Child's Name _____

Date _____

VISUAL-MOTOR CONTROL

Classroom and Individual Practice

SPACING BETWEEN LETTERS AND WORDS— GRAPH PAPER ACTIVITY

Purpose

To improve ability to space evenly between letters and words

Prerequisite Skills

Before working on writing with correct spacing, child should be able to visually discriminate (tell the difference) between correctly and incorrectly spaced letters and words, and copy all letters and numbers. If child is weak in these areas, work on letter copying and visual-perceptual activities for discriminating correct spacing before beginning this activity.

Materials

Pencil and eraser; black and red markers; one sheet each of graph, tracing, and regular lined paper; ruler

Preparation

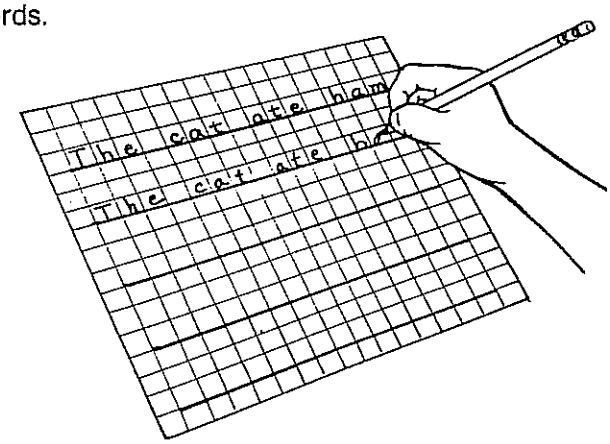
Outline horizontal lines of graph paper at regular intervals with red marker for top line and black marker for lower lines. Write a word or sentence, one letter per square, along the top red line. Skip one square for spacing between words. Place tracing paper over the graph paper, and use a ruler to trace the horizontal lines.

Position

Child is seated at desk of proper height, with arms supported on desk surface and feet flat on the floor.

Procedure

1. Child copies the word or sentence on the second outlined line, with one letter in each square and one square skipped between words.



2. Child places tracing paper over the graph paper so horizontal lines match up. Child traces over the word or sentence.
3. Child copies the word or sentence on the tracing paper on the next line down. Child uses the traced sentence for comparison.
4. Child identifies any spacing errors on the copied line of letters and corrects by erasing and rewriting them; then puts that sheet of paper out of sight.
5. Adult says the word or sentence; child writes it from dictation on a blank sheet of lined paper. Child identifies and analyzes spacing errors, records the number of correctly spaced letters, and corrects the errors.
6. Repeat with several words or sentences. Child attempts to increase the number of letters that are spaced accurately.

Desired Response
Child traces, copies, and writes words and sentences from dictation with consistent spacing between letters and words.

Variations and Adaptations
Start with short words and sentences. As skill improves, progress to longer words and sentences. Encourage child to check classroom written work and correct spacing errors after assignments are completed.

After classroom penmanship activities, have child mark, count, and record spacing errors and try to decrease that number on later activities.

Have two or more children try to produce writing samples with no spacing errors, identify each other's errors, and try to correct their own work until no more errors can be identified by the other child.

Have child write classroom assignments on graph paper if this helps with spacing and doesn't visually confuse the child.

Use of these activities should be directed by a qualified therapist.

Child's Name _____

Date _____

Written Work
Not organizing

VISUAL PERCEPTION
Compensatory Strategies

WRITING PAPER CHOICE

se

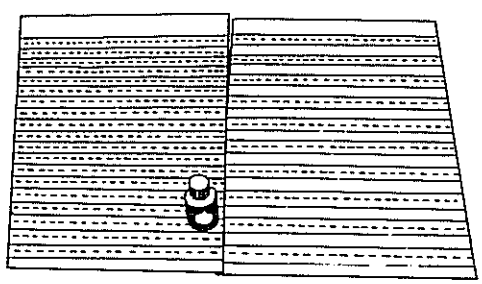
rease child's ability to use lines for visual guidance when

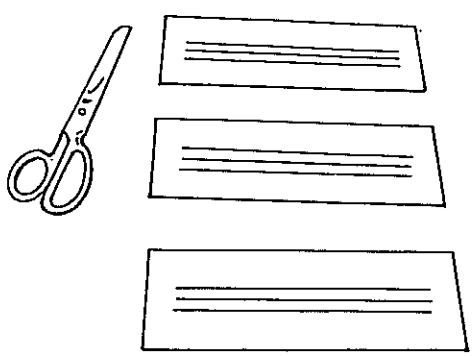
es

nes on writing paper can be very confusing for children with isual perceptual skills. Finding the right paper can make a ic difference in handwriting performance. Try a variety of children vary widely in their preferences.

2. Take handwriting samples on a variety of papers, and ask the child how each paper feels. If no difference is seen in handwriting performance (legibility, rhythm, or speed) or in child's comfort level, continue to use the regular classroom paper.

