# 3D printing technology aims students understanding maths and recycling procedure

## *Curricula 2: Digital Sketching*
## *"Modeling a Simple Object - Part 2"*
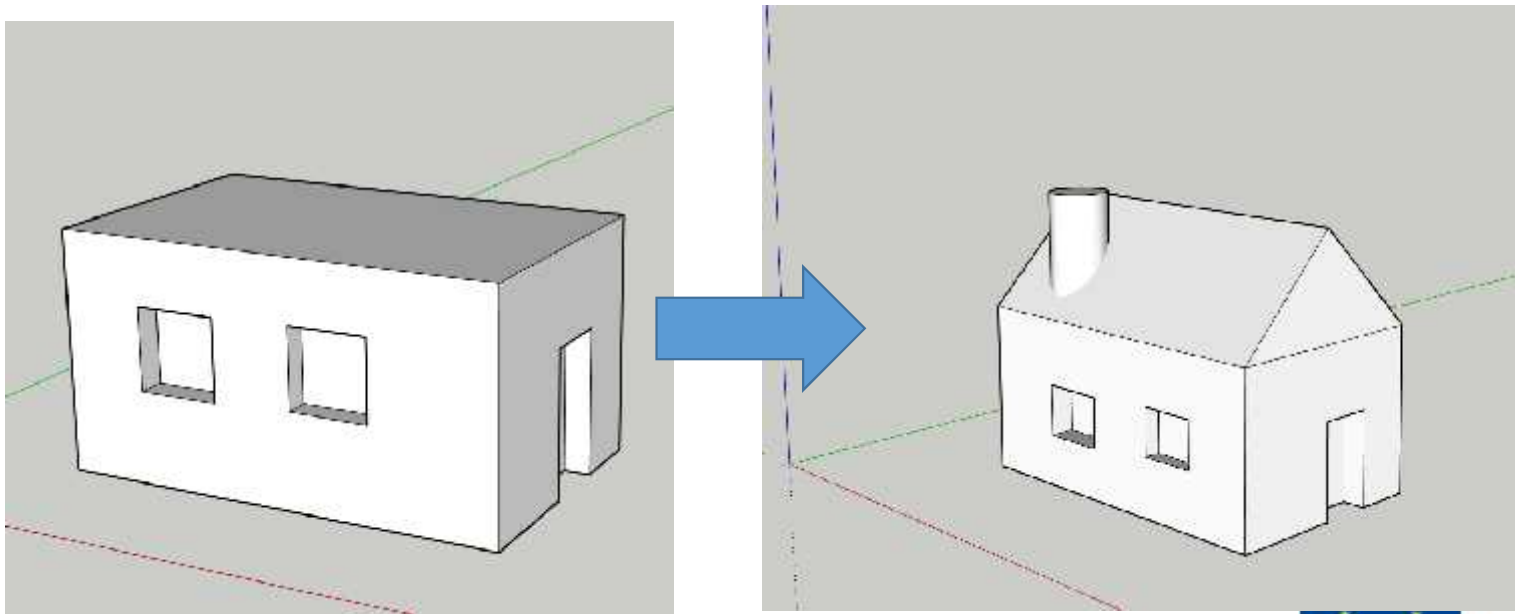
### Output 3 (O3) – 3D Printing and Maths

