Math

Identifying the Faces, Edges, and Vertices of Solids

A DepEd-BEAM Distance Learning Program supported by the Australian Agency for International Development
To the Learner

How was your past lesson my dear learner? Did you get high score in the activity? I hope your enthusiasm to learn will still continue. Today, our lesson is all about identifying the faces, edges and vertices of solid.

Let’s Learn This

This module discusses about finding the faces, edges and vertices of solid. The exercises that you will walk through will help you understand more about spatial figures. Are you ready? Okay, let’s try answering the next exercises.
Let’s Try This

Take a look at each drawing then try to identify what spatial figure is being shown.

1.

2.

3.
A solid or space figure in three-dimensional. It has length, width and height. It is bound by portions of planes or curved surfaces or both.

A polyhedron is a solid with plane or flat surface. The flat surface is the face, the intersection of any two faces is called an edge and the intersection of three or more faces is the vertex.
base

height

circular base

vertex

height

radius

O is the center
OQ – is the radius
PQ – is the diameter
Identify each space figures, then find the number of faces.

1. Name: ________
   Number of faces: ________

2. Name: ________
   Number of faces: ________

3. Name: ________
   Number of faces: ________

4. Name: ________
   Number of faces: ________
Let’s Do More

Count the number of faces and edges.

1. Number of faces: ____
   Number of edges: ____

2. Number of faces: ____
   Number of edges: ____

3. Number of faces: ____
   Number of edges: ____

4. Number of faces: ____
   Number of edges: ____
Let’s Remember This

- A solid or space figure is three-dimensional. It has length, width and height.
- Face – is the flat surface.
- Edge – is the intersection of any two faces.
- Vertex – is the intersection of three or more faces.

Let’s Test Ourselves

Find the number of faces, vertices and edges in each figure.

<table>
<thead>
<tr>
<th>Spatial Figure</th>
<th>Faces</th>
<th>Edges</th>
<th>Vertices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Let’s Consider This

How many correct answers do you have?

What is your score?

- If your score is 12-15, proceed to the next module.
- If your score is 8-11, do the “Let’s Enrich Ourselves.”
- If your score is below 8, review the whole module.
Complete the table below.

<table>
<thead>
<tr>
<th>Spatial figure</th>
<th>Name</th>
<th>Number of Faces</th>
<th>Number of Edges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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</table>

Reflection Sheet.

Reflect on what you have learned in this lesson by answering the given questions. Record your reflections on the space provided.

1. What have I learned?
   a. What is a spatial figure?
   b. Give examples of spatial figures. Describe each in terms of face, edge and vertex.

2. How will I apply my learning?
Let’s Try This

1. cube 4. rectangular pyramid
2. rectangular prism 5. cone
3. cylinder

Let’s Do This

1. Name: cube
   Number of faces: 6

2. Name: rectangular prism
   Number of faces: 6

3. Name: rectangular pyramid
   Number of faces: 5

4. Name: cone
   Number of faces: 1

Let’s Do More

1. Number of faces: 5
   Number of edges: 8

2. Number of faces: 2
   Number of edges: 12

3. Number of faces: 6
   Number of edges: 10

4. Number of faces: 6
   Number of edges: 12
**Let’s Test Ourselves**

<table>
<thead>
<tr>
<th></th>
<th>faces</th>
<th>edges</th>
<th>vertices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>2.</td>
<td>5</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>5</td>
<td>8</td>
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**Let’s Enrich Ourselves**

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<tr>
<td>1. cube</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>2. rectangular prism</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>3. cylinder</td>
<td>2</td>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>