variety:

Use above described items mimeographed in random order (not in categories) on sheets of paper. Teacher first goes over the paper to be used with the children, naming each item and allowing children to name them. Teacher then says, "Listen. I will name some things on your paper. Mark the ones I say. Ready? Mark apple, and the watermelon." As correct responses are achieved, move on to categories alone, letting the child decide which item may be marked for the correct response to, "Mark a fruit." Then, "Mark a fruit and a meat." Be sure that adequate explanation is given before each new step is undertaken. Other categories may be added. For example: furniture, animals, clothes, toys, buildings, things to ride in, etc.

For added difficulty:

Using above mimeographed sheets of paper, make certain children understand what is expected, and that they comprehend all individual words used in the instructions. Teacher should first illustrate by performing the action herself as she explains, "Draw a line under the apple and a circle around the grapes." or, "Make a blue mark under the bed and a green mark over the cow."

Give instructions calling for more gross physical movements: "Stand up and clap your hands." or, "Sit down and touch your nose." Increase to three, if possible.

For greater complexity:

Increase the complexity of the series of commands. For example: "Go to the chalkboard and get the eraser and the chalk." "Go to the cupboard and get the red blocks and the yellow truck." "Put the truck on the floor and the blocks in the basket." "Get three sticks. Put one on the big table and two on the little table." Have available 3 drawers or three boxes, stacked one on top of the other. Say, "Open the top (or middle or bottom) drawer, and bring me two green pencils and one red pencil." or, "---three marbles and two beads." etc.

Purpose:

To increase auditory memory span with a verbal response.

Materials:

Simple "stories" (suggestions for which appear below) and related pictures which may be cut from magazines or workbooks or make of line drawings.

Game:

Teacher and children sit facing each other at a table or in a circle of chairs or on the floor. The teacher has the appropriate pictures, but does not show them until the moment they are called for in the story. She begins by explaining that she is going to tell the children a story, and that they will then tell the story to her. "Listen. We'll begin with the story of Daddy's Trip. Daddy went on an airplane trip to Jacksonville." (Show first picture, illustrating man boarding an airplane). "It was in the daytime. The sun was shining. There
were big, white clouds in the sky. The plane made a loud roar as it went up into the air. Now we will take turns telling a part of the story. Helen, you may have the first turn. Listen, and say what I say. Daddy went on an airplane trip to Jacksonville." If the response is not correct, say "Listen again. This time it will be John's turn." Continue until a correct response is achieved. Keep the picture visible. When a correct response is achieved, proceed to the next sentence, showing appropriate picture. When correct responses are achieved, place all pictures on chalkedge or table in proper order and ask one child to begin the story. Point to the next picture and indicate a child to give the following sentence, and so on until the story is completed. Then ask one child to tell as much of the story as he can, and so on, taking turns. When this can be accomplished, take the pictures away, and have the story retold without the visual clues. Do not expect to accomplish all this in one session. Do not remain with one story until it becomes a chore. If all you wish to achieve cannot be achieved, move on to another activity, and return another day to this story and those that follow, or make up your own.

Suggested Stories: The Hungry Dog--Mother put some meat on the table for lunch. The telephone rang and she went to answer it. Spot saw the meat on the table. He jumped up onto the table and ate up all the meat.

Susie's Balloon--Susie was playing with her balloon. Daddy was smoking and reading the paper. The balloon touched Daddy's cigarette and burst.

The New Baby--The new baby is very small. Mother gives him a bath. She wraps him in a towel. He cries when he is hungry.

There are many such simple stories without words in the "Before We Read" series. The pictures may be cut out and used along with such brief, simple sentences as those contained in the stories above. (Insert section on "We Speak Through Music", simple rhymes and finger play rhymes) about it. Teacher says, "I went to the grocery store. I bought bread, jelly and hot dogs. What did I buy? Where did I go?" or, "Maryann lives in a brown house on Maple Street. Where does Maryann live? Who lives in a brown house on Maple Street?" or, "Jim rides bus #17 in the morning?" etc.

Purpose:
To aid child in facility of auditory recall.

Materials:
Pictures of common objects, mounted on cardboard, or the pictures found in the various Peabody Language Development Kits.

Game:
The teacher begins a sentence and points to complete it. The children made the appropriate verbal response. For example: Teacher says, "I eat with a _____" (showing a picture of a fork). Children respond. As correct responses are achieved, pictures are removed. Child responding appropriately may be given picture to hold until all have had a turn. If no response or incorrect response is given, teacher helps child by beginning, slowly, to say the correct word. She should also encourage the child by asking him to "say it with me", and begin the sentence over again, as the reauditorization of the sentence in its entirety
often helps the child recall the correct word at the end. Pictures should be named without the preceding part of the sentence. When correct responses are achieved, move on to adjectives. For example: Hot and cold, fat and new, etc. IDEAL Opposites Cards are excellent for this purpose. Peabody Language Development Kit Level I, has many sentences of this kind in the manual.