# Description

In this lesson we continue modelling our house by adding a roof and chimney. We learn how to move things around using the Move tool, and how to combine different objects.
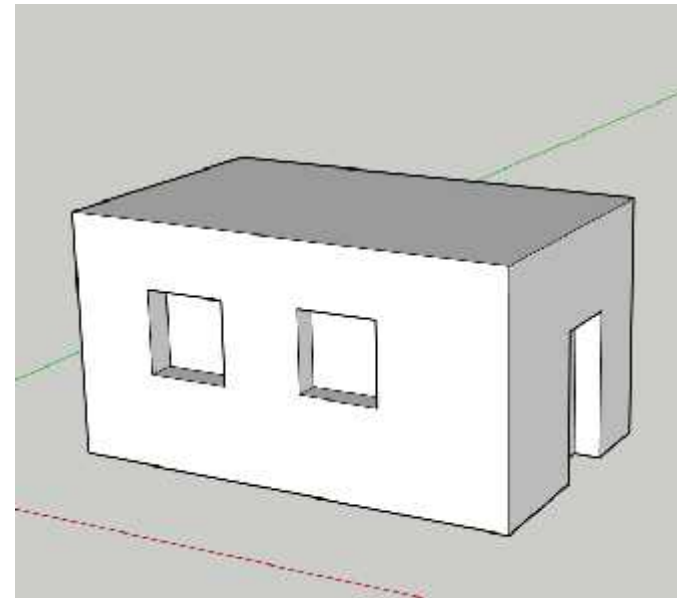
# Introduction

- We will continue modelling our house by adding more details.

- After the lesson, each student will have a 3D-printable model of a house
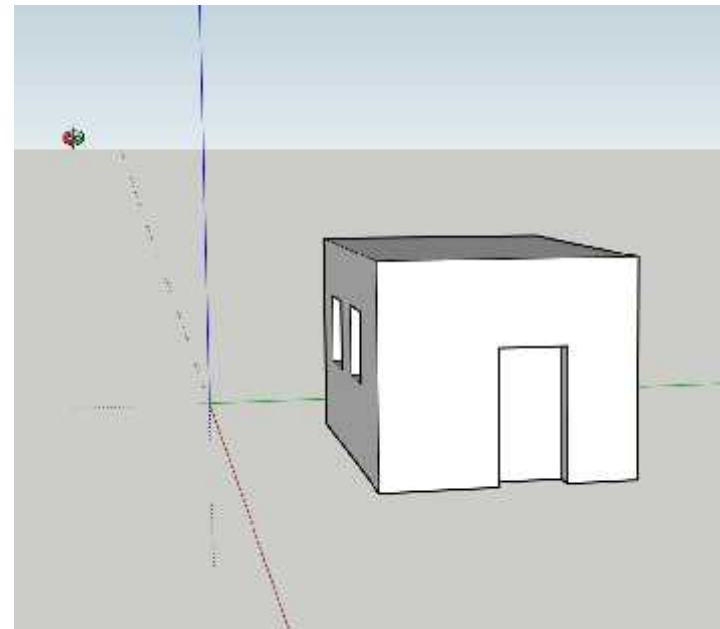
# Modelling a Simple Object - Part 2 (1/12)

- First, **Open** your file from the previous lesson.

- Let's add a roof to our house.

- Use the **Orbit** tool to move the view to the front side of the house, facing the door.
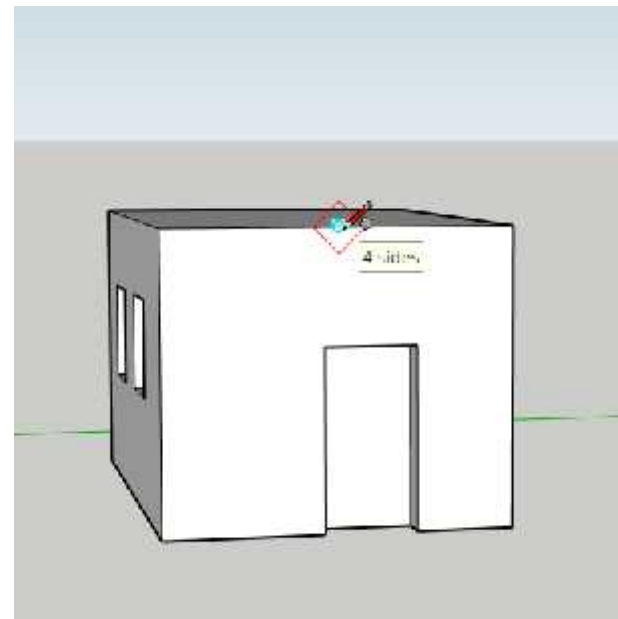
# Modelling a Simple Object - Part 2 (3/12)

- Use the **Polygon** tool and hover your mouse over the edge of the wall, without clicking, until you find the Midpoint (Highlighted in blue).

