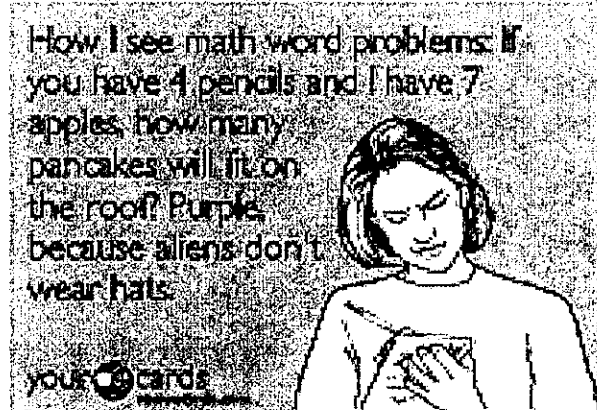


Name: KEY!

Hour: _____

Chapter 10

3D Figures



Lesson 10-1: Solid Geometry

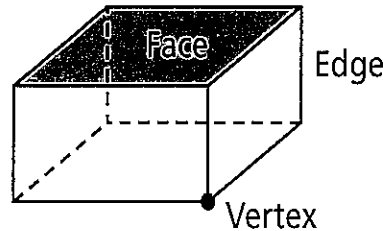
Vocabulary

Face: flat surface of a 3D figure

Edge: line of a 3D figure (where 2 faces meet)

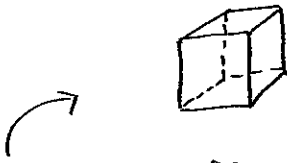
Vertex: corner of a 3D figure, where 3 or more faces meet.

Example:



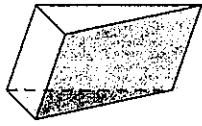
Three-Dimensional (3D) Figures

Name	Description	Picture
Prism	3D figure w/ 2 bases in the shape of a polygon, & rectangles connecting them	
Cylinder	3D figure w/ 2 circular bases, & a rectangle connecting them	
Pyramid	3D figure w/ 1 base in the shape of a polygon, & it comes to a point (vertex)	
Cone	3D figure w/ 1 circular base & it comes to a point (vertex)	

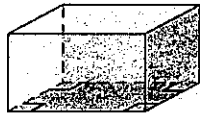


Cube: a prism w/ all equal sides & faces
(each side is a square)

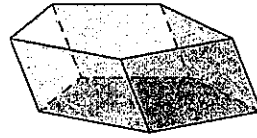
Other prisms and pyramids are named for the shape of their base...



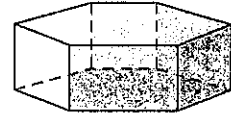
triangular prism



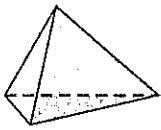
rectangular prism



pentagonal prism



hexagonal prism



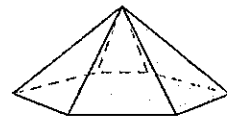
triangular pyramid



rectangular pyramid



pentagonal pyramid

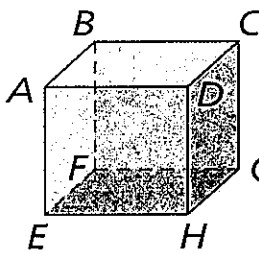


hexagonal pyramid

Practice

Classify the figure. Then, name the vertices, edges, and bases of the figure.

1.



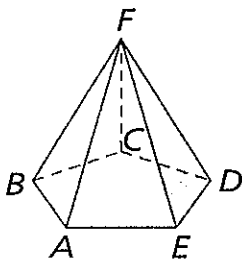
Name: cube

Vertices: A, B, C, D, E, F, G, H

Edges: $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DA}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{EH}, \overline{AE}, \overline{BF}, \overline{DH}, \overline{CG}$

Bases: ABCD & EFGH

2.



Name: pentagonal pyramid

Vertices: A, B, C, D, E, F

Edges: $\overline{BF}, \overline{AF}, \overline{EF}, \overline{DF}, \overline{CF}, \overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{AE}$

Bases: ABCDE

3.



Name: cone

Vertices: N, M

Edges: none

Bases: $\odot M$

4.