Purpose:

Same as above, though approach is through association rather than opposites.

Material:


Game:

Teacher and children sit facing each other at a table, or children sit in a semi-circle facing teacher at blackboard ledge. Teacher explains that they are going to play a game about things that go together. She says, "Look and listen. When we see salt (shows picture of salt), we think of (shows picture of pepper and says the word simultaneously) pepper too. So we think of salt (pointing to appropriate picture as she says each word) and pepper together." Teacher removes or turns over the pictures, and says, "When we think of salt, John, we also think of _____." John does not respond, or does not respond appropriately, the teacher turns over the picture of pepper, says "Pepper," and proceeds to the next pair of pictures. When all children are responding well to the pictures and verbalizations, remove the pictures, the teacher explains, "Now, we're going to play the game without the pictures on the table. You try to remember the pictures as I say the words. Ruth, you may be first. Salt and (wait for child's response) go together." Proceed to other pairs, giving each child a turn, and returning to visual clues as necessary.

Purpose:

Same as above, the approach is through serializing and categorizing, rather than through opposites or association.

Materials:

Boy, girl, man and woman figures cut from tag or cardboard, about 12" to 16" tall. Joints (elbows, shoulder, wrists, knees, ankles, hips and head to neck) may be fastened with brads, if desired, so that figures are moveable. These need not be
artistic, but they should be clearly recognizable as boys or girls, men or women. There should be a sufficient number so that each child may have one. "Clothes," cut out of colored construction paper that may be laid on top or fastened with paper clips to the different figures. The clothes should be: Hats, shirts, pants, sox and shoes for the boy and men figures; hat, blouse, sex or hose and shoes for the girl and women figures.

Game:

Teacher gives one figure, appropriate to sex of child, to each child. Children may identify themselves or members of their families or friends with the figures, if they wish. Teacher explains that although it isn't the way we dress ourselves, we are going to dress the dolls from the top to the bottom. One "outfit" is laid out on the table in random order. The teacher asks one child which piece of clothing goes on (hat) the top. And below that? (shirt or blouse) and below that? (pants or skirt) and at the bottom? (shoes). When this is understood, teacher supplies each child with a "Set" of the proper clothing in a pile in random order, and encourages him or her to dress the doll, beginning at the top and telling the name and place ("on top" or, "first", and "below" or "under" or "next" or "there", etc.) When all are responding well, remove the clothes and ask children to tell the clothes in order. When correct responses are achieved, let children illustrate on themselves, each other and the teacher, pointing to the correct location for each item and naming it in proper order. When all are responding well, return to the cut out clothes, holding one at a time up for identification and location. Do this in random order. That is, do not always select the hat first.

For Variety:

Use other series, such as (proceeding from left to right) napkin, fork, plate, knife, spoon. A real or toy table setting can be used, and the same procedure as above. For example: A setting is placed in front of each child, identified and named by teacher and children, with the left to right movement emphasized ("We begin with this hand and move to this hand; or, if children are able, "left hand to right hand" may be used). Then articles are placed in random order and child rearranges them properly. Children then name articles in order without settings in view. Children then identify article as it is shown and tell and show place for it without visible clues except for the one article being shown.

To add complexity:

Objects having well-defined characteristics of touch, such as glass, a piece of satin or silk, a piece of marble (not a glass marble), a piece of highly polished or waxed wood or tile (all smooth); a piece of rough concrete, a nail file or other file, a piece of coarse sandpaper (all rough); several feathers held together with a rubber band or tape, a piece of absorbent cotton, a soft sponge, a bit of fur (all soft); a piece of metal, a small stone, a block of wood (all hard). Use one object from each group to begin with. Identify each first by sight and feel. Put all four articles in a bag or under a cloth or blindfold the child and have him identify each by touch, explaining that he knew what it was because it was "smooth" or "rough" or "hard" or "soft." Then all four items are named without sight or touch. Then they are named in the order in which they were touched. When all are responding properly, more items may be added in each category. When all items have been used, have children give the name of "Something soft--something rough," etc. Name one object and ask child to tell whether it is soft, rough, smooth or hard.
Use pictures of foods that taste sour, sweet, salty or bitter, and use the same procedures as above, encouraging child to name as many "sweet" foods as he can, as many "sour", etc.

Other series and categories may be used in the same fashion, as, for example: Things that are round, things that are square, things that are light (in weight), things that are heavy, things made of wood or metal or glass or cloth, animals that have two legs, animals that have four legs, animals that have fur, animals that have feathers, etc.

Purpose:
Same (to improve auditory memory span), though the approach is through rapid naming.

Materials:
Anything visible in the classroom and pictures of common objects; color chips or beads or sticks or miniature toys or bits of cereal, or whatever you wish to use as rewards.