3. It may be confusing for this child to switch paper types. Try to find one which is the most helpful; then use it consistently in all classes and at home. As the child progresses to lines that are closer together, try to use paper that maintains the aspects the child is used to. For example, if the child has been using simplified classroom paper, simplify paper with closer lines in the same manner.





Paper Types

1. Regular classroom paper can be visually simplified by using typewriter correction fluid to "white out" some lines so lines used for writing are separated by more visible space. This simplified paper can be photocopied for regular classroom and home use. Advantages of this paper include its similarity to the paper used by other children, and its availability. Disadvantages are the labor and cost involved in preparation.

2. Classroom paper can be simplified even further by using correction fluid to erase all but three sets of writing guidelines, each separated by white space. These can be cut apart into writing strips. Child writes on one strip at a time and focuses attention on these lines only. Strips are more difficult to stabilize with the nonwriting hand, but they can be taped to the writing surface, if necessary.

3. Some children are visually confused by paper with a center line (dotted or continuous) and work more easily on paper with two lines, even when first learning letters and numbers. Two-line paper

can be made by using correction fluid to eliminate the middle line on regular classroom paper, then photocopying; or it can be copied (in a variety of widths) from the book, *Handwriting without Tears* (Olsen 1980).

4. For children with spatial confusion, regular paper may be easier to use when visual cues indicate top, bottom, and left-to-right. Emphasize the top writing line and left margin by tracing over with a green marker. This helps the child remember where the letters and the line start. Emphasize the bottom writing line and right margin with a red marker to provide a reminder of where letters and lines stop.

5. Paper with colorful lines, with and without raised or textured lines, provides visual and tactile cues that are helpful for some children. These are available from a number of commercial sources.

Reference

Olsen, J. Z. 1980. *Handwriting without tears.* Brookfield, IL: Fred Sammons, Inc.

Use of these activities should be directed by a qualified therapist.

Child's Name _____

Date _____

written work
not organized

SPATIAL ANALYSIS AND PLANNING
Classroom and Individual Practice

FOR SPATIAL ARRANGEMENT ON PAPER OR CHALKBOARD

e understanding of language used for organizing writing
g on paper (horizontal) and chalkboard (vertical) surfaces

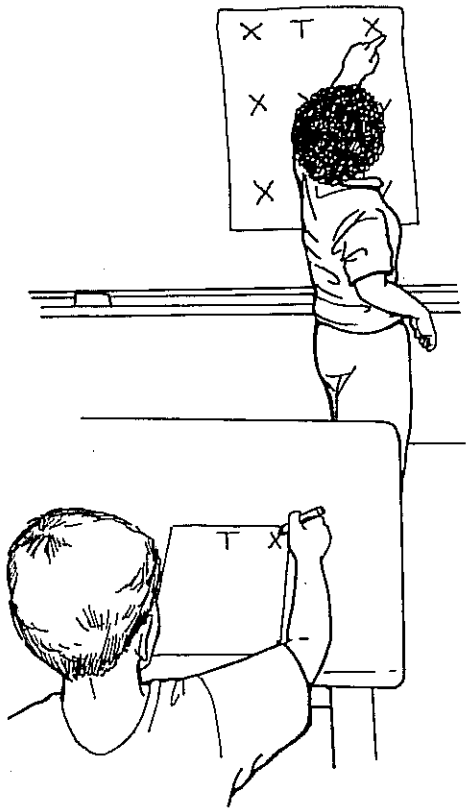
d; orange and white chalk; one sheet of unlined paper;
rker; pencil

ge rectangle on the chalkboard, with side proportions
... to those of a sheet of paper.

Position
Desk or table and chair are placed 3' away from and facing chalkboard. Child stands in front of desk, facing board, with trunk lined up directly in front of chalk rectangle.

Spatial Terms
1. Center, middle, between
2. Top, bottom
3. Below, above, next to, over
4. Upper, lower
5. Center/middle of the top, center/middle of the bottom
6. Beside, to the right side, to the left side
7. To the right of, to the left of, left-hand corner, right-hand corner
8. Upper and lower right- and left-hand corners

Procedure
1. Child makes a T with the orange chalk, to identify the top of the rectangle.
2. Adult says each of the terms in reference to the rectangle on the chalkboard.
3. After adult says each word, child makes a mark (circle, X, line, etc.) with white chalk, in each position as it is described (for example, in the center of the rectangle, at the bottom or top of the rectangle, or above the center mark).



4. Child sits at desk, with paper positioned directly in front of body, and identifies the top of the paper with a T, using the orange marker.
5. Adult points to each mark on the chalkboard.
6. Child describes the position of the mark which adult is pointing to, finds that position, and marks it on the paper.
7. Child engages in a writing or art activity which uses the skills practiced above; for example:
   - Making a collage and pasting objects in specified locations on the paper, or identifying positions in relation to the paper as pieces are pasted.
   - Creating a book, with words on the right-hand page, pictures on the left-hand page, and name written in a specified location.
   - Practicing spelling words in specified locations (for example, "Write the word *cat* on the upper left-hand side of the chalkboard").