- Make sure the Polygon outline is red, so it is parallel to the wall.
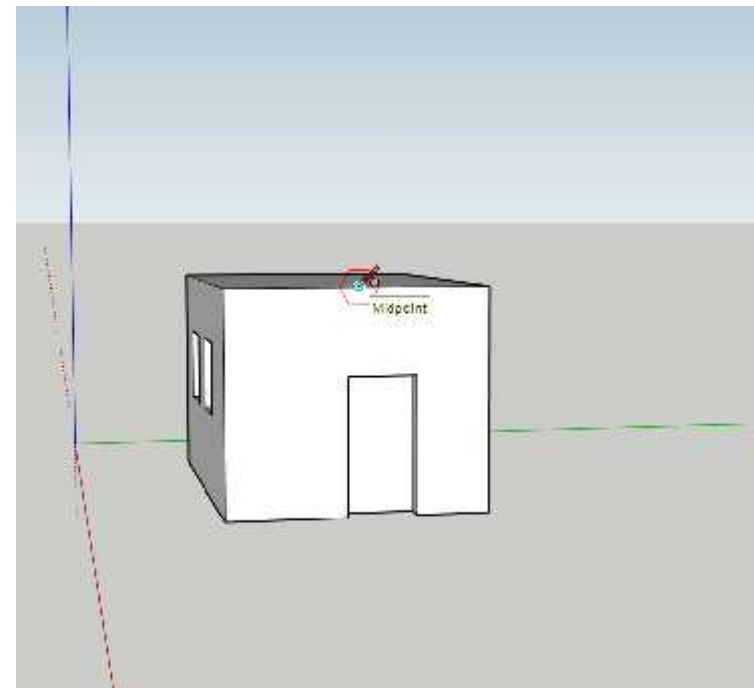
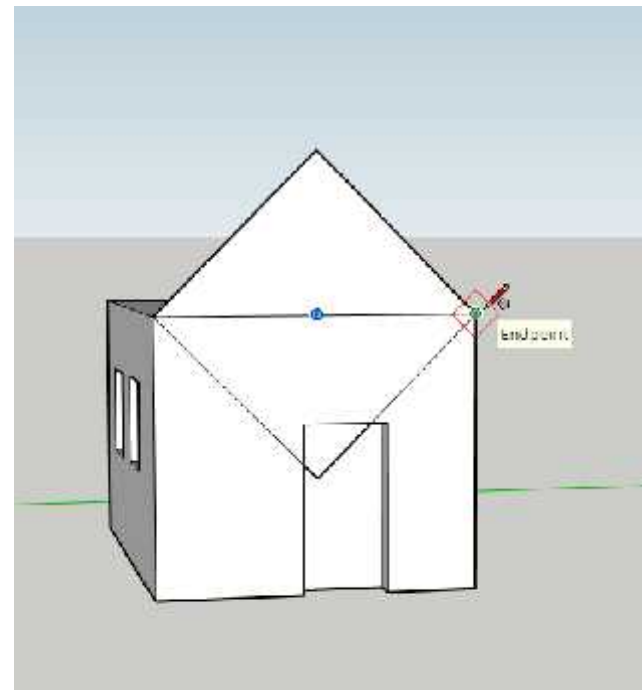- Press the **Ctrl** button and **Plus(+)** or **Minus(-)** on the keyboard, to make the Polygon sides four (4).
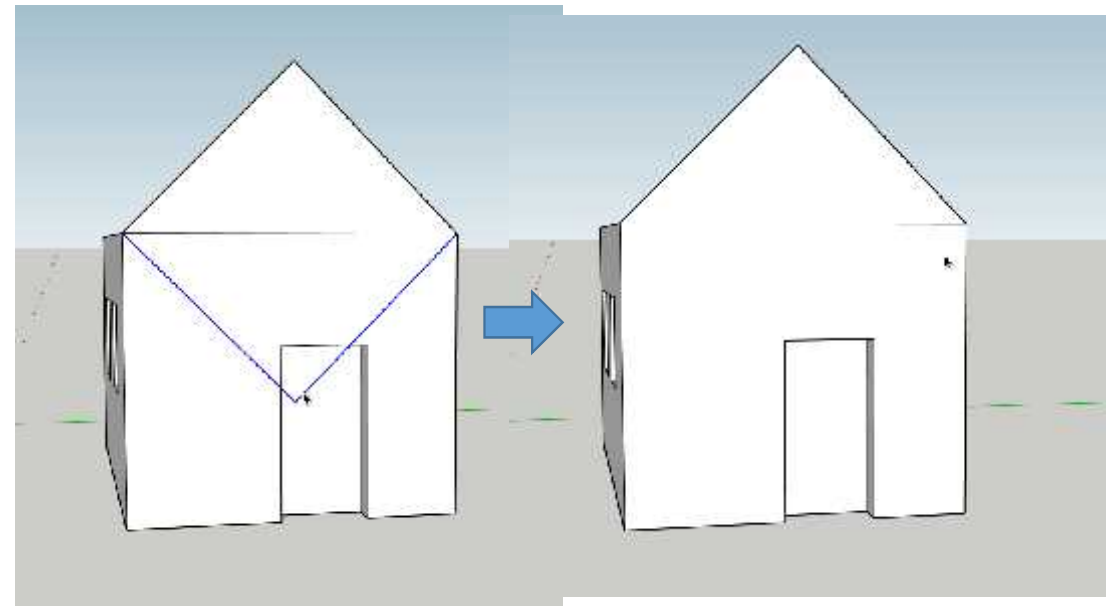
# Modelling a Simple Object - Part 2 (5/12)