Game:
Teacher and children sit facing each other around a table, or on chairs without a table or on the floor. Teacher explains that the game is to name what she points at as fast as they can. "John, you may begin. What is that? And that?" Teacher points to two objects far enough apart so that confusion will not result. The objects pointed to may be any clearly visible object in the room or some article of dress she or a child is wearing or some part of her or their bodies. As soon as the child has responded correctly, the teacher rewards the child in whatever way she elects, and says, "Good. What did you name?" If the child cannot remember, she points again and goes on to another child. As soon as the children can name two items rapidly and recall them, proceed to three, and four, if possible. Children and teacher may trade places, with the child pointing and the teacher naming. To use the game with pictures, place three pictures in front of one child at a time. Have him name them from left to right as quickly as possible (one per second is the goal to be strived for). Increase the number by one each time he is able to name the group quickly until you have built to 6-8 pictures. After each group is correctly named, see if the child can name the pictures without seeing them.

For Variety:
Use the same procedures with small toys and common objects, naming them as they are placed in a box or basket, renaming them when they are out of sight in the basket. Work for rapidity as much as possible. Parts of common objects or toys may be discussed, named and recalled as rapidly as possible. For example: The parts of a chair are seat, legs, back and arms, if any. The parts of a lamp are cord, lamp, bulb and shade. The parts of a wagon are wheels, body and handle, etc.

Sound as a Response:
Purpose of all the following is to help the child develop a correct, as well as
spontaneous and natural flow of language. Therefore, although structure and repetition are necessary, the procedures must be presented and participated in without becoming rigid or stereotyped. The child with auditory perceptual problems has trouble retaining the pattern of sentences, and in planning and organizing the words he already knows or hears. He therefore needs many concrete presentations of specific examples so that he will be able to internalize various sentence plans. In classroom situation, these will be most readily arranged through meaningful play experiences and pictures. The first example below is on the lowest level, and should be possible for children operating at 3 year old expressive language level. The following suggestions are not set up according to "Materials" and "Games" as were the previous ones because it will be effective for the teacher to think of this effort as a continuous program which takes advantage of whatever activity is being engaged in at the moment. As a place to begin, however, it may be helpful to illustrate the principles with a structured situation, using pictures. Start with nouns and verbs known and understood by the child. Nouns, for example: Mother, Daddy, baby boy, girl, etc. and verbs: Sleeping, eating, walking, running, etc. Teacher presents a picture and a sentence simultaneously: "Baby is eating." "Mother is eating." "Daddy is eating." Use the same sentence in each case, except for the noun. Teacher may hand the picture to each child as she says the sentence, and take a picture from each child as the child repeats the sentence. Teacher may ask child to finish the sentence for her as she presents the picture and says, "Baby_______." When all are responding well, the verb may be changed, but the remainder of the sentence is kept as before. For example: "Baby is sleeping." etc. It is sometimes helpful to show the child with fingers, pegs, blocks, straws, beads, etc., how many words are in the sentence. For example: as the teacher says the sentence, she may show on her fingers, pointing to each succeeding finger as she says a word in the sentence. Then, when the child repeats the sentence, she may follow his progress on her fingers, so that he is aware, visually, if he leaves out a word. Further attention can be drawn to the pattern of the sentence through tapping it out on the table as it is said. For example: as the teacher says, "Baby is eating," she taps her finger on the table in the rhythm of the words. "Baby" would receive two taps close together; "is" would receive one tap well separated from the preceding and succeeding words, and "eating" would receive two taps, close together. The teacher can assist the child in tapping out sequences. This is also helpful in calling attention to unstressed words or word endings. For example: in the sentence, "Daddy is sleeping," the word "is" is unstressed as is the "ing" ending in sleeping. When the teacher says the sentence and taps it out on the table, she can help the child become aware of these unstressed elements by tapping, vocalizing a little more loudly, and by being sure the child is watching her face as she speaks. To increase complexity of sentence pattern, select pictures showing different people eating the same food (cake, apples, sandwiches, cereal, soup, etc.) The teacher will, as described above, set the pattern by giving the sentence: "The boy is eating cereal," etc. After the whole sentence is given for each picture, the teacher may give the sentences again - this time omitting a word, and letting the child supply it. Finally, the child is asked to repeat the whole sentence.

