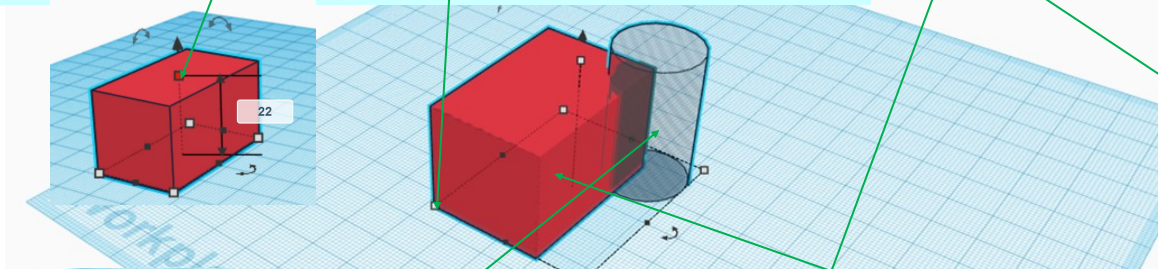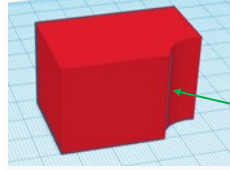# Tinkercad introduction

1) MOVING SHAPES AND RESIZING

Hold down the left mouse to drag a red box shape to workplane.

Hold left mouse on the corner squares to adjust size.

Click on the box to adjust the height of the red box.

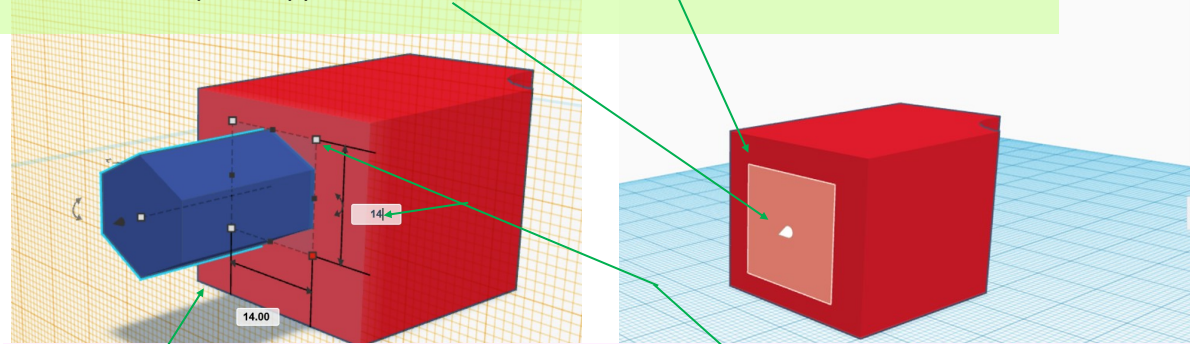Then drag a Cylinder Hole shape onto the corner of the shape.

2) CUT A HOLE

Hold down **Shift** on the keyboard then left click on the **solid** and then on the **hole** to select them, then click **Group** to make the cut. Your shape will look like this.
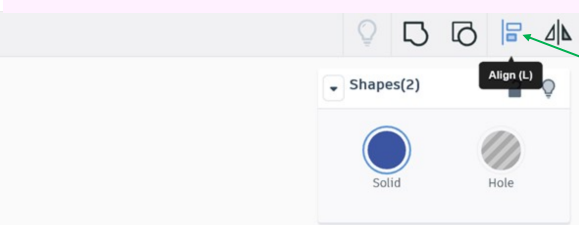
3) ADD A NEW WORKPLANE

Click the **workplane icon** and then click the front face of the object to select it.

The new workplane appears as below.