- Now click on the Midpoint.
- Hover your mouse to the edge of the wall, and click one more time.

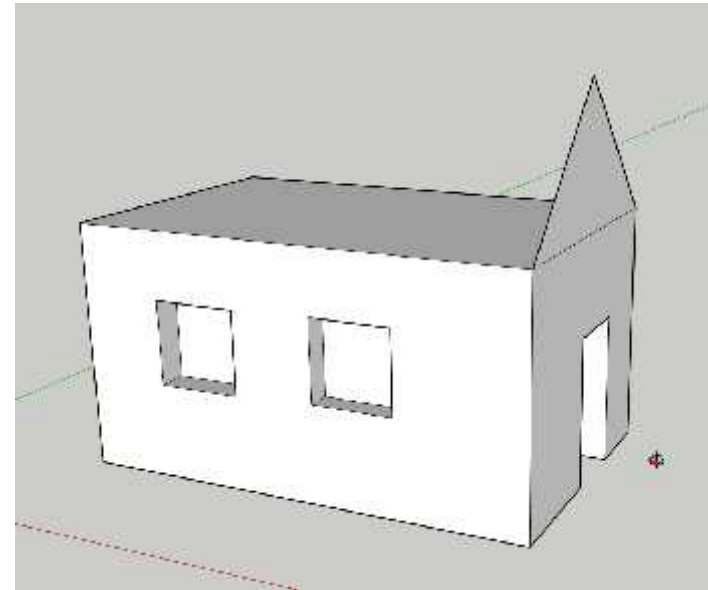- After clicking the mouse, a 4-sided Polygon will be created.

- Use the mouse to select the lines we see in the picture, as they are not needed.

- To select multiple lines press the **Ctrl** button on the keyboard while clicking.

