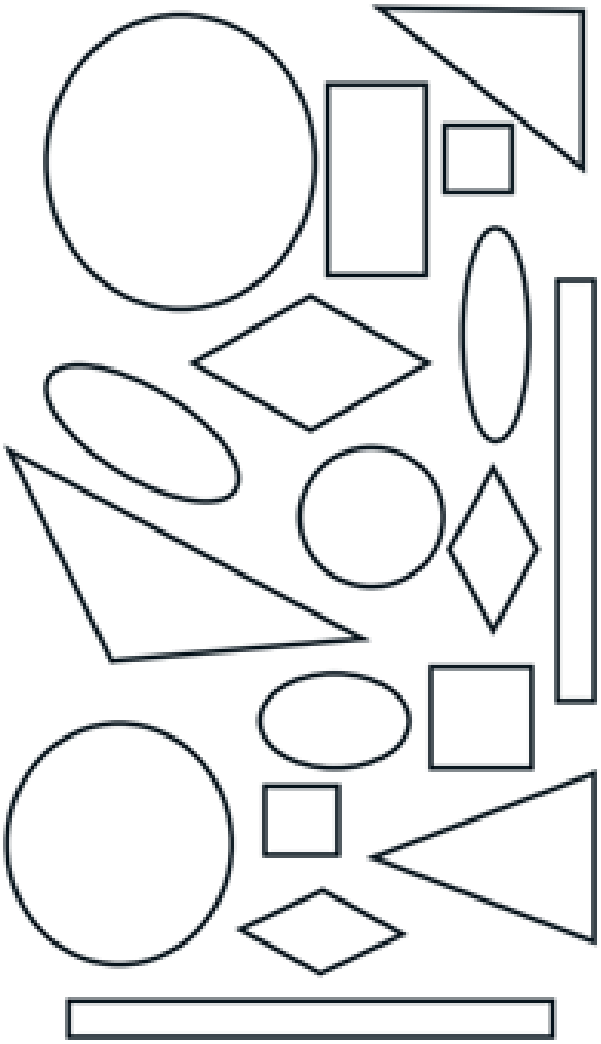
What's My Shape?

1. Draw a Square here.
   Color all the squares the same color.



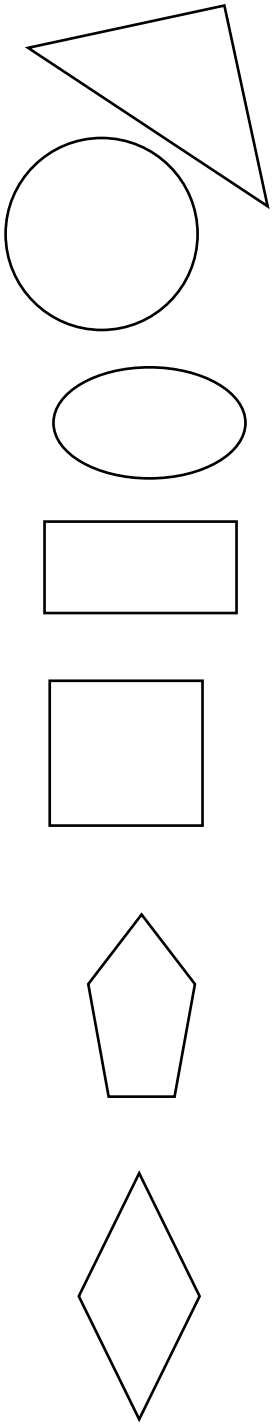
2. Draw a Rectangle here.
   Color all the rectangles the same color.

