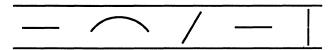


RATIONALE

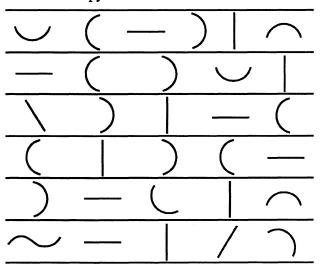
The purpose of this lesson is to teach the children to make a mental picture of a line and to use that mental picture to search for that line. Distinguishing straight and curved lines and knowing the labels will help the children represent shapes.

MAIN ACTIVITY

a. Draw the following line shapes in a row on the chalkboard or a piece of poster paper and ask the children to tell you what they see.



- b. Draw a curved line on a card or a separate area of the chalkboard and show it to the children. Then tell the children to close their eyes and to try to imagine the curved line.
- c. Have the children open their eyes, look at the row of lines, and circle all the shapes that have a curve in them. After they have finished, ask whether any of them forgot what they were looking for. Ask how they knew what to look for. (We remembered the model you drew.) Draw the following rows on the board for individual students to mark, or draw the lines on paper and make a copy for each student.



d. Use the same rows again but show the children a straight line. Have them make a mental picture of it and then put an X on the shapes with straight lines.

Cognitive Functions

- 1. MAKING MENTAL IMAGES
- 2. ANTICIPATING KNOWING WHAT WE ARE LOOKING FOR
- 3. COMPARING OBJECTS USING A MENTAL MODEL

VARIATION

A more advanced form of this activity is to draw whole letters rather than lines. Have the children look at a letter as the model. Remove the model, and then tell the children to find the letter in the rows.

GENERALIZING ACTIVITIES

- a. Have the children imagine or make a mental picture of a curved line, and then have them form pipe cleaners into curved lines. Then have the children imagine a straight line and find straight lines in a certain area of the classroom.
- b. Have the children look at a picture of a house, and then close their eyes, trying to make a mental picture of the house. Let them look again and try again. Then show them pictures of different houses, and ask which was the one they saw before. How did they know? Use other objects and pictures cut from catalogues of flowers, clothing, and so on.

BRIDGING DISCUSSION

Ask the children to remember times when they have a picture in their minds before they do an activity. They may offer times such as drawing a picture, building a house with blocks, or brushing their teeth. Ask whether having a mental image of an activity helps them do it better.

OTHER BRIDGING DISCUSSION

School:

Home:

Peer group:

Other:

COGNITIVE MASTERY CRITERIA

After looking at a card with a curved or straight line on it, and then closing his or her eyes for three seconds, each child should be able to tell whether the line was curved or straight and to explain that he or she made a mental picture of the line.