- Press the **Delete** button on the keyboard to delete these lines.
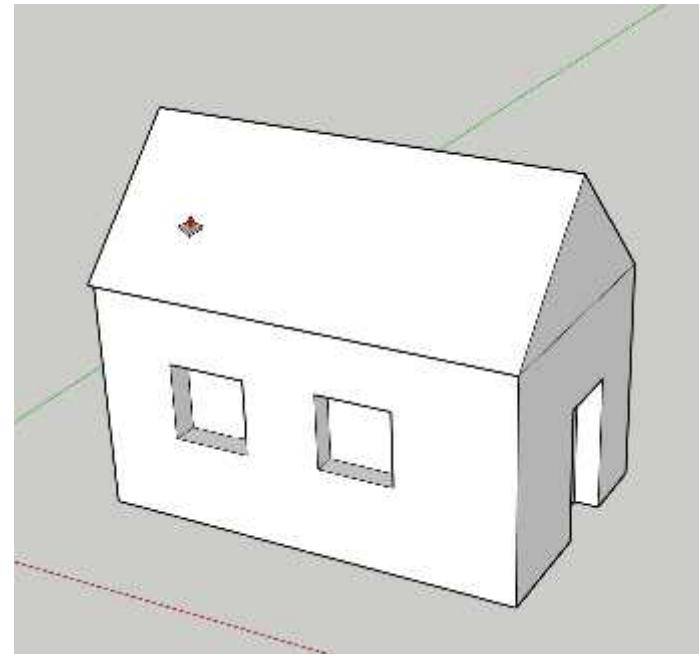
# Modelling a Simple Object - Part 2 (8/12)

- Use the **Orbit** tool to go back to the side of the house.

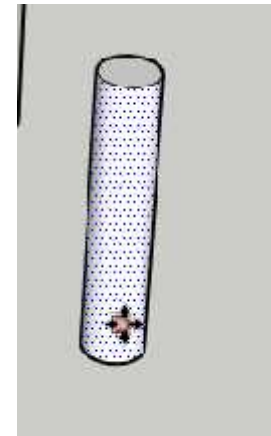- Use the Push/Pull tool on the triangle shape we created to make the roof of the house.

- Now let's make a chimney.