4) MOVING A SHAPE TO THE NEW WORKPLANE

Drag a polygon shape to the new workplane so itsits on the side face of the red shape. Drag corner of the shape to adjust size or click on measurement box and type in value you want.
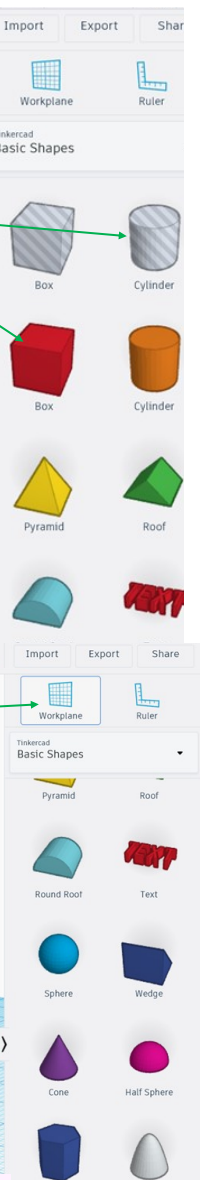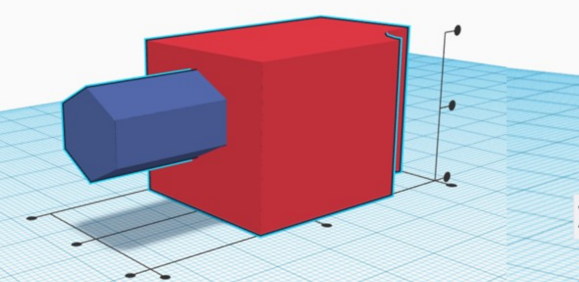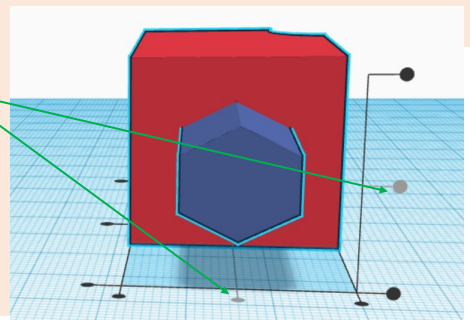
Get rid of the extra workplane—click workplane icon top right of screen, then click anywhere on orange workplane to delete it.
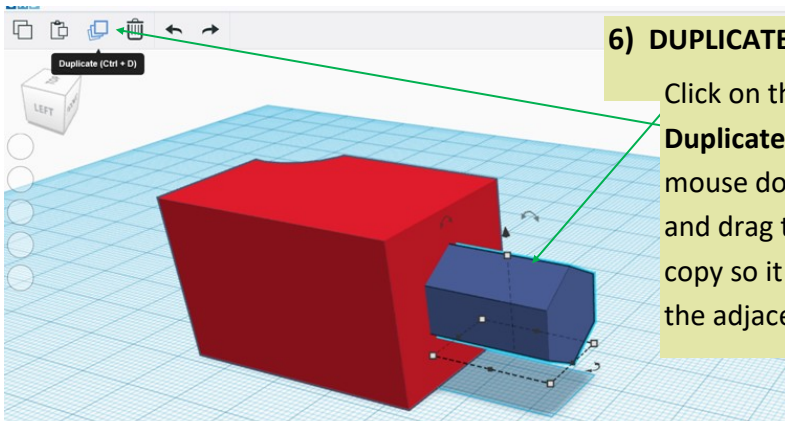
5) CENTRE 2 SHAPES USING ALIGN FUNCTION

Hold down **Shift** on the keyboard and click on the red shape then the polygon to select them, click the **Align icon.**
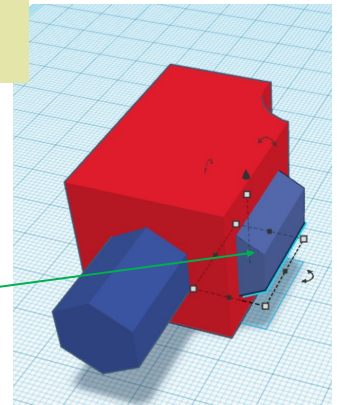
Rotate the screen so you can see the face with the polygon on, then use the centre indicators to centre the polygon on the face of the red box.
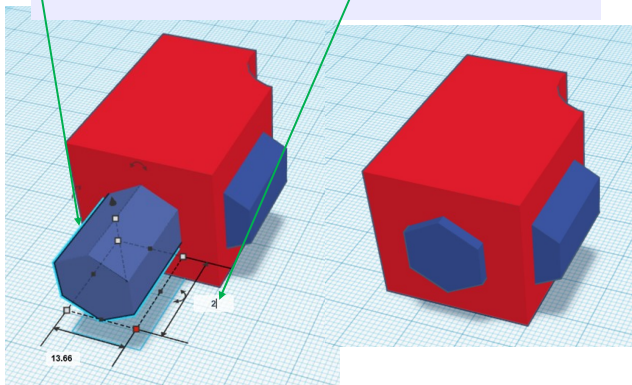
6) DUPLICATE AND MOVE A SHAPE

