# Classifying Shapes

 Self-Check

Use the questions in the menu to choose practice with classifying shapes.

- Decide if you are "Working On It," you are "Getting It," or you already "Got It" to choose which problems you should complete.

- If one set of problems seems too easy or too hard, choose a different set to complete.

Workshop Menu			
Can I Do This?	**▲ Working On It!** I could use some extra help. Jacob	**● Getting It!** I just need some more practice. Ana	**■ Got It!** I'm ready for a challenge. Nicholas
Classify shapes using their properties. **Explain my answer using geometric properties.**	**Questions 1–2, 4–5**	**Questions 2, 4–5**	**Questions 2–5**

Name _____   Date _____

Use the nine Power Polygons™ below for Questions 1 and 2.
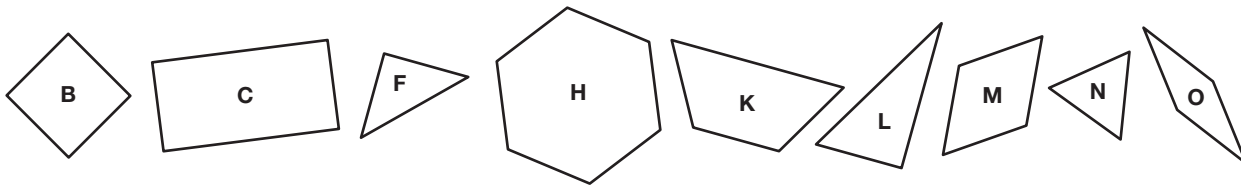
▲▢▢ **1.** **A.** Sort the shapes with four sides into Box A.
Sort the Shapes with one or more right angles into Box B.
Some shapes will go in both boxes. Some will go outside.
Sketch the shapes where they belong. The first one is an example.

4 sides

Box A

M

At least one right angle

Box B

B. What is one name for all the shapes in Box A?

_____

C. What is one name for all the shapes in both Box A and Box B?

_____

**D.** Is a square also a quadrilateral? Show or tell how you know.

Use the nine Power Polygons™ for Question 1 for this question, too.

▲|●|■ **2.** **A.** Sort the shapes with all sides equal into Box A.
Sort the shapes with all angles equal into Box B.
Some shapes will go in both boxes. Some shapes will go outside.
Sketch the shapes where they belong.

