## Math Journal - Chapter 10 - Perimeter, Area and Volume

- 10.01 The perimeter of a regular heptagon in 63 cm. Create a flow map to show how to find the length of each side.
- 10.02 Create a model to demonstrate that the area of a triangle is 1/2 of the area of a quadrilateral with the same base and height.
- 10.03 Use a rule to create an irregular polygon. Create a flow map to show the sequence of steps required to find the area and perimeter of your polygon.
- 10.04 As you saw during the guided practice, the effects of doubling or halving the dimensions of a polygon have a mathematical root. Write a paragraph to explain why you think this is true. (I do not expect a correct answer just a well thought out argument)
- 10.05 Write a narrative story (3 paragraphs) to tell a fifth grade student about today's discovering *pi* activity. Open with expectations and a hook. Discuss the activity and close your narrative by telling them what you discovered and/or why they should try it out for themselves.
- 10.06 Use graph paper to recreate the nets on page 529. Attempt to create a solid figure with each net.
- 10.07 Write a comparison/contrast piece to discuss how finding the surface area of a rectangular pyramid is different from finding the surface area of a rectangular prism.
- 10.08 Finding the volume of pyramids isn't really harder than finding the volume of a prism, you just have to use a different formula. The formula for finding the volume of a square pyramid is S\*S\*H÷3. Why do you think that finding the volume of prisms is considered a sixth grade objective while finding the volume of pyramids is saved for higher math?
- 10.09 Finding the volume of cones isn't really harder than finding the volume of a cylinder, you just have to use a different formula. The formula for finding the volume of a cone is  $\pi^*d^*d^*h$ +12. Why do you think that finding the volume of cylinders is considered a sixth grade objective while finding the volume of cones is saved for higher math?

General Scoring Rubric:

- 0 No Response
- 1 Wrong response
- 2 Weak response
- 3 Showed understanding
- 4 Showed understanding and cited an example
- 5 Showed understanding, cited examples and communicated effectively enough to enable others to understand.