Where Are the Treats?
Students will learn to map their classroom using the shapes of objects as they demonstrate the path a dog follows in search of his treat.

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Grade Level
1

Duration
1 class period

National Geography Standards
ELEMENT ONE: THE WORLD IN SPATIAL TERMS
1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

Arizona Geography Strand
GRADE 1
PO 3 Construct maps of a familiar place including a compass rose, symbols, and map key/legend.

Other Arizona Standards
Mathematics Common Core Standards
Geometry
1.G.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)

Overview
Mapping is a way to show the relative position of items in a room. One can use the shapes of the items as seen from above (bird’s eye view) to indicate the objects on a map.

Purpose
Children will learn to make a map of their classroom. They will use various shapes including at least one composite shape to represent classroom items on a map. The map will also show the path a dog travels in search of his treats.

Materials
- Paper cut in the following shapes: circle, rectangle, square, and triangle.
- Paper, pencil
- A pre-made map of the classroom which shows the door, one or two important landmarks, and is oriented with north at the top. (*The children will use this outline to construct their more detailed map of the dog’s path.*)
- Dog treats that are in varying shapes
- Classroom Map and Classroom from Above map (from GeoMath lesson called Shape of My World: Mapping a Classroom).

Objectives
The student will be able to:

1. Identify the following shapes: circle, square, rectangle, and triangle when they are shown.

2. Compose composite shapes as needed for their maps.

3. Draw a map of the classroom with a legend.
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Procedures

1. Show the students each paper shape. Ask the children to name the shape and describe the attributes (size and number of sides, for instance) of each shape.

2. Have the children stand and look down at their desk and identify the desk’s shape from above. Do the same for a chair, the classroom rug, a shelf, or other large furniture in the room.

3. Now show the students how two shapes can be put together to make a new shape to look like an object. (rectangle plus a triangle could be dog treat container or cookie jar) (2 squares with a rectangle between could be bookends and a book) (4 squares making a rectangle could be a file cabinet) Have students look for other ideas.

4. Show the children dog treats (or crackers if treats are not available). Ask the children to identify the shapes.

5. Tell the children that dogs have an excellent sense of smell. If somebody placed dog treats around the room, the dog could use his nose to go from one treat to the next.

6. Have the children suggest 4 places to put the treats and the route the dog would take to get from the door to each treat, such as across the rug to the first table, back to the shelf, and behind the wastebasket.

7. Explain to the students that they are to make a map to show the dog’s path. Tell the children to use the shapes they’ve seen from above to map the classroom. As a demonstration, draw the classroom shape on the board or on a large piece of paper. Show them how to orient it with north at the top. Have the children name the important pieces of furniture the dog will pass in order to get to the first table and what shape these pieces of furniture would be from above. For example, the rug might be a large square, and then the first table is a small rectangle.

8. As the children describe the furniture and their shapes, draw them on the map. Continue with the items the dog will pass in order to get to the shelf – perhaps two more rectangular tables, and then to the round wastebasket. Then he will pass another rectangular table, and a square table.

Assessment

Have the class come up with 4 different places to place the treats. Give each child a piece of paper on which you have indicated north, where the doorway is located, and one or two important landmarks such as the reading table. Ask the children to fill in the maps with the items the dog will pass on the way to retrieve these 4 treats.

Maps should be measured according to the following rubric:

4 – Map includes 4 different places. Shapes are appropriate for the items they represent. Map is an accurate depiction of the classroom.

3 – Map includes 4 different places. Three shapes are appropriate for the item they represent. Map closely resembles the actual classroom arrangement.

2 – Map includes 3 different places. Shapes are not clearly defined. Map does not accurately resemble the actual classroom.

1 – Map only includes 1 or 2 different places. Shapes are difficult to determine and are not
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appropriate for the items they represent. Map does not depict the classroom at all.

0 – No attempt was made.

Extensions
This activity can be done in conjunction with a science activity on the characteristics of dogs or mammals emphasizing their sense of smell. If it is permitted in the school, bring a dog and watch where he actually goes as he retrieves treats.