Verb Tense: Use of past, present and future tenses involves selecting and shifting words in a sentence, and so presents added problems for many children. Presenting these forms with action is probably the most effective method of achieving results. For example: teacher and children sit together after
teacher has told one child (out of the hearing of the rest) what to do. Teacher may instruct the child to walk, skip, hop, pick up blocks, etc. While he does this, the teacher says, "What is David doing?" "He is walking," etc. The child then joins the group, and the teacher says, "What did David do?" "He walked," or "David walked." Each child is encouraged to respond similarly to some action. When all have had a turn and are responding well, teacher may say, "Now, it is David's turn again. What will David do? He will walk." "What is David doing? David is Walking." After he has rejoined the group, the previous forms are repeated. "What did David do? He walked." And so on, with other verbs. As the children grow accustomed to the forms, the pantomime may be expanded to include imaginary objects, so that responses may be more complex. For example: "What is David doing? David is combing his hair." "What did David do? David combed his hair." What will David do? He will comb his hair." etc. To teach "see" and "saw" forms, pictures are useful, and a projector adds variety and interest, as well as opportunity for increasing complexity. For example: teacher holds (or projects) a picture, and says, "What do you see?" The response to be encouraged is, of course, "I see a ____." The picture is then removed or the projector turned off, and the question, "What did you see?" is asked. When three pictures have been shown, the teacher explains that the children will see the pictures again. "What will we see first?" "We will see the ____." "What will we see next?" "We will see the ____." etc.

Other pictures, such as are readily available in "Before We Read" series (or simple line drawings) may be used effectively, as follows: in the first picture of such a series, the children see a dog going toward a dish of food. In the third picture, the dish is empty and the dog is turning away. The children are given such sentence patterns as, "The dog is going to eat his food. The dog is eating. The dog ate." The children also enjoy a game with bits of cereal to illustrate, "will eat, eating, ate." The teacher takes a bit of cereal and says, "Watch and listen." She holds the cereal close to her mouth and says, "What will I do?" "Yes, I will eat the cereal." As she eats it, "What am I doing?" "Yes, I am eating the cereal." When she has finished, "What did I do?" "yes, I ate the cereal." She then begins to hand a bit to one child and says to the others, "What will Jane do?" "What is Jane doing?" "What did Jane do?"

Pictures of a grocery store, a toy store, a drug store, an office building, a church, grandmother's house, a school, a hotel, a restaurant, a movie, etc., may be used in conjunction with pictures of a man walking, a woman walking, a boy walking, a girl walking, the same figures riding in a car or on a bicycle, or animals doing such things as running, climbing, crawling, flying, etc. For example: teacher shows picture of mother walking, "Mother is walking," Shows picture of grocery store: "to the store." Teacher shows picture of a horse running: The horse is running," shows picture of a barn, "to the barn." Teacher shows picture of a snake or lizard, "The snake is crawling," shows picture of a rock or a hole, "to the rock", or "to the hole." Further: "What will the snake do?" "The snake will crawl under the rock," etc.

The same procedure can be used in making children familiar with the position of adjectives in relation to nouns. For example: using pictures held in the hand or projected on a screen, "What do you see?" "I see a hat." "I see a brown hat." "I see an old hat." "I see a funny hat." "I see a man's hat." "I see
a big hat." "I see a little hat." etc. The adjective in question, "brown, old, funny," etc., should be used first with a number of different nouns before the adjective is changed. For example: "I see a brown hat. I see a brown rabbit. I see a brown dog. I see a brown crayon," etc.

The above procedures lead naturally to the next level of complexity, which is the building of sentences. It is usually best to start with nouns and verbs. Often it will be necessary for the teacher to supply two nouns, and sometimes the first two or three words of a sentence. For example: teacher says, "I will say a word, and you tell me something about it. If I say, 'boy' If I say, 'cat,' you might say, 'The cat is hungry.' John, you may begin. "Baby." If the child needs help, the teacher may say, "The baby is___." Gradually increase complexity by moving to verbs, prepositions, conjunctions, adjectives and adverbs, the most commonly used and easily demonstrated and illustrated first. For children who can read, complexity can be added through the use of particular sentences with one word missing and scrambled sentences. For example: "Mother went___the store." "Come___me to the beach." "Put the book ___the table." "The apple is___the bag." etc. "The boy___school." The dog ___his food." "We___to church Sunday." "Mother___I went shopping." "Susie___Helen are sisters." "The baby cries___he is hungry." "Sugar is___." "Lemons are___." "Bunny fur feels___." (Mother went to the store).""The dog chased the cat. (The dog chased the cat)." "visit grandmother to came. (Grand mother came to visit)." "rode car we the in. (We rode in the car)."

Formulating stories is a helpful method of improving the flow of language. Many different devices may be used, such as picture sequences cut from readiness books mounted separately and arranged by the child in proper sequence as he "tells the story"; the sequence series is available; movies, slides, film strips, etc; may also be used. The Sounds I Can Hear," albums are especially good for this purpose. In all of these procedures the teacher should lead the children from simple to complex structures, accepting all responses, but helping to remedy the errors.
AUDITORY DISCRIMINATION SCREENING
FOR KINDERGARTEN AND FIRST GRADE

Adapted from DLM-APT
Speech Therapy, Orange County, Fla.

On a chalkboard or a large piece of paper, the therapist should first draw a picture of a horn 📣, a cat 🐱, and a bell ⏰. She should then say something to the following: "If I should ask you to draw a line around the one that sounds like this: meow, which one would you draw the line around?" Therapist will then draw a line around the cat. If necessary, further demonstration should be made until therapist is satisfied that children understand, "draw a line around," and associate this with a matching sound and picture. Children should be seated so that they cannot see each other's worksheets.

