



PLTW Virtual Learning

7th and 8th Grade Design and Modeling

April 23, 2020



Lesson 1: Multi-View Drawing Day 4

Objective/Learning Target:

Students will understand the properties of multi-view drawings and be able to draw shapes in multi-view.

Warm-Up:

Walk around your house and gather the following materials...

- Paper (graph paper if possible but no necessary)
- Writing utensil
- 5 objects to draw the multi-view of

Lesson Introduction/Background Information:

We've been drawing a lot of cube shapes. Now let's see what it is like to draw a real world object in multi-view.

Lesson Introduction/Background Information:

The first thing you need to do is choose which view is the **FRONT**. Pick the side that shows the best shape of the object.

Note: Also keep in mind the hidden lines that you will have to draw based on where your front view is. You may not be able to avoid them all the time, but you can minimize how many are in each view.

For example, I chose a mug to draw. I am letting this side be my front because it shows the best shape of the mug and makes it so I do not have any hidden lines for views.

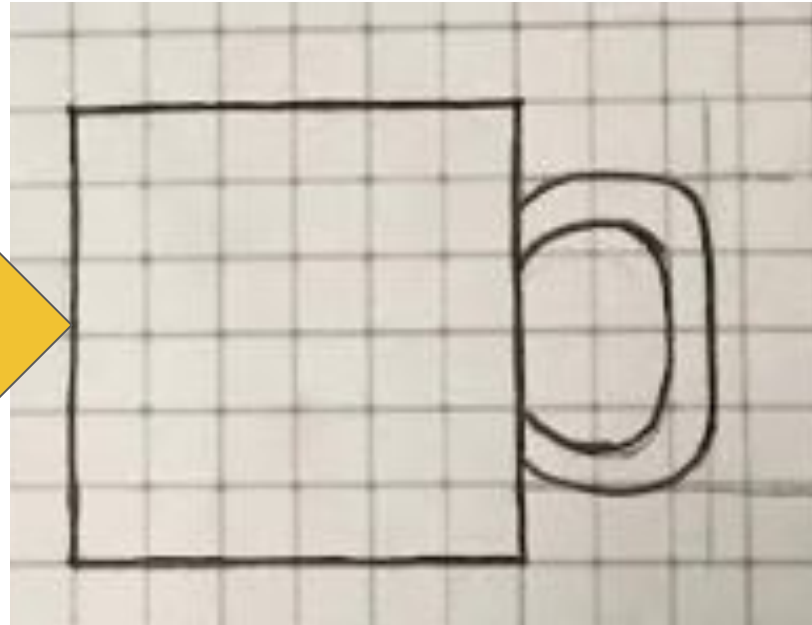


Lesson Introduction/Background Information:

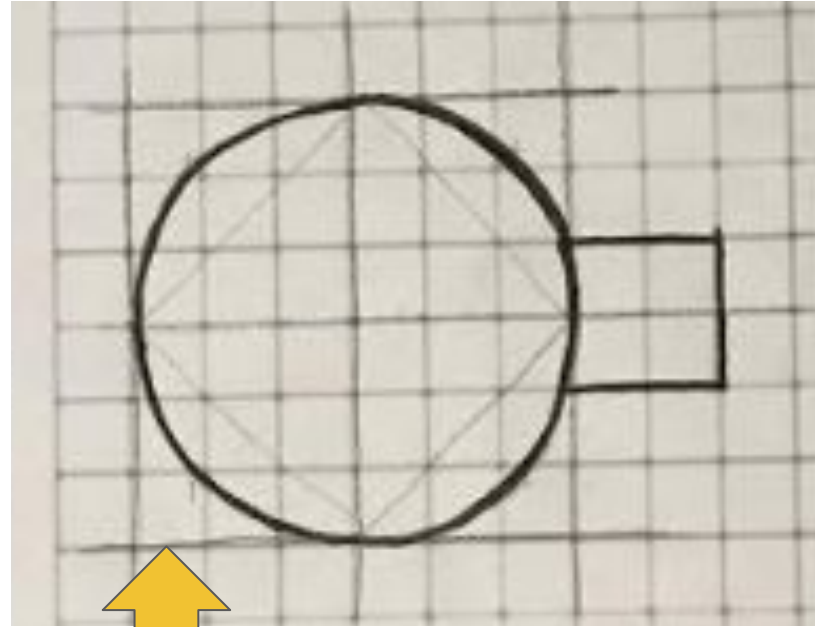
To help you better see the view, look at the shape directly from that angle.



Break it
down into
the basic
2-D shapes.
The main
shape of my
mug is a
square.

