Chapter 11: Surface Area & Volume

SECTION 1: SOLID GEOMETRY

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I Can

❑ Classify three dimensional figures according to their properties

❑ Use nets and cross sections to analyze 3D figures
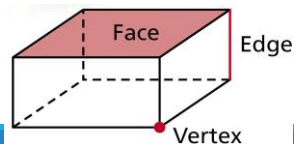

Solid Geometry

Three-dimensional figures, or solids, can be made up of flat or curved surfaces.

Each flat surface is called a **face**.

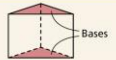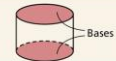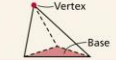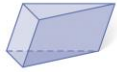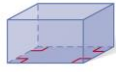An **edge** is the segment that is the intersection of two faces.

A **vertex** is the point that is the intersection of three or more faces.
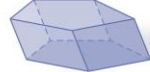

3D Figures

Prisms

A **cube** is a prism with six square faces. Other prisms and pyramids are named for the shape of their bases.
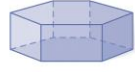

Triangular prism | Rectangular prism | Pentagonal prism | Hexagonal prism

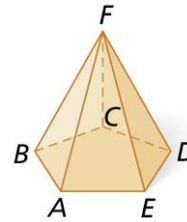Triangular pyramid | Rectangular pyramid | Pentagonal pyramid | Hexagonal pyramid

Classifying 3D Figures

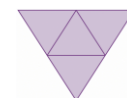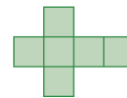**Classify the figure. Name the vertices, edges, and bases.**

Nets

A **net** is a diagram of the surfaces of a three-dimensional figure that can be folded to form the three-dimensional figure.

To identify a three-dimensional figure from a net, look at the number of faces and the shape of each face.

Nets

Describe the three-dimensional figure that can be made from the given net.
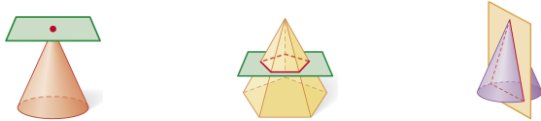
Cross Sections

A **cross section** is the intersection of a three-dimensional figure and a plane.
Describe the cross section.

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