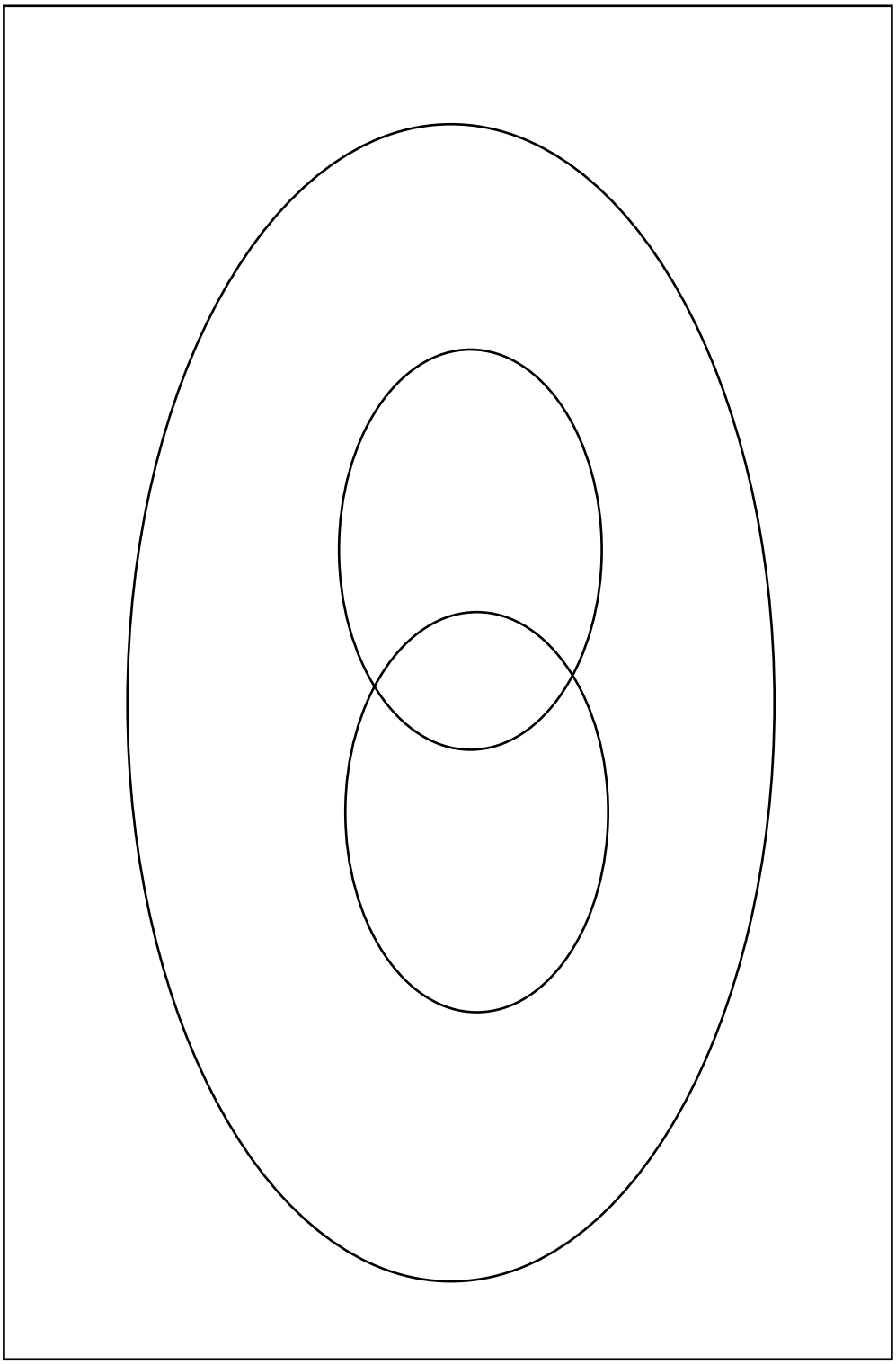
3. Draw a Rhombus here.
   Color all the rhombuses the same color.

4. Are any of the three shapes that you colored in more than one category?

What's My Shape?

5. Place each of these shapes appropriately in the Venn diagram.





The Units Conjecture

1. Complete the following conjecture on how the size of the unit of measure affects the size of the value of the measurement.

   When measuring an object, a bigger unit of measure will result in _____ value of measurement.

2. Test your conjecture by measuring the same object twice with two different units of measure.

Object	First measurement	Second Measurement	Supports Your Conjecture? (Y/N)

3. State the correct fact about the relationship between the size of the unit and the value of the neasurement.

   When measuring an object,

   _____

   _____

   _____

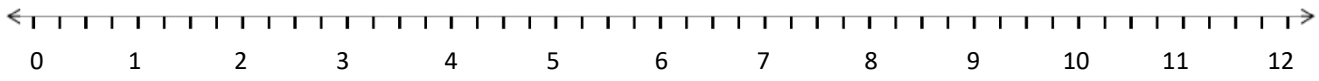
Less Than a Foot

1. You and your group members each are to measure the length a different object. Your object must be less than a foot long. Within your group, there must be at least one object which has a length, measured in inches, that is a whole number, another that includes a half, and another that includes a fourth. (For example, $3", 5\frac{1}{2}", 8"$ & $10\frac{1}{4}"$.)

   a. Record your group's results in the chat below.

Group Member's Name	Object Measured	Length (inches)

   b. Once everyone in the class has their measurements posted on the line plot, copy the results on your own line plot below.



   c. Write a question that could be answered by the data represented above. What is the answer to your question?

The Rectangle Conjectures (cont'd)

1. Jose's conjecture: *Two rectangles that have the same perimeter can have different areas.*

   If you think Jose is correct, draw to scale (in inches) two rectangles that support his claim. If you think he is incorrect, show or explain why.

The Rectangle Conjectures (cont'd)

2. Claudia's conjecture: *Two rectangles that have the same area can have different perimeters.*

   If you think Claudia is correct, draw to scale (in centimeters) two rectangles that support her claim. If you think she is incorrect, show or explain why.

Clay Boxes

1. Given 12 unit-cubes, create as many different rectangular prisms as you can. For each one, write the equation, $l\ x\ w\ x\ h = V$, substituting your values for length, width and height, measured in inches.

2. Given your quantity of clay, create three different rectangular prisms. For each one, write the equation, $l\ x\ w\ x\ h = V$, substituting your values for length, width and height. Each one should be measured in different units (inches, cemtimeters, millimeters, etc).