Procedure:

The therapist says, "Each of you has a sheet of pictures and a crayon. Do not pick your crayon up until I tell you to do so. You are going to hear some sounds. I am going to ask you to draw a line around the picture of whatever is making the sound you will hear. You must listen carefully, and do what I tell you to do."

1. "Look at the first row." (Therapist holds up her worksheet, and points to the first row.) "Listen." (Therapist turns on the page and allows it to run until the first sound has ended.) "Draw a line around the picture of whatever made the sound you just heard." (Maximum interval of 10 seconds before the following direction.)

2. "Look at the next row." (Therapist holds up worksheet, and points to 2nd row.) "Listen." (Tape is turned on and allowed to run until second sound ceases.) "Draw a line around the picture of whatever made the sound you just heard." (Maximum interval of 10 seconds before the following direction.)

3. "Look at the next row." (Therapist holds up worksheet, and points to 3rd row.) "Listen." (Tape is turned on and allowed to run until third sound ceases.) "Draw a line around the picture of whatever made the sound you just heard." (Maximum interval of 10 seconds before the following direction.)

4. Same procedure and directions as 1., 2., 3., above.

5. "

6. "

Collect worksheets (with child's name and date at top) and score. Total possible score is 6. Though there are no norms for this screening procedure, it may be assumed that a score of 3 would indicate a need for particular attention to development of auditory discrimination of non-speech sounds skills.
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AUDITORY MEMORY SCREENING FOR

KINDERGARTEN

Adapted from the DLM-APT
Speech Therapy, Orange County, Florida

On a chalkboard or large piece of paper, the therapist should first draw a picture of a ball and a snowman; a cat and a square; or any other simple, familiar objects in pairs. The therapist should then demonstrate, "Draw a line around" and "first and last", so that there is no question of the children's not understanding these terms.

The children should be seated so that they cannot see each other's worksheets. Child's name and the date should appear at the top of each worksheet. Give each child a worksheet and a crayon (of any color).

Procedure: Speech therapist says, "Each of you has a sheet of pictures, and a crayon. Do not pick up your crayons until I tell you to do so. Listen while I tell you what to do. I am going to tell you the names of the pictures, and ask you to make a line around one of the pictures. I might not say the names in the order you see them. Pick up your crayons. Listen, while I say the names of the pictures. Then do what I tell you to do. Look at this row." (Therapist holds up her worksheet, and points to the first row.) "Candle. Box." (These are to be said with a two-second interval between each word. After "Box" wait three seconds before giving the following direction.) "Draw a line around the picture of the word I said first." Therapist will then wait ten seconds before going on to the next row, unless all have finished sooner. "Now look at this row." As before, therapist holds up her worksheet and points to the second row. "Chair. Window." (two seconds between words; three seconds after words before giving the following direction.) "Draw a line around the picture of the word I said first." Wait ten seconds (unless all have finished sooner) before holding up the worksheet and pointing to the third row. Continue in this manner through rows 3, 4, 5, and 6, using the following sequences:

Row 3: "Glass. Plate. Draw a line around the picture of the word I said last."

Row 4: "Clock. Sun. Draw a line around the picture of the word I said first."

Row 5: "Table. Door. Draw a line around the picture of the word I said last."

Row 6: "Hat. Mitten. Draw a line around the picture of the word I said first."

Collect worksheets and score. Total possible score is 6. While there are no norms for this screening procedure, it may be assumed that a score of 3 would indicate a need for particular attention to development of auditory memory skills. Speak clearly and somewhat more slowly than usual.
| Auditory Memory                                                                 
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<td>Door</td>
<td>Table</td>
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<td></td>
<td>Mittens</td>
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AUDITORY FIGURE-GROUND SCREENING
FOR KINDERGARTEN AND FIRST GRADE

Adapted from the DLM-APT 
Speech Therapy, Orange County, Florida

The speech therapist will give each child a worksheet, a crayon (any color), a paper clip, a small square and a small circle cut from two different colors of paper, a rubber band, and a piece of string (any color, about 1/2 to 1 inch long).

The children should be seated so that they cannot see each other's worksheets. Before the therapist gives the children the worksheets and other objects, she should explain: "I am going to give each of you a page of pictures, a crayon, a paper clip, a paper square, a paper circle, a rubber band, and a piece of string." (The therapist will hold up each item as she names it.) "Keep your hands in your laps. Do not pick anything up until I tell you to do so." Therapist will then draw a circle and a square on a chalkboard or large piece of paper, and demonstrate, "draw a line around," and ask the children to identify, "square and circle," so that there is no question of their understanding these terms. Therapist will then turn on the tape of background noise, and will not turn it off until the screening is completed. The therapist should not appreciably increase her volume, but must be certain she can be heard. It would be well to run the tape of background noise, and give the directions to someone else before doing the screening.