Click on the polygon then on **Duplicate,** now hold left mouse down over the polygon and drag to move the duplicate copy so it just sticking out of the adjacent face as shown.
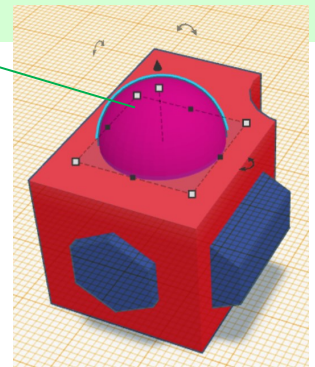
7) CHANGE DIMENSIONS OF SHAPE

Click on the polygon then click on the length dimension box and type 2 in the box.
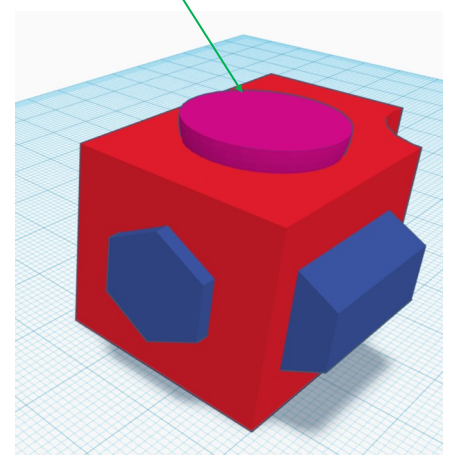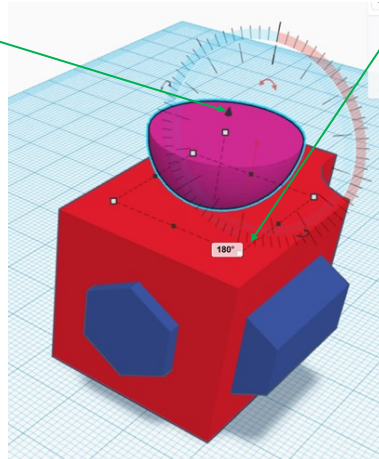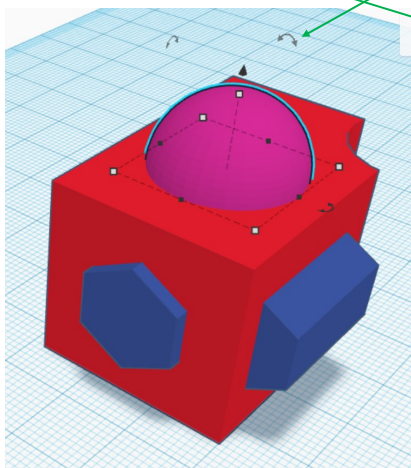
8) ADD A SHAPE TO THE TOP FACE

Follow **step 3** and add a new workplane to the top face of the red box.

Drag a half sphere to the new workplane. Then as in **step 4,** click on the workplane icon, then click the orange workplane to delete it.

9) ROTATE THE SHAPE AND MOVE IT DOWN

Click on the half sphere and use this rotation handle to rotate it round 180° so it is upside down.
Use this black UP/DOWN arrow to move the half sphere down 6mm into the red box.

10) CHANGE A SOLID SHAPE TO A HOLE SHAPE

Click on the half sphere then click on Hole to change the half sphere to a hole shape.
Follow **step 2** to use this hole shape to cut an indent in the top of the red box. Your finished shape will look like this.