

# Today's Materials

**HEY HEY HEY**



- device
- pencil
- notebook
- glue

# What are Scaled Copies?



## Lesson 1

CCSS Standards:  
Addressing

• 7.GA.1



2019 Open Up Resources | Download for free at [openupresources.org](https://openupresources.org).

# Let's explore scaled copies!



# Printing Portraits

## Warm Up 1.1

- Think Pair Share
- Stronger and Clearer Each Time



Here is a portrait of a student.

Move the slider under each image A-E, to see it change.

## 1.1: Printing Portraits

Here is a portrait of a student. Move the slider under each image, A-E, to see it change.



Original Portrait



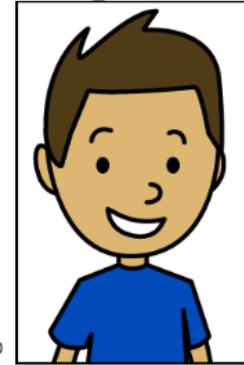
A



B



C



D



E

# Today, we'll investigate

→ Unit 1: Scale Drawings

→ Lesson 1: What are Scaled Copies?

**OPEN-UP resources** **GRADE 7 MATHEMATICS**  
By Illustrative Mathematics®

**UNIT 1**  
Scale Drawings

**UNIT 2**  
Introducing Proportional Relationships

<b>LESSON 1</b> What are Scaled Copies?	<b>LESSON 2</b> Corresponding Parts and Scale Factors	<b>LESSON 3</b> Making Scaled Copies	<b>LESSON 4</b> Scaled Relationships	Th
<b>LESSON 6</b> Scaling and Area	<b>LESSON 7</b> Scale Drawings	<b>LESSON 8</b> Scale Drawings and Maps	<b>LESSON 9</b> Creating Scale Drawings	Char
<b>LESSON 11</b> Scales without Units	<b>LESSON 12</b> Units in Scale Drawings	<b>LESSON 13</b> Draw It to Scale	<b>PRACTICE PROBLEMS</b>	

Please begin working with Quiet Think Time. (2-3 min.)

Share your thoughts as a team.

- What did you notice using the applet?
- What is a scaled copy?

## 1.1: Printing Portraits

Here is a portrait of a student. Move the slider under each image, A–E, to see it change.



Original Portrait



A



B



C



D



E





# Today's Goals

- ❑ I can tell whether or not a figure is a scaled copy of another figure.
- ❑ I can describe some characteristics of a scaled copy.

