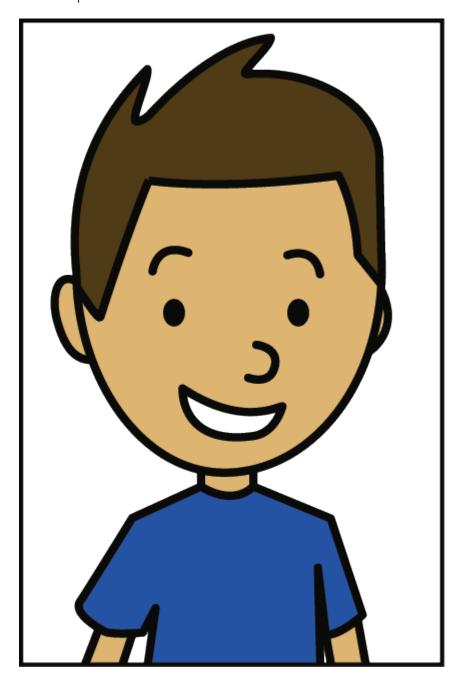
# **Unit 1 Lesson 1: What are Scaled Copies?**

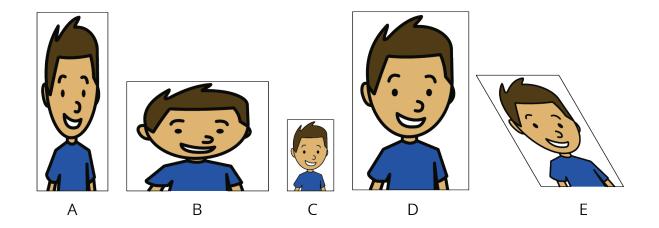
# 1 Printing Portraits (Warm up)

#### **Student Task Statement**

Here is a portrait of a student.



1. Look at Portraits A–E. How is each one the same as or different from the original portrait of the student?

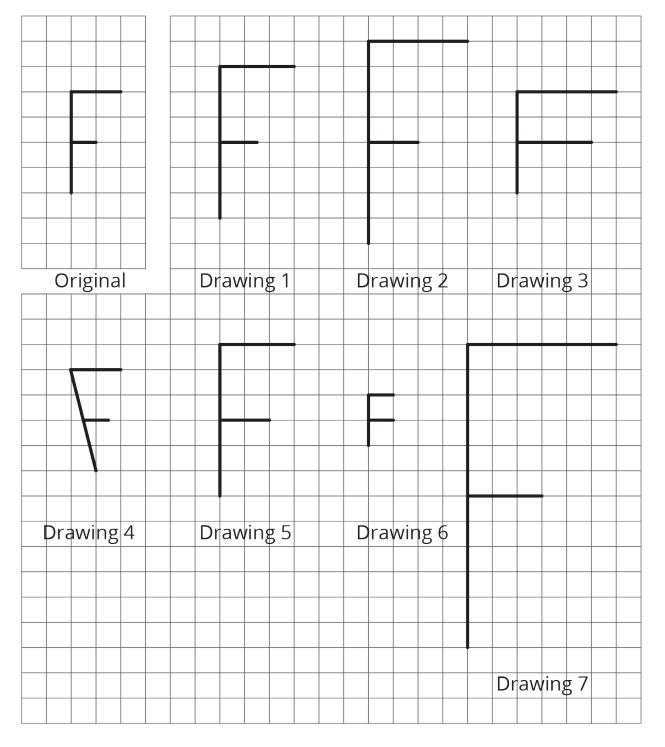


- 2. Some of the Portraits A–E are **scaled copies** of the original portrait. Which ones do you think are scaled copies? Explain your reasoning.
- 3. What do you think "scaled copy" means?

## 2 Scaling F

### **Student Task Statement**

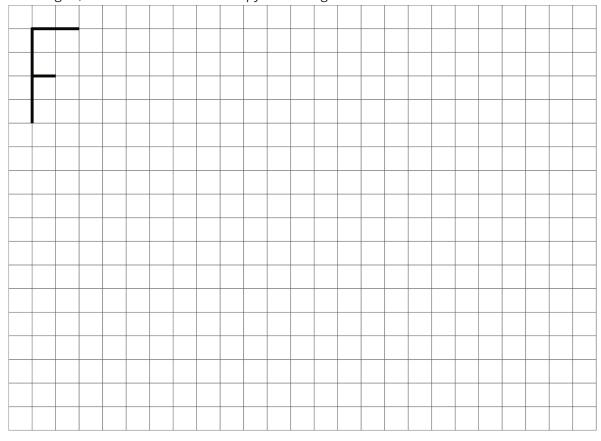
Here is an original drawing of the letter F and some other drawings.



1. Identify **all** the drawings that are scaled copies of the original letter F. Explain how you know.

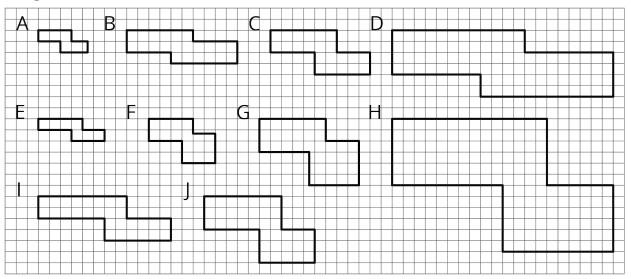
2. Examine all the scaled copies more closely, specifically the lengths of each part of the letter F. How do they compare to the original? What do you notice?

3. On the grid, draw a different scaled copy of the original letter F.



### **3 Pairs of Scaled Polygons**

#### **Images for Launch**



#### **Student Task Statement**

Your teacher will give you a set of cards that have polygons drawn on a grid. Mix up the cards and place them all face up.

- 1. Take turns with your partner to match a pair of polygons that are scaled copies of one another.
  - a. For each match you find, explain to your partner how you know it's a match.
  - b. For each match your partner finds, listen carefully to their explanation, and if you disagree, explain your thinking.
- 2. When you agree on all of the matches, check your answers with the answer key. If there are any errors, discuss why and revise your matches.

3. Select one pair of polygons to examine further. Draw both polygons on the grid. Explain or show how you know that one polygon is a scaled copy of the other.

