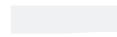


NAME: _____



Activity One



1a) Write the formula for finding the area of a square or rectangle.

b) Find the area for the square.



c) Find the area for the rectangle.



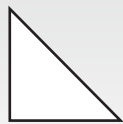
d) Draw the missing half of the shapes below to make each shape symmetrical.



e) Transform each shape.



Turn



Flip



Slide

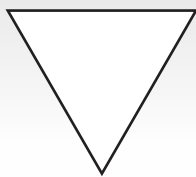


Turn

f) Resize each shape.



Larger



Smaller



Smaller

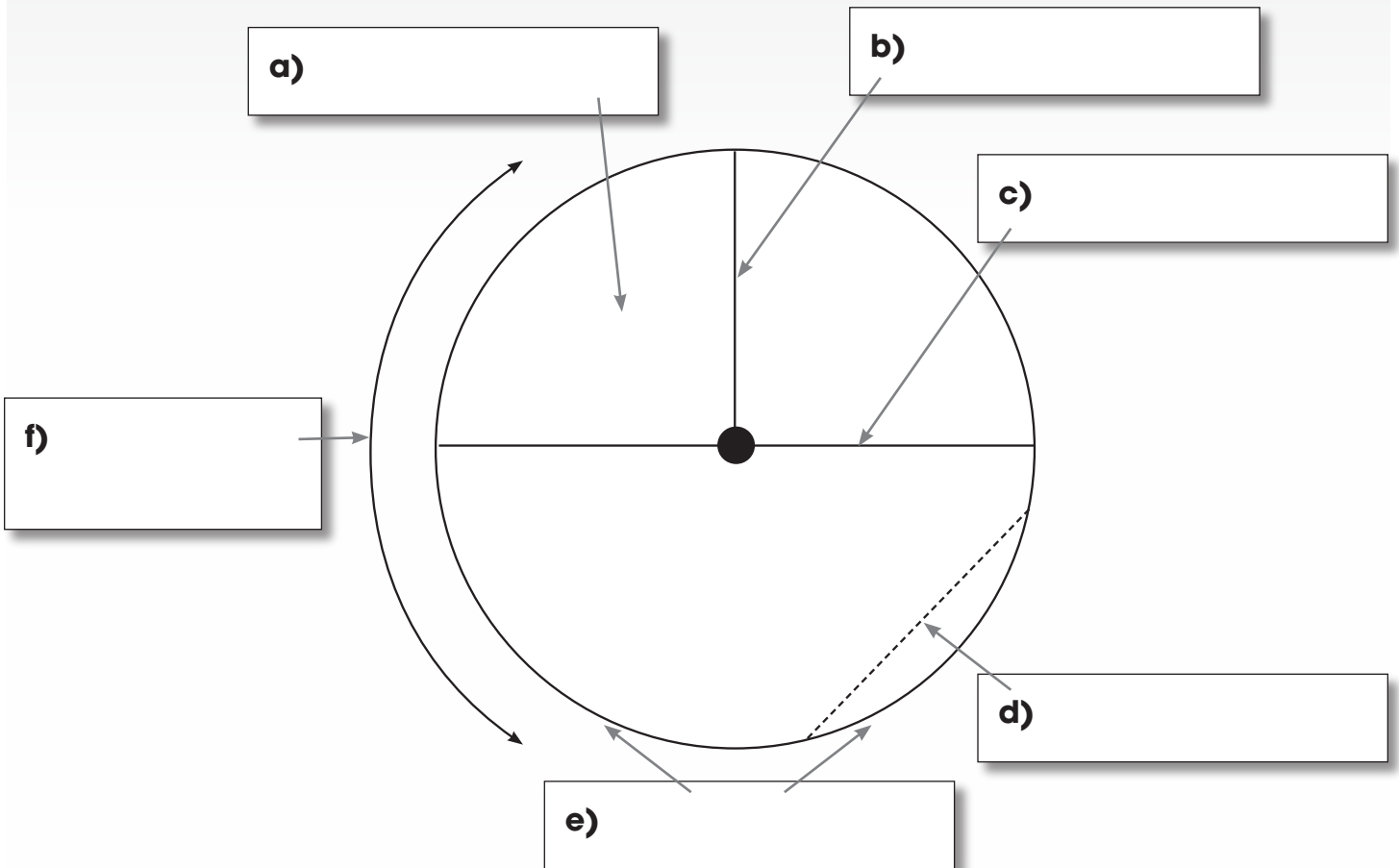


Activity Two

- 2)
- **Radius:** the distance from the center of the circle to the edge
 - **Circumference:** the distance around the circle
 - **Diameter:** starts at one side, goes through the center, and ends at the other side (The diameter is twice the radius.)
 - **Chord:** a line that goes from one point to another point on the circle's circumference
 - **Arc:** a part of the circumference
 - **Quadrant:** $\frac{1}{4}$ of the circle

Label the parts of the circle below using the words from the list.