Name: triangular prism

Vertices: W, X, Y, V, U, T

Edges: \overline{TW} , \overline{UX} , \overline{VY} , \overline{WX} , \overline{XY} , \overline{WY} , \overline{TU} , \overline{UV} , \overline{TV}

Bases: $\triangle WXY$ & $\triangle TUV$

Lesson 10-1 Continued...

Vocabulary

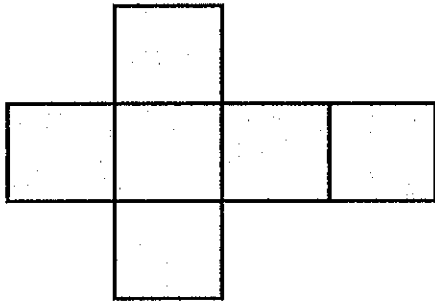
Net: a 2D surface that can be folded into a 3D figure

Cross Section: "slicing" a 3D figure
↳ "karate chop"

Practice

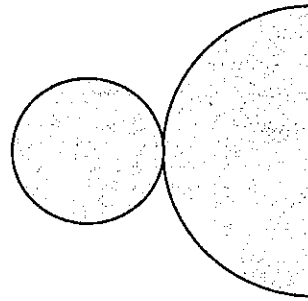
Name the three-dimensional figure that can be formed from the following net.

1.



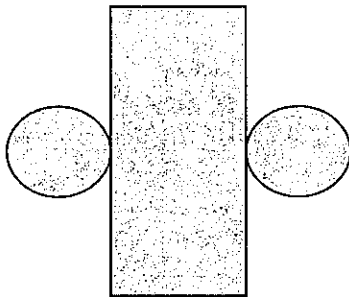
cube

2.



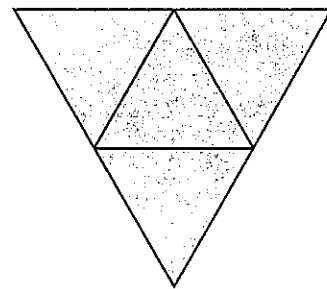
cone

3.



cylinder

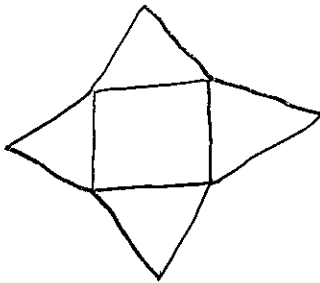
4.



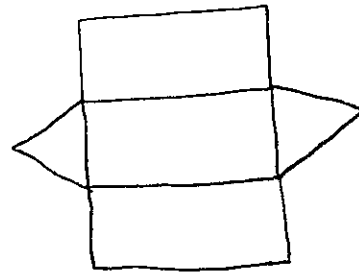
triangular
pyramid

Draw the net for the following 3D figure.

5. Square pyramid

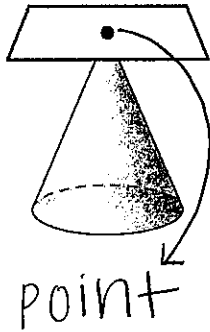


6. Triangular prism

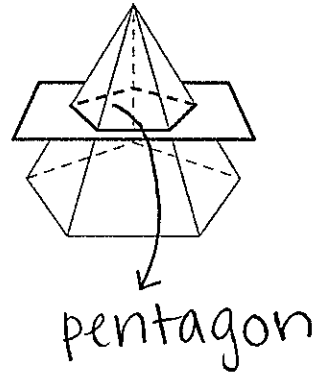


Describe the cross section.

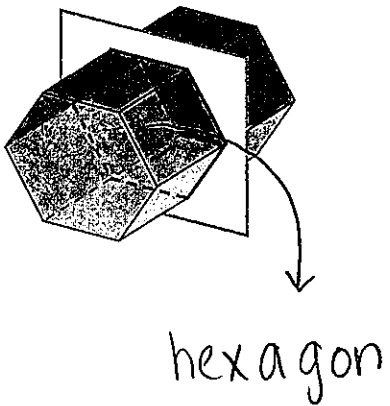
7.



8.



9.



10.