Directions to be given against taped background noise:

"Listen: These are sounds you might hear in your classroom. You must listen carefully in order to do what I tell you to do. Let's try to do some work while the children are talking. Look at your sheet of pictures. Do what I tell you to do. Find the picture of the (1) telephone." (interval of 6 seconds) "Draw a line around the telephone." (maximum interval of 12 seconds; if all have finished sooner, proceed) "Find the picture of the (2) fork." (6 seconds) "Put your finger on the picture of the fork." (interval long enough to allow therapist to see and note if each child has done so).

3. "Find the picture of the bread." (6 secs.) "Color the picture of the bread with your crayon." (maximum interval of 12 secs.)

4. Find the picture of the table." (6 secs.) "Put your paper clip on the picture of the table." (maximum interval of 12 seconds)

5. "Find the picture of the chair." (6 secs.) "Put your circle on the picture of the chair." (max. inter. of 12 secs.)

6. "Find the picture of the pencil." (6 secs.) "Put your circle on the picture of the pencil." (max. inter. of 12 secs.)

7. "Find the picture of the clock." (6 secs.) "Put your square on the picture of the clock." (max. inter. of 12 secs.)
8. "Find the picture of the spoon." (6 secs.) "Put your rubber band on the picture of the spoon." (max. inter. of 12 secs.)

9. "Find the picture of the baseball bat." (6 secs.) "Put your finger on the picture of the baseball bat."

Collect worksheets and score. Therapist must provide herself (before beginning the screening) with a list of the children's names, so that she may note on it those children who do not successfully perform numbers 2. (fork) and 9. (baseball bat). Total possible score is 9. Although there are no norms for this screening procedure, it may be assumed that a score of 5 would indicate a need for particular attention to development of auditory figure-ground skills.
AUDITORY MEMORY SCREENING FOR 

FIRST GRADE

Adapted from the DLM-APT
Speech Therapy, Orange County, Florida

On a chalkboard or large piece of paper, the therapist should first draw a picture of 3 common objects (such as a ball, a square and a chair). She should then demonstrate, "Draw a line around," and "first and last," so that there is no question of the children's not understanding these terms.

The children should be seated so that they cannot see each other's worksheets. The child's name and the date should appear at the top of each worksheet. Each child should be given a worksheet and a crayon (of any color).

Procedure: Therapist says, "Each of you has a sheet of pictures, and a crayon. Do not pick up your crayon until I tell you to do so. Listen while I tell you what to do. I am going to say the names of the pictures, and ask you to draw a line around one of the pictures. I might not say the names in the order you see them. Listen, while I say the names of the pictures. Then do what I tell you to do. Pick up your crayons. Look at the 1st row on your worksheet." (Therapist should hold her worksheet up and point to the 1st row of pictures.)

Row 1: "Tent. Ring. Pig. Draw a line around the picture of the word I said first." (There should be a two second interval between the naming of each picture, and a three second interval between the naming of the 3rd picture and the beginning of the direction to, "Draw a line ---etc." There should be a 10 second interval between the end of the direction to, "Draw a line---etc.", and the beginning of the next row, "Now look at this row." If all children have finished their drawing in fewer than 10 seconds, the therapist may proceed. The maximum interval should be 10 seconds.)

Row 2: "Now look at this row." (Therapist should hold up her worksheet and point to the second row.) "Lock. Scissors. Sock. Draw a line around the picture of the word I said last." (Time interval as above.)

Row 3: "Now look -- etc." (Pointing to 3rd row). "Hand. Triangle. Pot. Draw a line around the picture of the word I said first." (Time intervals as above.)

Row 4: "Now look -- etc." (pointing to 4th row). "Sun. Shovel. Glasses. Draw a line around the picture of the word I said last." After 10 seconds, collect worksheets and score. Total possible score is 4. While there are no norms for this screening procedure, it may be assumed that a score of 3 would suggest a need for attention to development of auditory memory skills.

Speak clearly, and somewhat more slowly than usual.
AUDITORY FIGURE-GROUND SCREENING
FOR SECOND GRADE

Adapted from the DLM-APT
Speech Therapy, Orange County, Florida

The speech therapist will give each child the same worksheet of pictures as used for Kindergarten and First Grade, and a crayon (any color). She will make sure that the children recognize a square, a triangle, and what is meant by, "draw a line around, next to, above and below." Children should be seated so that they cannot see each other's worksheets.

Procedure: Therapist says, "Listen." (The tape is turned on and left running until the screening is completed. The therapist will wait about 5 seconds before continuing with the following directions). "You can hear someone reading a story. You are going to have to listen carefully to do your work. Listen to me, even though the other person will go on reading while I am giving you directions. Listen carefully to what I am going to say. Look at your worksheet. Do what I tell you to do." (Therapist will allow about 4 seconds to elapse without speaking. She will then continue the directions below, speaking loudly enough to be heard, but not increasing her volume appreciably above that of the voice on the tape.)

