Names: _____

Slicing Three-Dimensional Figures: Rectangular Prisms
Adapted from CPALMS Can You Cut It? Slicing Three-Dimensional Figures
Resource ID#: 47309 *http://www.cpalms.org/Public/PreviewResource/Preview/47309*

1. Using modeling clay or Play-Doh, create a right rectangular prism that is not a cube. **The bases of the prism are squares and the lateral faces are rectangles.**

2. With your group, predict the type of shapes you could see by cutting the prism at different places and different angles. Do not actually make any cuts, but envision what they would look like and write your predictions below:

Description of "slice" made:	Prediction of shape formed (cross-section):

3. Using a plastic knife or dental floss, slice through the middle of the model prism in a direction that is perpendicular to the base (and parallel to the faces).

To the right, sketch, describe, and name the figure formed by the cross-section.	
If the slice was made in a different area (but still perpendicular to the base), would the shape of the cross-section be the same or different? Explain your thinking in the box to the right.	

4. Put your model back together again before continuing.

5. Slice through the middle of the model prism in a direction parallel to the base.

To the right, sketch, describe, and name the figure formed by the cross-section.	
If the slice was made in a different area (but still parallel to the base), would the shape of the cross-section be the same or different? Explain your thinking in the box to the right.	

6. What do you notice about all the cross-sections formed by the intersection of a plane that is either parallel or perpendicular to the bases of a prism?

7. Put the prism back together and create a cross-section that would make a triangle shape. Describe what you did and how you did it.