**Centre 8 – Geometry Journal**

**Choose a few of the following prompts to think about and/or discuss with a partner, then respond in your journal. Remember to check the “effective journal” criteria posted at the front of the room.**

1. Can you usually divide a shape up into one or more similar shapes? Explain.
2. One triangle has two 40-degree angles. Another triangle has a 100 degree angle and a 4- degree angle. Could the triangles be similar? Could they be congruent? Explain your thinking.
3. Carefully read the following statements. Consider whether you think each is always true, sometimes true or never true. Choose some to write about, and explain your reasoning.
4. A trapezoid is a rectangle
5. Parallelograms are quadrilaterals
6. The diagonals of parallelograms bisect each other
7. A rectangle is a square
8. A square is a rectangle
9. A parallelogram has exactly three right angles
10. A rhombus and a rectangle each have four sides of equal length and four angles of equal measures
11. You want to prove that two **triangles** are similar. You know the angle and length measurements of the first one. What is the fewest number of measurements you need in the second one? How do you know?

OR

1. You want to prove that two **rectangles** are similar. You know the angle and length measurements of the first one. What is the fewest number of measurements you need in the second one? How do you know?

***Reflect:***

* *How many measures are there associated with your second shape?*
* *Are there some measures you know automatically if you know the other measure? Which ones?*
* *Why do you have to take measurements in both shapes?*
* *Which measurements did you decide you absolutely needed? Why those?*