1. "Find the picture of the thing you would use to tell what time it is." (max. interval of 6 secs.) "Draw a line around it." (max. interval of 10 secs.)

2. "Find the picture of the thing you would use to make a sandwich with." (max. inter. of 6 secs.) "Draw a line below it." (max. inter. of 10 secs.)

3. "Find the picture of the thing you would use to write your name." (max. inter. of 6 secs.) "Draw a line above it." (max. inter. of 10 secs.)

4. "Find the picture of the thing you would use to call a friend." (max. inter. of 6 secs.) "Draw a line around it." (max. inter. 10 secs.)

5. "Find the picture of the thing you would use to hit a ball." (max. inter. of 6 secs.) "Draw a line below it." (Max. inter. 10 secs.)

6. "Find the picture of the thing you would use to eat ice cream." (max. inter. of 6 secs.) "Draw a line below it." (max. inter 10 secs.)

7. "Find the picture of the thing that you would use to put your plates on for dinner." (max. inter. of 6 secs.) "Draw a line next to it." (max. inter. 10 secs.)

8. "Find the picture of the thing that you would sit on." (max. inter. of 6 secs.) "Draw a square on it." (max. inter. 10 secs.)

Collect worksheets and score. Total possible score is 8. It may be assumed that a score of 4 would indicate a need for particular attention to development of auditory figure-ground skills.
AUDITORY MEMORY SCREENING FOR
SECOND GRADE
Adapted from the DLM-APT
Speech Therapy, Orange County, Florida

Cutting score: 3

On a chalkboard or large piece of paper, the therapist should first draw a picture of four common objects or forms, such as a circle, a square, a triangle and a rectangle or a ball, a chair, a stick figure and a cat. She should then demonstrate, "Draw a line around," and, "first, second, third and last," so that there is no question of the children's not understanding these terms.

The children should be seated so that they cannot see each other's worksheets. The child's name and the date should appear at the top of each worksheet. Each child should be given a worksheet and a crayon (any color).

Procedure: Therapist says, "Each of you has a sheet of pictures, and a crayon. Do not pick up your crayons until I tell you to do so. Listen while I tell you what to do. I am going to say the names of the pictures, and ask you to draw a line around one of the pictures. I might not say the names in the order you see them. Listen, while I say the names of the pictures. Then do what I tell you to do. Pick up your crayons. Look at the 1st row on your worksheet." (Therapist should hold her worksheet up and point to the 1st row of pictures. This should be done at the beginning of each row.)

Row 1: "Strawberry. Wagon. Ear. Grasshopper. Draw a line around the picture of the word I said second." (There should be a two second interval between the naming of each picture, and a three second interval between the naming of the last picture and the beginning of the direction to, "Draw a line-- etc." There should be a maximum interval of 10 seconds between the end of the direction to, "Draw a line --etc." and the beginning of the next row, "Now, look at this row." If all children have finished their drawing in fewer than 10 seconds, the therapist may proceed. Follow the above procedures for each row.)


Row 3: "Watch. Banana. Gate. Snowman. Draw a line around the picture of the word I said last."

Row 4: "Squirrel. Window. Button. Light bulb. Draw a line around the picture of the word I said first."

Row 5: "Glass. Ship. Stamp. Wheel. Draw a line around the picture of the word I said last."


Row 7: "Fireplace. Frog. Motorcycle. Sock. Draw a line around the picture of the word I said second."

Speak clearly and somewhat more slowly than usual.
<table>
<thead>
<tr>
<th>Ear</th>
<th>Toy Car</th>
<th>Strawberry</th>
<th>Cricket</th>
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<tbody>
<tr>
<td>Tree</td>
<td>Paste</td>
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<td>Zebra</td>
<td>Snowman</td>
<td>Fence</td>
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<td>Light Bulb</td>
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<td>Stamp</td>
<td>Glass</td>
<td>Ship</td>
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<td>Balloon</td>
<td>Baby</td>
<td>Spoon</td>
<td>Plates</td>
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<tr>
<td>Motorcycle</td>
<td>Sock</td>
<td>Fireplace</td>
<td>Frog</td>
</tr>
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</table>
AUDITORY DISCRIMINATION
SCREENING FOR SECOND GRADE

Adapted from DLM-APT
Speech Therapy, Orange County, Florida

Therapist will provide each child with a worksheet (Auditory Discrimination, Level I, Lesson 10) and a pencil. She will explain that they are going to listen to a voice on the tape recorder, and do what the voice tells them to do. Each child's worksheet should have his name and the date at the top of the sheet.

Children should be seated so that they cannot see each other's worksheets. After the tape has been completed, the therapist will collect the worksheets and score them. The total possible score is 7. Though there are no norms for this screening procedure, it may be assumed that a score of 4 would indicate a need for particular attention to development of auditory discrimination of a verbal message and non-speech sounds.
AUDITORY DISCRIMINATION SCREENING
FOR THIRD GRADE AND ABOVE

Adapted from DLM-APT
Speech Therapy, Orange Co., Fla.

