

# Using Lines, Circles, and Curves To Form Letters

**Introduction:** This is a puzzle type of activity. Students put together circles, lines, and curves to make alphabet letters. The shapes are on colored cardstock. The lines are blue, and the circles and curves are red. The pieces are placed on an outline of the alphabet letter. The letter outlines are printed on white cardstock.

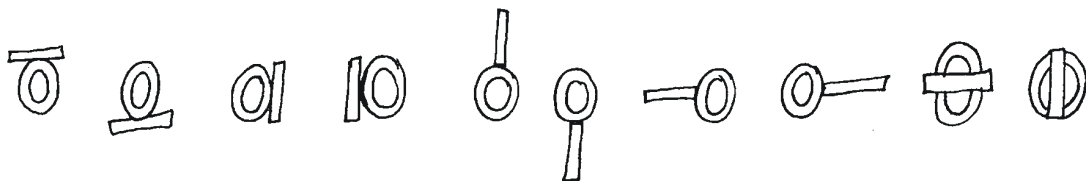
**To prepare the activity:** Run off the circles, lines, and curves on colored cardstock. Print each different shape on a different color. Laminate. Cut out each circle, line, and curve. Store the shapes in a shallow box, plastic bag, or large envelope. Cut each white letter frame page into two sections along the line. This will give you a separate card for each letter of the alphabet. Store in alphabetical order in a box, plastic bag, or folder,

## Step 1 - Become Familiar With The Shapes

Start with a series of warm-up activities. Work with the student to separate the shapes into lines, circles, and curves. Talk about the name of each shape and its properties. Some of the lines are longer than others. Sort the lines by length. Have the student put two large curves together to form a circle. Find the small circles and small curves. Lay the small curves on the small circles to show the student that the curves are part of a circle. These small curves are used to form the letter s.

## Step 2 - Play A Copying Game

Next play a copying game. The teacher takes two shape pieces and gives two identical pieces to the student. For instance, you may want to start with a line and a circle. Make a design, using the two shapes, and have the student copy it exactly. Continue to form a variety of designs with the same two pieces and have the student match each configuration. Point out any errors and have the student try again. The series of designs might look something like this.



After a new letter has been introduced, have the student continue by building previously learned letters. There are enough shapes to build the whole alphabet.

### **Using the Lines**

The lines come in seven different lengths. To build a letter with lines, use the ones that fit into the outline. To help you find the correct line more easily, they are numbered. The list below tells which lines are used to build which letters.

Line 1 - Use for f, k (2), q, t

Line 2 - Use for e

Line 3 - Use for a, i, m, n, r, u, v (2), w (4), z (2)

Line 4 - Use for g, j, x (2), y, z

Line 5 - Use for f

Line 6 - Use for p, q

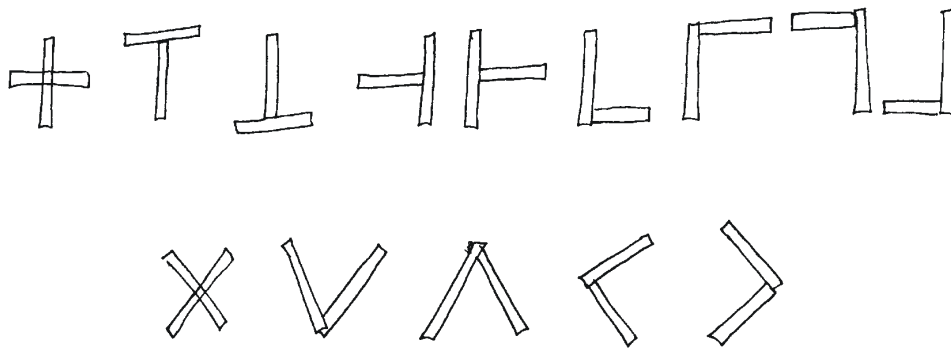
Line 7 - Use for b, d, h, k, l, t

Some letters use lines of two different lengths.

t	Line 1 and line 7
f	Line 1 and line 5
k	Two of line 1 and one of line 7
v	Two of line 3
w	Four of line 3
x	Two of line 4
z	Two of line 3 and one of line 4
q	Line 1 and line 6

This activity was adapted from the Ball-Stick-Bird program by Renee Fuller, Ph.D. See <http://www.ballstickbird.com/>

During the following lessons, choose pieces in a variety of different shapes and sizes to work with, and gradually make the designs more challenging. You may also want to let the student make some of the designs for the teacher to copy. Here are some samples of designs to copy using two lines.



### Step 3 - Use The Circles, Lines, And Curves To Build Letters

Now it is time for the student to use the shapes to form letters. You'll build the letters on alphabet frames which show how to place each piece.

As you introduce each letter, get out the appropriate outline frame and the pieces needed to build the letter. Notice that the lines are numbered so that the correct length can be found easily. Lay the pieces to the side, and have the student put the pieces on the outline to assemble the letter. Then have the student reassemble the letter on the table top, without using the frame. Have the student verbalize which shapes are used and describe how they are arranged. Point out the sound picture at the top of the card and have the student say the sound represented by the letter.