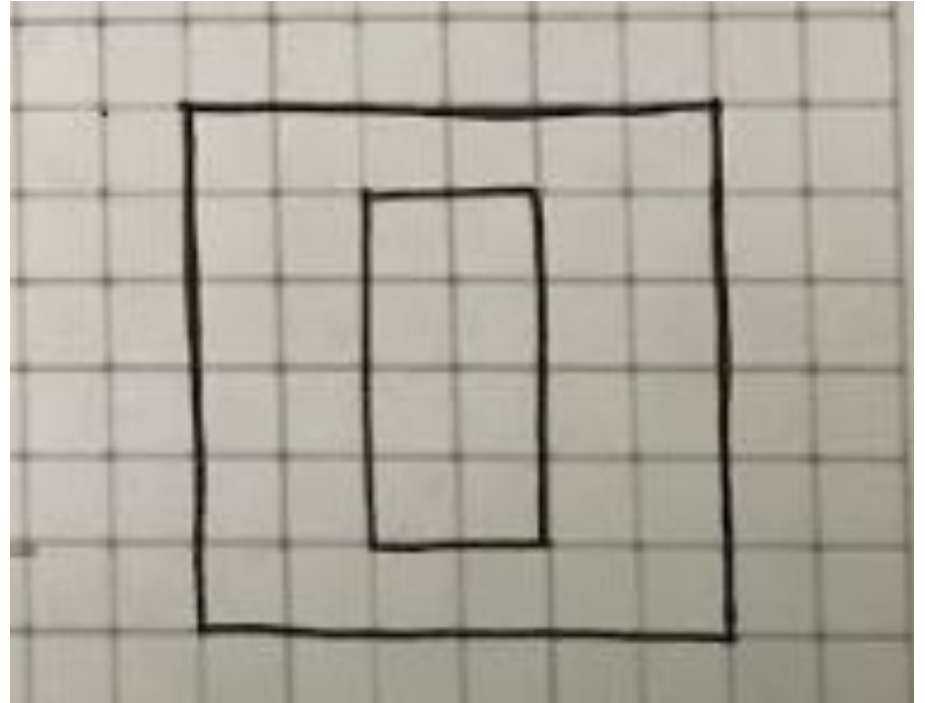


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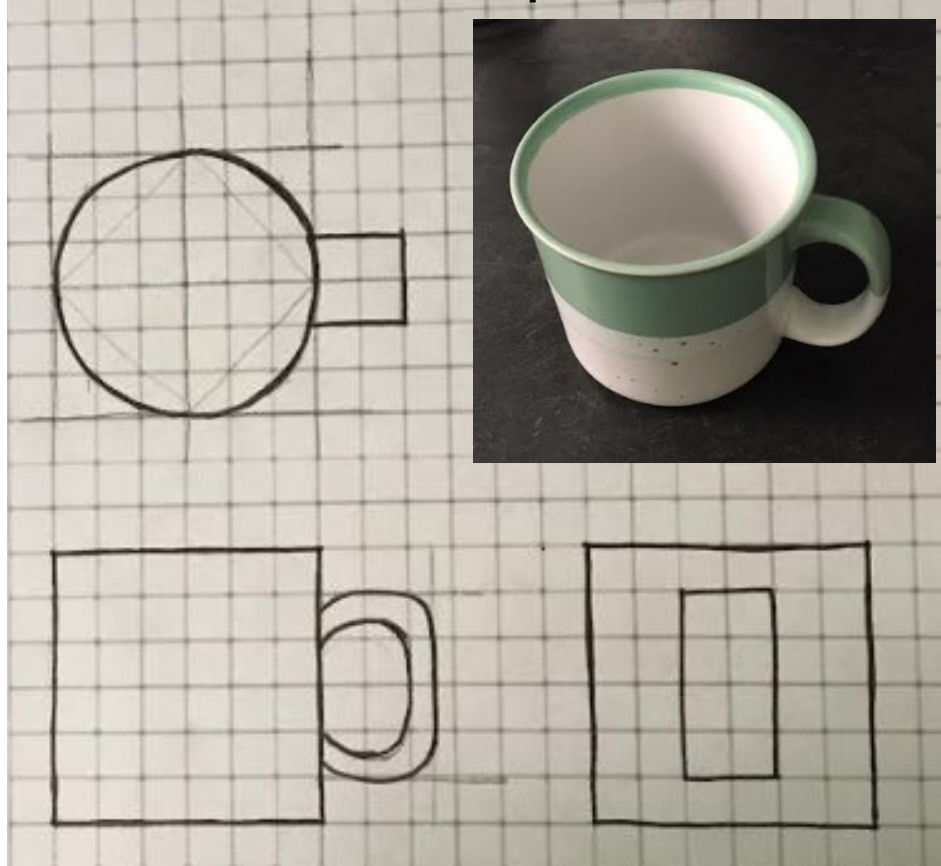


I used construction lines to help me get the size and shape of the circle.

