

Name \_\_\_\_\_

Date \_\_\_\_\_

## Circles, Cylinders, Cones and Spheres – Comparing 2-D and 3-D Objects

Let's talk about spheres. The shape of our earth is a sphere. How many spheres can you think of that you see every day? Here are some examples: the moon, a ball of wool, a tennis ball, a soccer ball, a golf ball.

A sphere is a **3-dimensional** figure. That means it has three dimensions – height, width and depth. Flat shapes like the circle have only two dimensions: height and width. Still, a circle belongs to the same family of shapes as the sphere. If you cut a ball in half the flat faces will be circles. Try it with a plasticine ball.

There are not many 2-dimensional objects in our world, but all objects have flat faces. Can you find any other things that have a flat circle face? My watch has a circle for a face. The bottom of my water bottle is also a circle. How many did you find?

Cylinders and cones are two other shapes, which have circle faces. Do you want to try to make these two 3-D shapes with plasticine?



If you cut through a cone you will get smaller and smaller circles.

If you cut through a cylinder, you will get many circles, all the same size. The special thing about the circle family of shapes is that they have curved edges. That means that the sphere and the cylinder can roll. The cone can roll too, but it will roll around in a circle because it is wider at one end than the other – try it!

All sorts of important things like wheels and gears are made with circle faces.

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## Circles, Cylinders, Cones and Spheres – Comparing 2-D and 3-D Objects Questions

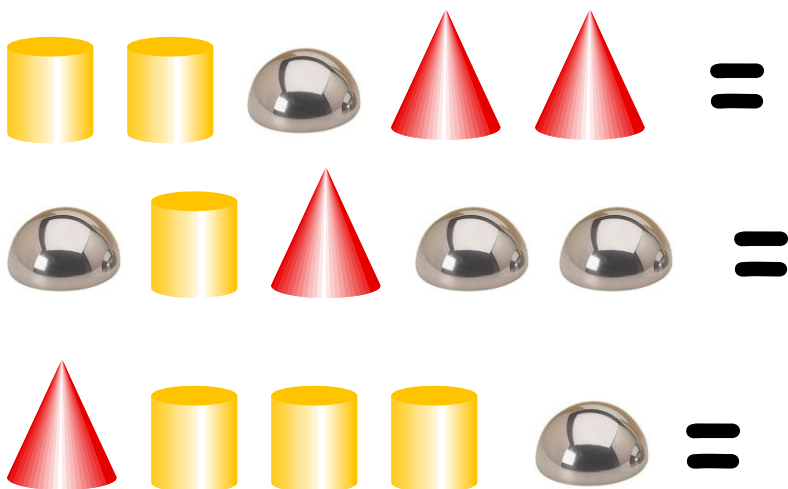
### A: Patterns

Can you fill in the missing shape?



### B: Count the circles

How many circles do you think there are in each row?

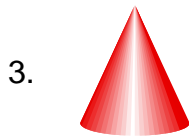


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## Circles, Cylinders, Cones and Spheres – Comparing 2-D and 3-D Objects Answers

### Activity A



### Activity B

1. 7

2. 6

3. 8