



**Mathematics Planning  
Template Grade 6**

<b>STRAND: GEOMETRY</b>			
<b>TOPICS/OBJECTIVES</b>	<b>MAIN CONCEPTS</b>	<b>TEACHING/LEARNING ACTIVITES</b>	<b>ASSESSMENT/HOMEWORK ACTIVITIES</b>
<ol style="list-style-type: none"><li>1. Draw and describe nets of prisms: triangular base.</li><li>2. Identify and create solids that are polyhedral (tetrahedron and octahedron).</li><li>3. Classify solids shapes (prism, pyramids and polyhedron) according to their properties.</li><li>4. Recognize faces, edges, vertices of a solid and classify solids according to the number and shape of their faces.</li><li>5. Describe, design or create three dimensional shapes.</li><li>6. Represent and solve problems using</li></ol>	<ul style="list-style-type: none"><li>• Nets of a solid</li><li>• Prisms</li><li>• Pyramids</li><li>• Polyhedrons</li><li>• Polygons</li><li>• Identification/classification of solids</li><li>• Edges</li><li>• Vertices</li><li>• Faces</li><li>• Solids</li></ul>	<ul style="list-style-type: none"><li>• Have students collect, sort and examine a variety of solids found within the environment. Allow them to identify these solids (polyhedra) that are used in real-life situations (e.g. toothpaste box, milk boxes, tissue rolls etc.)</li><li>• Allow students to construct solids by using polygons as faces. Explore to find the greatest possible number of polygons that they can use to create a solid.</li><li>• Have students carefully unfold the models to examine their nets and to refold them to show that when filled up they show the volume. <i>Please see resource document activity sheet 1 and 2 page 8 to 12</i></li><li>• Allow students to create solids from nets <i>Please see resource document 15 page Activity 3</i></li><li>• Guide students as they sort and group solids discussing the number and shape of the faces, the number of edges and the number of vertices. <i>Please see resource document page 1 and 2</i></li></ul>	<ul style="list-style-type: none"><li>• Allow students to solve net puzzle: <div style="background-color: orange; padding: 10px; border-radius: 10px; width: fit-content; margin-left: auto; margin-right: 0;"><b>I am made up of six congruent squares attached by their sides to form a T shape. What am I?</b></div><div style="background-color: gray; padding: 10px; border-radius: 10px; width: fit-content; margin-left: 0; margin-right: auto;"><b>I have a square in the middle with an isosceles triangle attached to each side. The four triangles are congruent. What am I</b></div><div style="background-color: blue; padding: 10px; border-radius: 10px; width: fit-content; margin-left: auto; margin-right: 0;"><b>I have six congruent rectangles side by side attached to each other along their length. A pair of hexagons is attached to the opposite ends of the fourth rectangles. What am I?</b></div></li></ul>



MINISTRY  
OF

EDUCATION, YOUTH & INFORMATION

geometric models

Every Child Can Learn, Every Child Must Learn



- Have students explore the cross section of solids  
*Please see resource document worksheet 3 page 13*
- Have students develop a table displaying their findings.

Name of Solid	Number of Faces	Number of Vertices	Shape of Faces

- Draw faces of a polyhedron, prism and pyramid,  
*please see resource document page 4 dotted paper*
- Place students in groups and have them, identify, discuss and name things in the environment which can be described using, geometric shapes e.g. trunk of a tree, drum, glue stick, towel paper rolls, tin of paint, the Jamaican \$1, \$5, \$10 and \$20 coins, die (prisms) the top of a mountain suggest a pyramid.

- Have students sketch the nets of the 3-D shapes from the puzzles and make their own puzzles for a net and trade with a partner
- Complete Worksheet *Please see resource document page 2* students identify the solids based on the faces shown
- Complete worksheet 4 *Please see resource document page 13* Students will complete the table identifying the properties of each solid listed
- **Complete Activity on Page 3 of the resource document** students identify the object that by its properties
- Allow students to compare and contrast pairs of solids. *Please see resource document page 7*
- Allow students to recognize solids by its cross section, *Please see resource document worksheet 2 page 7*