Lesson Introduction/Background Information:

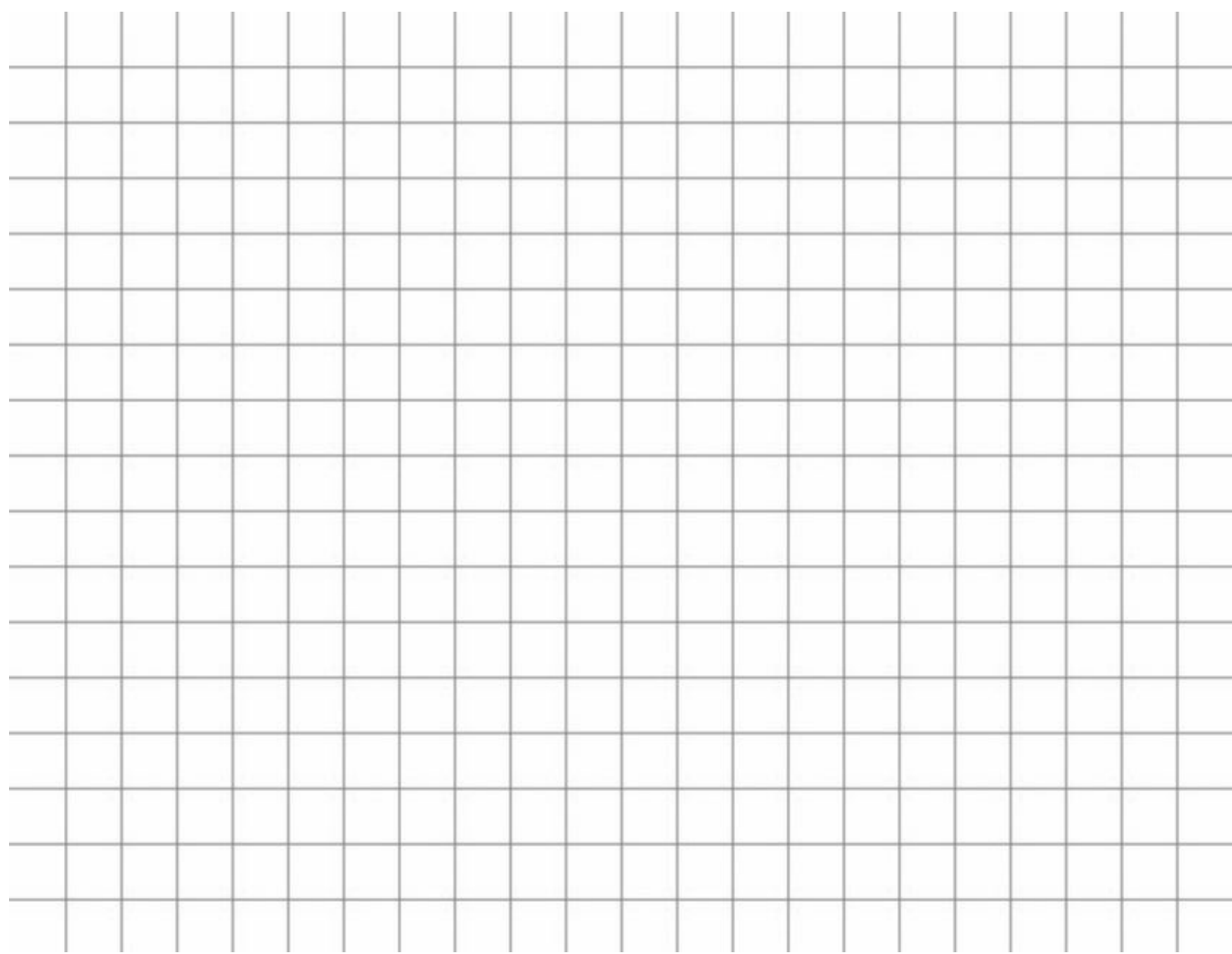


Lesson Introduction/Background Information: Finished product



Practice:

It's your turn. Draw the multi-view of the five objects you gathered during your warm-up.



Self-Assessment:

Test your skills....

Show your drawings to someone in your house and see if they can guess the object you drew.

Extend Your Learning/Continued Practice:

You are doing a great job! If you want a challenge try drawing the 3 views we haven't drawn of your 5 objects.

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