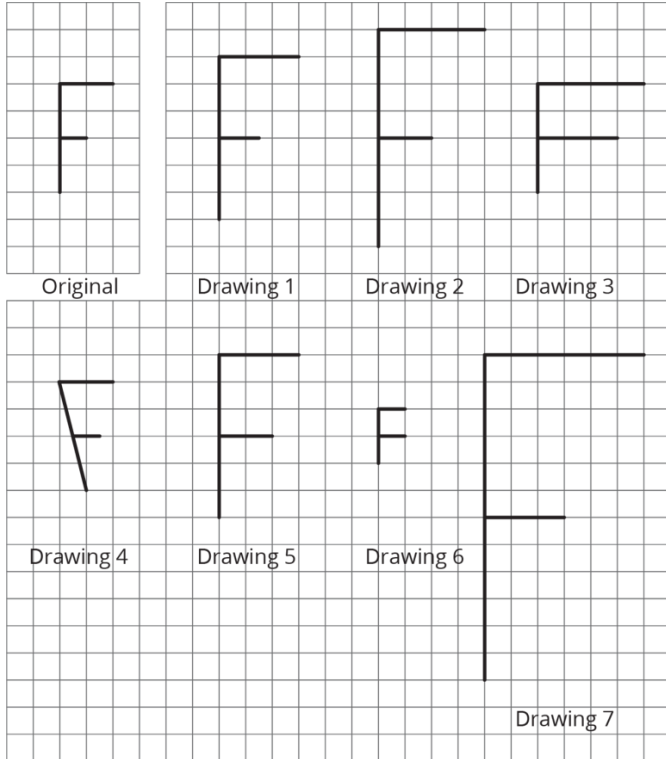
# Scaling F

## Activity 1.2

- Think Pair Share
- Collect and Display



# Here is an original drawing of the letter F and some other drawings of the letter.



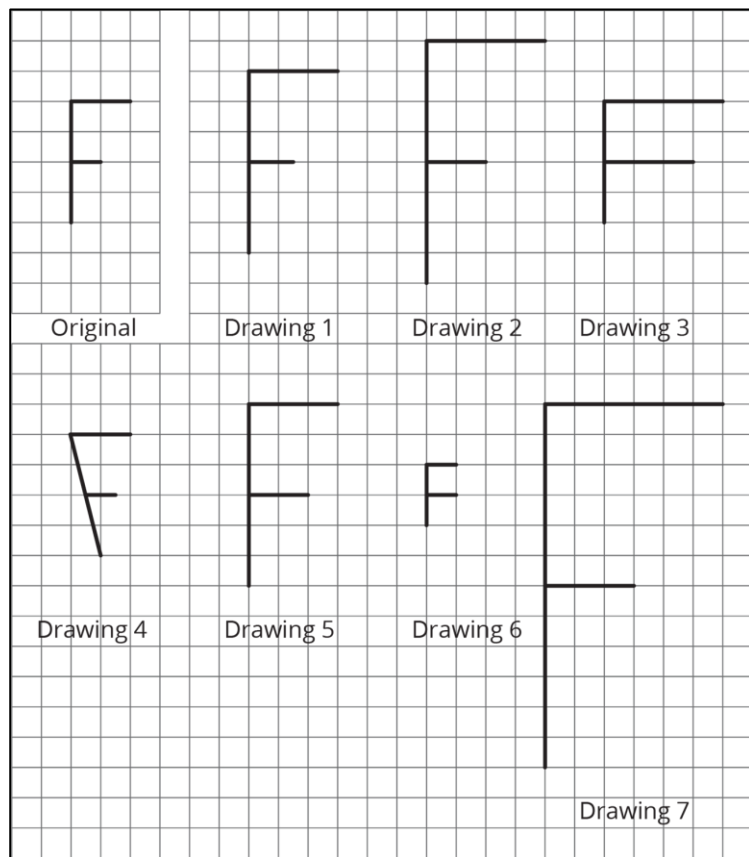
Begin with  
Quiet Work Time.  
(3-4 min.)