B. What is one name for all the
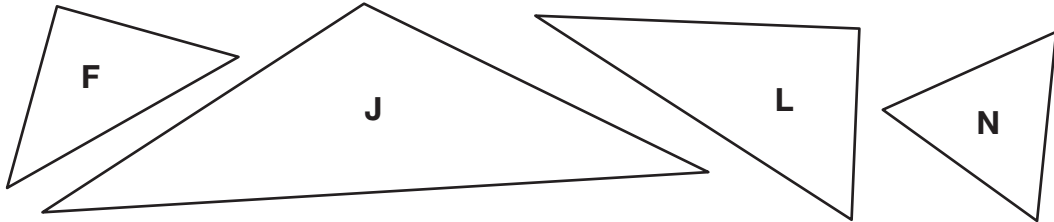shapes in Box A that are not in Box B? _____

C. What is one name for all the
shapes in both Box A and Box B? _____

D. Is a square a regular polygon? Show or
tell how you know.

All sides equal

Box A

All angles equal

Box B

Name _____   Date _____
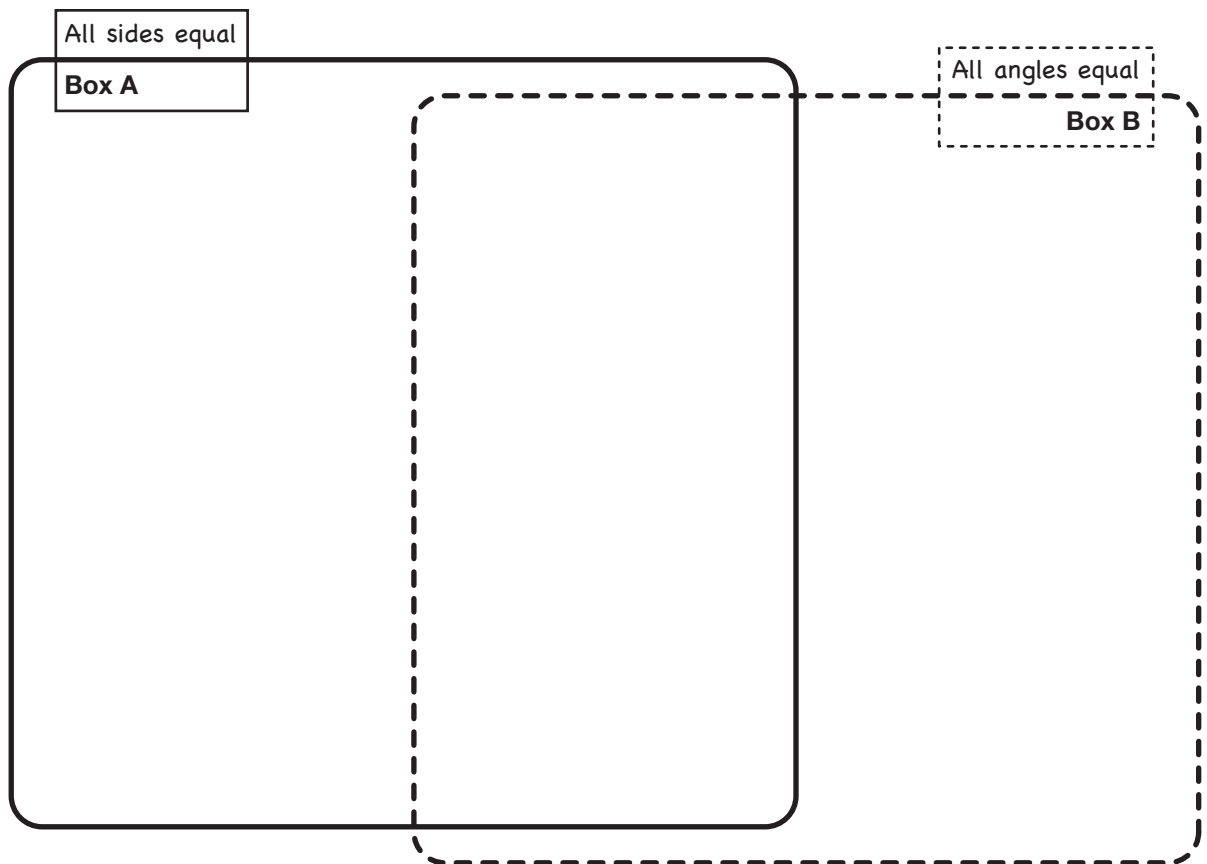
■□□ **3.** You will need seven triangles for this question:

- Cut out the 3 triangles (P, Q, R) at the bottom of the page, and
- Find these 4 triangles (F, J, L, N) in your Power Polygons™.

A. Review the names for triangles in Lessons 5 and 9 in the *Student Guide*. Fill in the chart below with the letters of the triangles. Some boxes will not have a letter. Write "none" in those boxes.

Example: Triangle J is both isoceles and obtuse, so write "J" in the row for obtuse and the column for isosceles.

