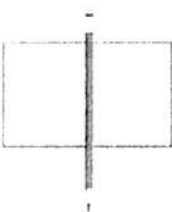
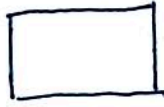
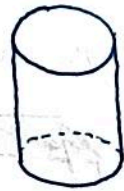
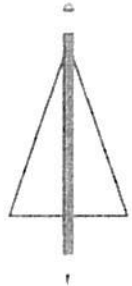


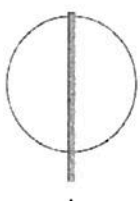

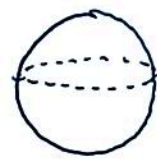


### 4.1 - Rotating 2D shapes to make 3D shapes

Work through the steps and fill out the table below.

1. Using a pencil and the shapes provided, create a "spinning top" as shown in the first column.
2. Rotate each shape by holding the eraser of the pencil with the pointed tip on the desk, as the two-dimensional shapes rotate about the pencil, the image of a three-dimensional solid is formed. Record your results in the table.

Example	Name and sketch the 2D starter shape	Sketch the 3D solid formed	Name the 3D solid formed	How do the dimensions of your 2D shape relate to the dimensions of your 3D solid?
	Rectangle 		Cylinder	the length of the rectangle is the same as the diameter of the circle base of the cylinder. The height of rectangle = height of cylinder.
	triangle 		cone	base of triangle is equal to diameter of circle base of cone. height of triangle is equal to height of cone.
	circle 		Sphere	diameter of circle is same as diameter of sphere.