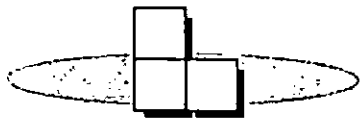
Objective: Communicate and apply positional language in oral, written or numerical form.



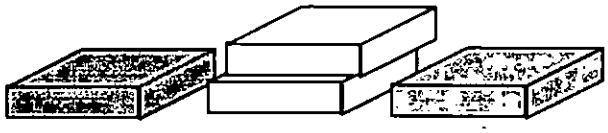
Representation:

Materials: OH spinner, 2 blank spinner mats, color tiles.

- Create 2 spinners:
  - Color Spinner — 3 sections: red, green, blue
  - Position Spinner — 5 sections: above, behind, below, in front, beside

- Take 3 tiles (a red, green and blue) and arrange them on your table top. The tiles may be randomly placed in a row, side by side, or separated, but they may not be stacked.

- Twirl both spinners and place a yellow tile on the table according to the instructions spun. Example: assume you spun "below green," then lift the green tile and place a yellow tile beneath the green.



PROBLEM SOLVING

Sandra has stacked four color tiles. Create a stack like hers using the clues below:

- no 2 like colors are next to each other.
- the only red tile is above the only blue tile.
- there is no yellow tile.
- the tiles on the top and the bottom of the stack are different colors.

STRATEGY: *Act It Out*

ANSWER:

red green blue green	or	green red green blue

adaptations:

DOWN

Using only the positional spinner as described above, have students spin and then pick two objects which can be described by the position identified. Example, the clock is *above* the blackboard, or Jason is *beside* Ryan.

UP

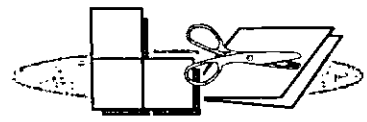
1. Have the students make 5 spins and then using construction paper squares build a model of their tile arrangements. Write a sentence for each yellow tile.

2. Play Simon Says using the positional spinner. Example: Simon Says put your hands *behind* your knees.

Writing Corner:

Write a riddle for your classmates to solve! Make a list of five clues describing the location of an object in your classroom. Ask a friend to try to solve your riddle by identifying the object!

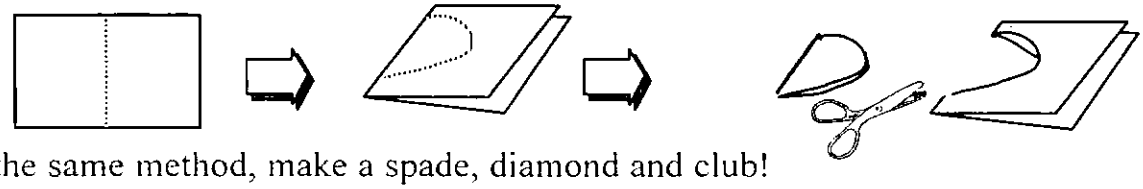
Objective: Create symmetrical 2-D objects by folding and reflecting.



Representation:

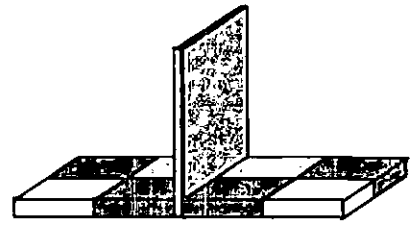
Materials: paper, scissors, color tiles, mirror.

[1] To cut a heart from a piece of paper, first fold the paper in half, and then along the folded edge cut half of a heart. This way you know the two sides of the heart will match.



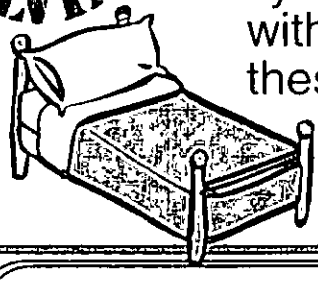
Using the same method, make a spade, diamond and club!

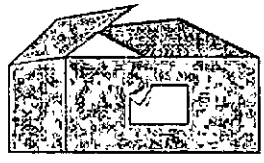
[2] Take 4 color tiles (no more than 2 of the same color) and arrange them in a square as shown. Along one edge stand a mirror. Use the mirror to build the reflected image. Remove the mirror and write two sentences about the rectangle you have built.

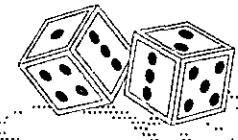


PROBLEM SOLVING

How many of the capital letters have a horizontal line of symmetry? How many have a vertical line of symmetry? Can you make any words with a line of symmetry using these letters?







STRATEGY: *Draw a Picture*

ANSWER:

Eleven letters have a vertical line of symmetry. Nine letters have a horizontal line of symmetry. BED, BOX and DICE are examples of words with a line of symmetry.

adaptations:

DOWN

1. Have students fold paper and cut figures freely. Ask students to trace along the fold lines after unfolding the figures and talk about the importance of this line.
2. Start with some symmetrical figures and have students fold them to create the lines of symmetry: rectangles, squares, triangles, circles, etc.

UP

Have students fold the paper twice (into quarters) before cutting — save both folded edges when you cut!

After unfolding you will have figures with 2 lines of symmetry.

What shapes and figures can you make?

Writing Corner:

Make a list of 5 objects in the room which are symmetrical. Pick one object and explain how you know *it* is symmetrical.