	Equilateral	Isosceles	Scalene
Right			
Acute			
Obtuse		J	

B. Which triangle is a scalene right triangle? Show or tell how you know.

C. In which boxes did you write, "none"? Why are these boxes impossible to fill?
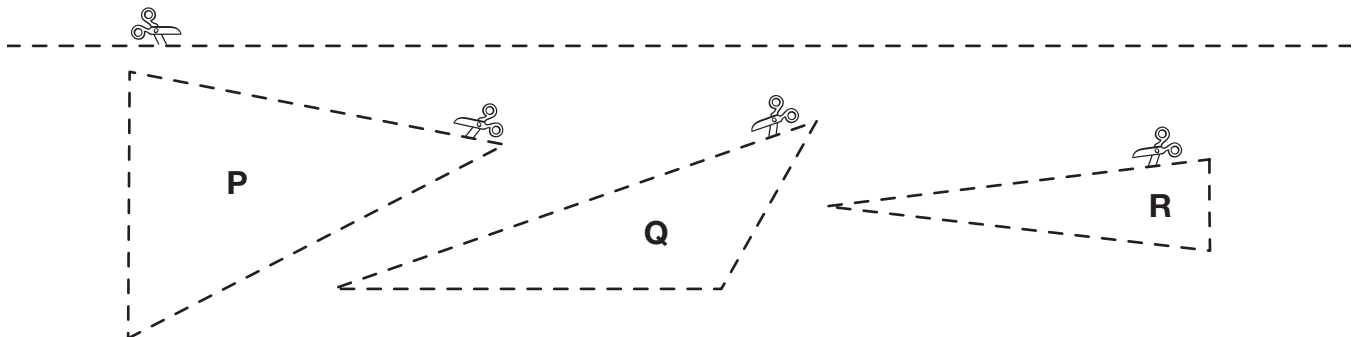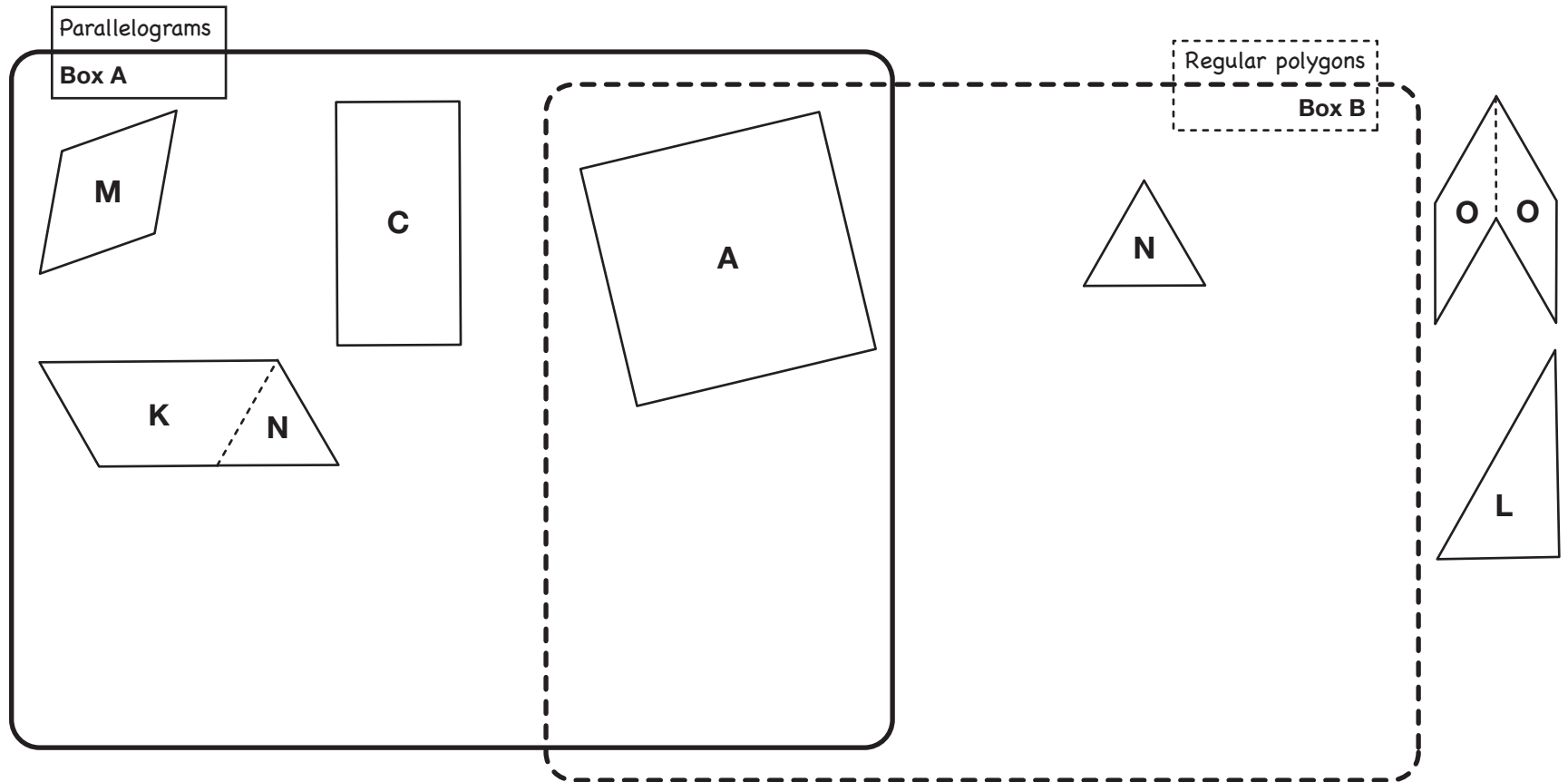
Name _____   Date _____

Check-In: Questions 4–5

Mrs. Dewey's class sorted shapes. They put parallelograms in Box A and regular polygons in Box B. They placed shapes that did not go in either box outside the boxes.

Parallelograms
Box A

Regular polygons
Box B

M

C

A

N

N

K

N

O   O

L

Name _____ Date _____

▲●■ **4.** Sort the following shapes using the same rules as Mrs. Dewey's class. Sketch the shapes where they belong on the drawing of the boxes on the previous page. Add their letters.

B   F   H   O
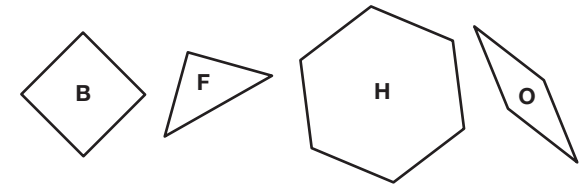
▲●■ **5.** Use your work for Question 4 to answer the questions below. Use properties in your explanations.

A. How did you decide where to place the brown triangle (F)?

B. How did you decide where to place the yellow hexagon (H)?

C. Are all hexagons regular polygons? Show or tell how you know.

D. Is a square also a parallelogram? Show or tell how you know.

Classifying Shapes Check-In: Questions 4–5 Feedback Box	Yes . . .	Yes, but . . .	No, but . . .	No . . .
MPE5. Show my work. I show or tell how I arrived at my answer so someone else can understand my thinking.				