Desired Response
Child locates, identifies, and marks all spatial positions according to the descriptive terms, in both the upright and flat planes.

Undesired Response
Child randomly tries several positions until correct movement or answer is achieved.

Variations and Adaptations
If child is unable to make the transition from the spatial positioning on the board (vertical plane) to the paper (horizontal plane), encourage child to lift the top edge of the paper up slightly (and more if necessary) until the child recognizes the relationship to the positions on the chalkboard. If this is still difficult, hold the paper next to the rectangle on the board, and point out how the *T*s are in the same position. Replace paper on desk, and repeat questions about the top, bottom, sides, and center of the paper, while child points to the position described. Continue until this is done easily on paper or chalkboard.

Draw lines on the rectangle on the board. Use lined paper to practice terms related to the use of lines (such as, "the third line down," "in the center of the first line," or "on the line below your name . . ."). If child has difficulty with left-and-right directions, teach child to associate the color red with right (both start with R) and green with left, and use red and green chalk and markers to indicate right and left on the board and paper. This also helps with remembering the left-to-right (green for go, red for stop) direction for writing; and once this is mastered, the left-to-right progression can assist with remembering left and right directions. In classroom activities, use the same colors to assist with directions.

Child's Name _____

Date _____

SPATIAL ANALYSIS AND PLANNING
Classroom and Individual Practice

SPATIAL TERMS APPLIED TO SELF AND OBJECTS

Written Work
Not organizing

rpose

improve understanding and use of language used to describe ıtial concepts such as position, direction, size, distance, and asurement

ivities

ourage any physical activity that uses spatial terms to describe vement of the body, body parts, or objects from one position in ce to another; and variations in size, distance, or quantity. elop skills in the order in which they normally develop, as ribed below.

ial Terms

, out, up, down, on, under, over

2. Large, big, little, small, next to, over, off, beside, above, below
3. Bigger, smaller, in front of, behind, closer, near, far, farther away, through, around
4. Longer, taller, shorter, close to, far away from, higher, lower, more, less, towards, away from
5. Right, left

Procedure

1. Child follows commands and answers questions dealing with the position of the whole body in space, using spatial terms ("Stand behind this line"; "Stand in front of that chair"; "Go outside this room"; "Is your body bigger or smaller than this block? the room? the chalkboard?"; "Stand to the right of this chair"; "Make your body higher.")
2. Child uses spatial terms to describe relationships between body parts ("Is your head above or below your feet? Is your foot larger or smaller than your thumb? Is your head or your foot closer to your neck?"); and to move parts of the body as instructed ("Move your hand away from your body").
3. Following the adult's instruction, child places objects and makes judgments in relation to the body or body parts. ("Place this block above your head, under your hand, below your chin"; "Is this block smaller or larger than your hand?"; "Is this block or that chair farther from you?"; "Move this block closer.")

4. The child places objects in relationship to other objects and describes relationships of one object to another, using spatial terms, in response to instructions and questions from the adult. ("Put this book on top of that book"; "Put your coat on the shelf"; "Is the shelf higher or lower than your coat?"; "Is your coat bigger or smaller than the shelf?"; "Put this pencil in the drawer; on the desk; outside of the room"; "Does this cup contain more or less water than this one?")

Desired Response
Child follows directions that involve spatial terms and uses correct words for describing spatial relationships.

Undesired Response
Child guesses correct responses, or randomly tries several until correct movement or answer is achieved.

Variations and Adaptations
This activity can be fun for children working in pairs. The children take turns giving instructions or asking questions, using the word list above, and determining whether another child's response is correct.

Start with simple relationships, such as "Is your head above your feet?" As the child's skills improve, progress to finer discriminations, such as "Is your knee above your ankle?"

Provide physical assistance, if needed, to enable child to carry out movement of objects from place to place. Place objects in child's hands and assist with finger or hand movement. If child is unable to manipulate objects, move objects and encourage the child to identify whether your movement followed the instructions.

Write spatial words on cards. Have child read the cards and place the body, body parts, or objects according to the word on the card; or use the word to describe the size or location of objects in the room.

For any of these activities, let the child instruct you to move yourself or objects in various directions or ask you questions about relative sizes and distances and tell you if your answer is correct.

If the child is unable to speak the words, ask the questions so they can be answered with a "yes" or "no," thus showing that the child understands the words.

If the child has difficulty with body part relationships, practice using the terminology while putting together people puzzles or looking in the mirror.

Use spatial words for describing movement and spatial relationships whenever possible throughout the child's day.

Use of these activities should be directed by a qualified therapist.