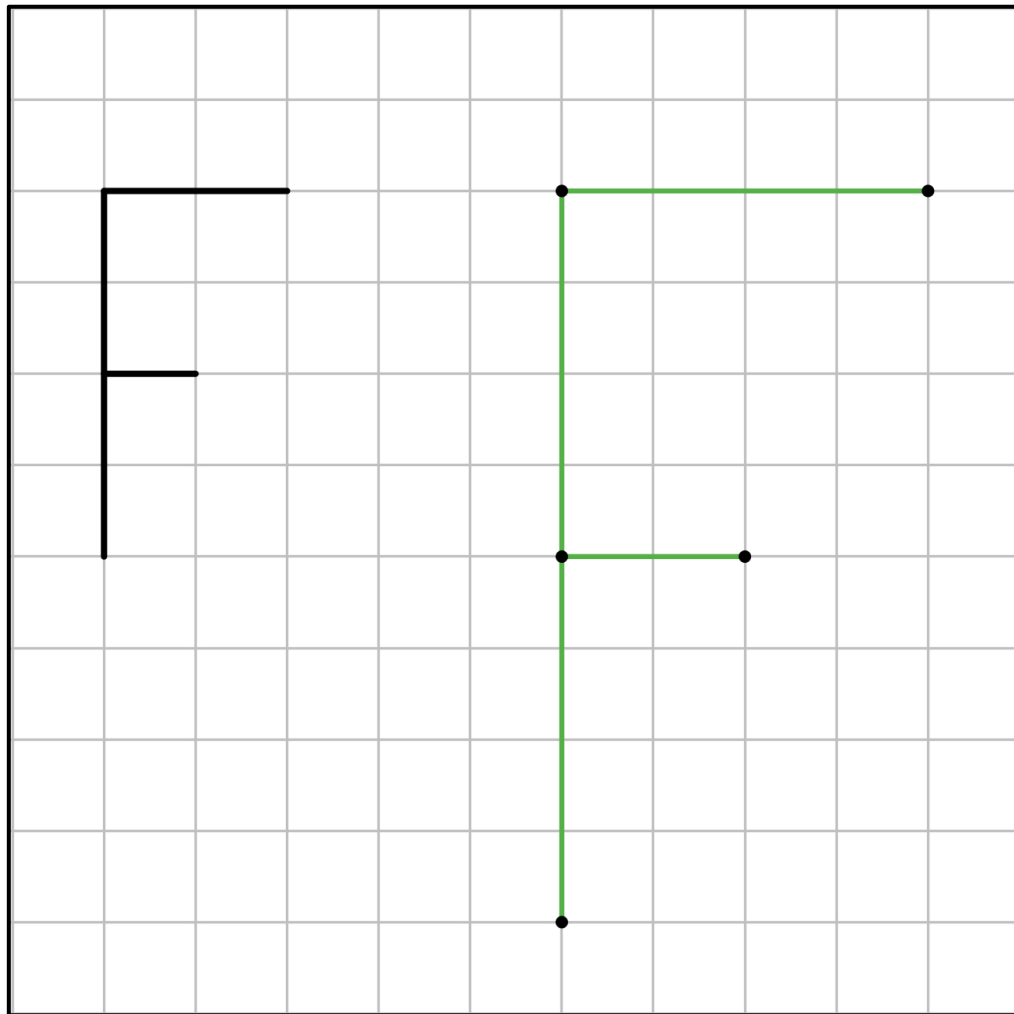
Talk about your  
ideas as a team.

What features do the scaled copies have in common?

How do the other copies fail to show these features?

Here is an original drawing of the letter F and some other drawings.





# Pairs of Scaled Polygons

## Activity 1.3

- Take Turns Matching or Sorting



# Pairs of Scaled Polygons

- Match polygons that are scaled copies of one another.
  - ◆ Explain how you know it's a match.
  - ◆ Listen carefully to your partner! If you disagree, explain your thinking.
- Check your answers when you finish.
- Select one pair of polygons to examine further. Draw them on grid paper.  
(Share grid paper [halves] with a partner!)

I think these match because...

I don't think these match because...

I agree/disagree because...