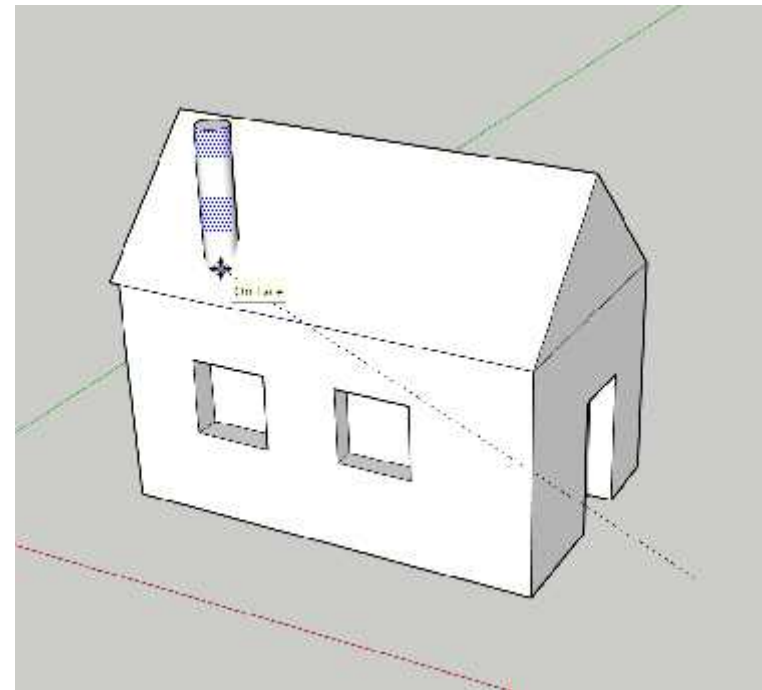- Draw a small **Circle** to the side of the house and use the **Push/Pull** tool to make a Cylinder shape.
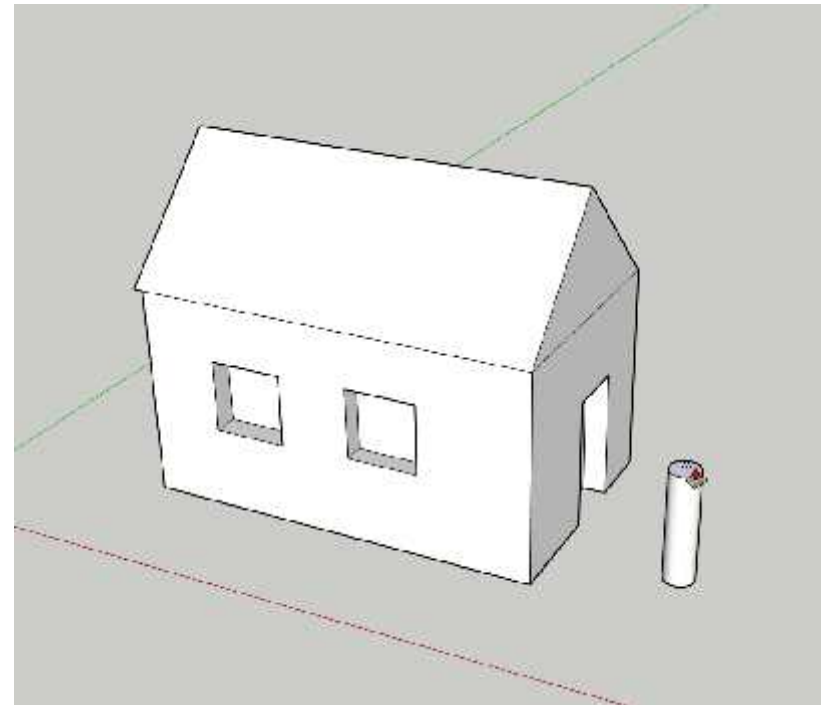
- Switch to the **Move** tool.
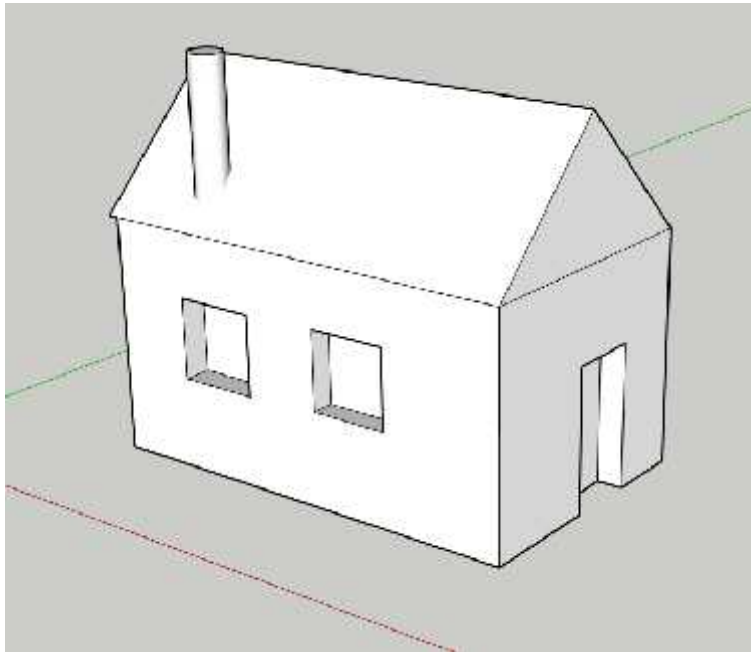- Grab the cylinder by the side, as you see in the picture.

# Modelling a Simple Object - Part 2 (12/12)

- Move the Cylinder to the roof to make the chimney.

# Modelling a Simple Object - Part 2



- Our house is ready for 3D Printing!

Thank you!!

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