Therapist will provide each child with a worksheet (Auditory Discrimination, Level II, Lesson 5) and a pencil. She will explain that they are going to listen to a voice on the tape recorder, and do what the voice tells them to do.

Each child's worksheet should have his name and the date at the top of the sheet.

Children should be seated so that they cannot see each other's worksheets.

After the tape has been completed, the therapist will collect the worksheets and score them. The total possible score is 10. Though there are no norms for this screening procedure, it may be assumed that a score of 6 would indicate a need for particular attention to development of auditory discrimination of consonant sounds, and possibly of a verbal message.
Auditory Discrimination
LEVEL 11  LESSON 5
© 1970 DEVELOPMENTAL LEARNING MATERIALS
AUDITORY FIGURE-GROUND SCREENING
FOR THIRD GRADE AND ABOVE
Adapted from the DLM-APT
Speech Therapy, Orange County, Florida

The speech therapist will give each child a worksheet and a crayon (any color). Children should be seated so that they cannot see each other's worksheets. While the therapist is giving directions, she will try to keep her own loudness level at about the same loudness level as that of the voice on the tape.

Procedure: Therapist says, "You each have a worksheet and a crayon. Do not pick up your crayons until I tell you to do so." At this point the therapist turns on the tape, and does not turn it off again until the screening has been completed. "Listen: You can hear someone reading a story." (therapist stops speaking for 4 seconds) "You are going to have to listen carefully to do your work. Listen to me, even though the other person will go on reading while I am giving you directions. Listen carefully to what I am going to say. Look at your worksheets. Do what I tell you to do. Pick up your crayons."

1. "Look at box number 1. (4 sec. interval) "John was hot and thirsty. He drank a whole glass of water. Draw a line around the picture of the glass the way it looked after he finished drinking all the water." (15 second interval)

2. "Look at box number 2." (4 sec. inter.) "Mary ate a fried egg every day for breakfast. Draw a line below the picture of the egg the way it looked before she cooked it." (15 sec. inter.)

3. "Look at box number 3." (4 sec. inter.) "Mr. Smith had a tree in his front yard. He cut it down. Draw a triangle on the picture of the bottom of the tree the way it looked after he finished cutting it down." (15 sec. inter.)

4. "Look at box number 4." (4 sec. inter.) "The children in the third grade had some eggs to hatch. Draw a square on the picture of the thing that came out of one of the eggs." (15 sec. inter.)

5. "Look at box number 5." (4 sec. inter.) "The Brown family went away for a week. They forgot to have someone water their plant. Draw a triangle on the picture of the plant that they saw when they came home." (15 sec. inter.)

6. "Look at box number 6." (4 sec. inter.) "Mrs. Kline fixed sandwiches for her family's lunch, and put them all on a plate. Draw a square on the picture of the plate the way it looked before the family ate lunch."

Collect worksheets and score. Total possible score is 6. The cutting score is 3.
AUDITORY MEMORY SCREENING FOR
THIRD GRADE AND ABOVE

Adapted from the DLM-APT
Speech Therapy, Orange County, Florida

On a chalkboard or large piece of paper, the therapist should first draw a series of five familiar forms, such as a circle, a square, a triangle, a rectangle and a star. She should then determine that the children understand the following placenames: "first, second, third, fourth and fifth."

The children should be seated so that they cannot see each other's worksheets. The child's name and the date should appear at the top of each worksheet. Each child should be given a worksheet and a crayon (any color).

Procedure: Therapist says, "Each of you has a sheet of pictures, and a crayon. Do not pick up your crayons until I tell you to do so. I am going to say the names of the pictures, and ask you to draw a line around one of the pictures. I might not say the names in the order you see them. Pick up your crayons. Look at the 1st row on your worksheet." (Therapist should hold her worksheet up and point to the first row. This should be done at the beginning of each row, as she says, "Now look at the second row," etc.)

Row 1: "Bread. Worm. Faucet. Tie. Watch. Draw a line around the picture of the word I said third." (There should be a 2 second interval between the naming of each picture, and a 3 second interval between the naming of the last picture and the beginning of the direction to, "Draw a line--- etc." There should be a maximum interval of 10 seconds between the end of the direction to, "Draw a line---" and the beginning of the next row, "Now, look at the third row," etc. If all have finished drawing in fewer than 10 seconds, therapist may proceed. Follow above procedures for each row.)


Collect worksheets and score. Total possible score is 5. Cutting score is 3. Speak clearly and somewhat more slowly than usual.
REFERENCES


Lowell E. and Stoner, M. Play it by Ear, Los Angeles, Cal., John Tracy Clinic, 1963.


Piaget, J., Language and Thought of the Child, N.Y. Harcourt and Brace, 1926.