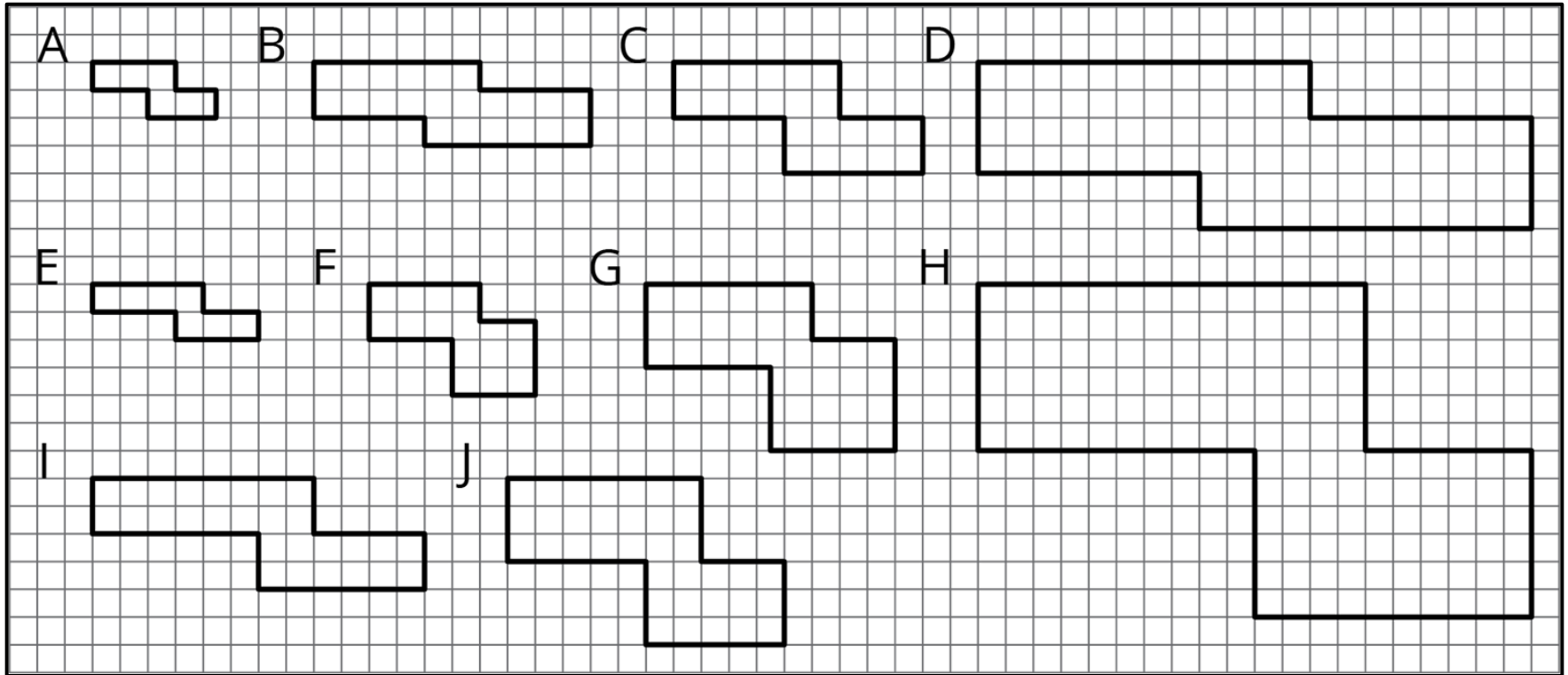
I agree, and I can also tell you that...

Why do you think that?

I used to think... but now I think...

I don't know what you mean when you said...

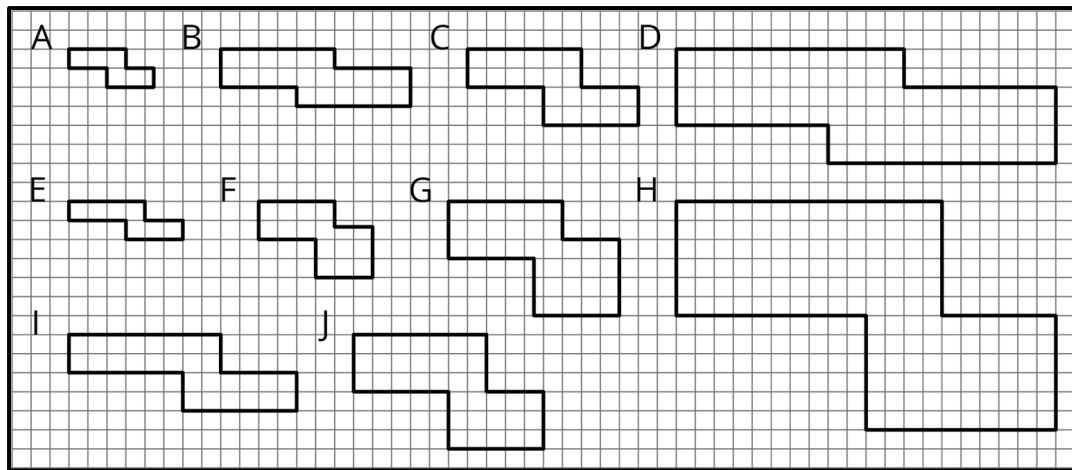
Which polygons are scaled copies? How do you know?





# Let's Chat!

- When you looked at your polygons, what did you check for?
- How many sides did you compare before you decided that the polygons were or were not scaled copies?
- Did anyone check the angles of the polygons? Why or why not?



What is a  
scaled copy?

What are some characteristics of scaled copies?

How are they different from figures that are not scaled copies?

What **specific** information did you look for when determining if something was a scaled copy of an original?

# Scaling L

Cool Down 1.4

