

SORTING CONCRETE SHAPES

Purpose: Students will analyze and sort two and three dimensional geometric figures.

Suggested Grade Level: 1-4 (add parallelogram and rhombus)

Math SOL: Geometry 1.12, 2.16, 3.14, 4.12

Equipment/Materials Needed:

1. Ten hoops labeled with one of each of the following figures.
2. Different items that represent the ten shapes. Examples:
 - Circle – CD's, poly spots, paper plates
 - Square – poly spots, napkins
 - Rectangle – pieces of computer paper, envelopes
 - Triangle – cut out pieces of paper, pieces of tangrams
 - Cone – cones, party hats
 - Cube – dice, blocks
 - Rectangular solid (prism) – book, CD cover, blocks, empty cereal boxes
 - Square pyramid – blocks
 - Sphere – all sorts of balls
 - Cylinder – oatmeal canister, coffee can, toilet paper tubes with the ends covered to provide 2 faces

Advance Preparation:

1. Collect materials listed above.
2. Spread hoops out in a large circle labeling each hoop with a different figure.
3. Place all of the objects that you've collected in the middle of the circle that is created by the hoops.

Directions:

1. Have students circle around the outside of the hoop circle.
2. On the "go" signal instruct students to the circle and pick up an item.
3. Instruct students to take the item and place it in the corresponding hoop.
4. Have students return to the middle and get another item.
5. Continue until all items are sorted.
6. As a class, go from hoop to hoop and decide what belongs and what does not, using the number of sides, faces, and dimensions.

Teaching Suggestions:

1. Make sure to include enough items so that all students get at least one or two turns.

Modifications/Variations:

1. Assign specific students to each hoop and have them enter the circle, one at a time, and find things that only go in their hoop. When they find one, have them return and send out another person from their hoop.

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