Arc	Chord	Circumference	Diameter	Quadrant	Radius
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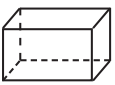







Activity Three

- 3) **Face:** a flat surface on a geometric solid
Edge: the line where two faces come together
Vertex (vertices): a point or corner on a shape where several faces (and edges) meet

Fill out the chart below with the correct data.

Shape		Faces	Edges	Vertices
Sphere				
Cone				
Cylinder				
Rectangular Prism				
Triangular Pyramid				
Cube				
Rectangular Pyramid				

Answer the questions below using the information in the chart above.

- a) Which two shapes have the same numbers of faces, edges, and vertices?

- b) Which shapes have at least one triangular face?

- c) Which shapes have at least one circular face?

- d) Which shapes do not have any edges or vertices?

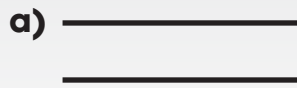
- e) Which shape does not have a face?



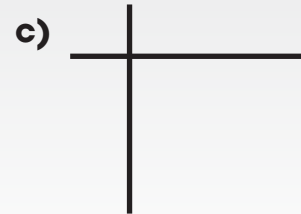
Activity Four

- 4) Parallel Lines:** two lines that never intersect and are the same distance apart
Perpendicular Lines: two lines that intersect and form a right angle (90 degrees) where they cross each other

Identify each pair of lines as either **parallel** or **perpendicular**.

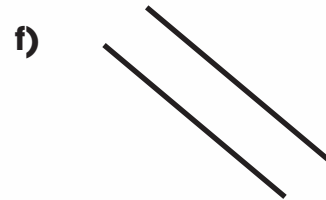




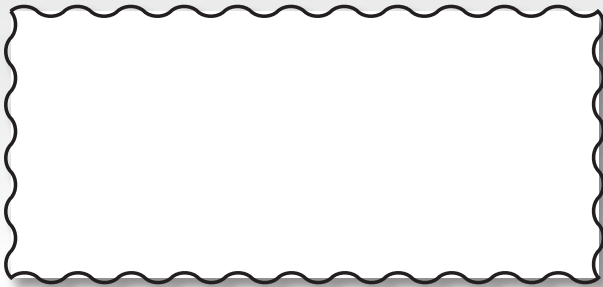




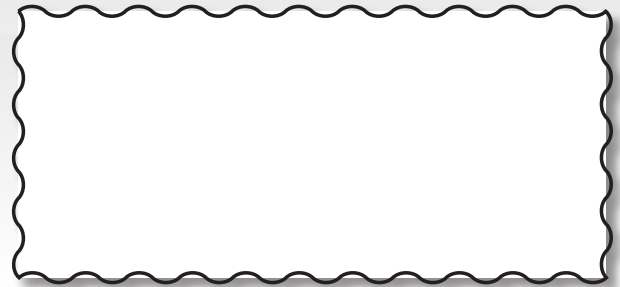




- g) Draw a pair of parallel lines.



- h) Draw a pair of perpendicular lines.



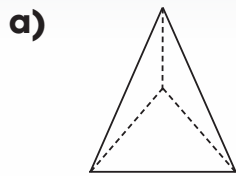
- i) Explain the difference between parallel lines and perpendicular lines.

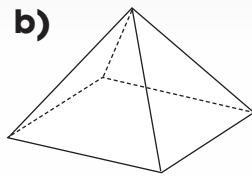


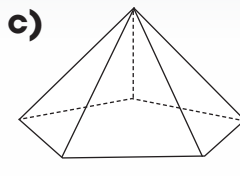
Activity Five

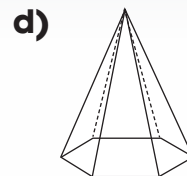
5) A pyramid is named after its base. Label each type of pyramid using the words in the box.

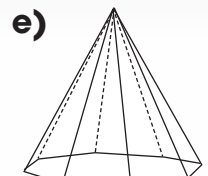
Hexagonal Pentagonal Octagonal Rectangular Triangular



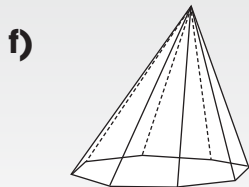


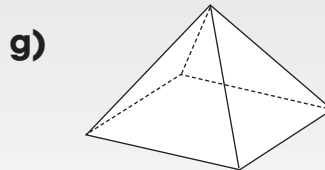


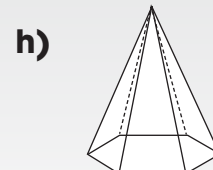


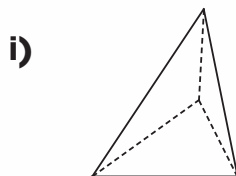


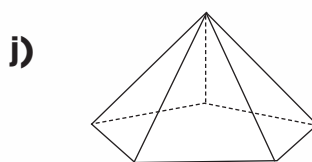
A pyramid can be **regular** or **irregular**. If the pyramid is made with a regular polygon (all sides the same length) then it is a regular pyramid. Label each type of pyramid as **regular** or **irregular**.

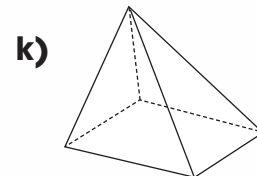










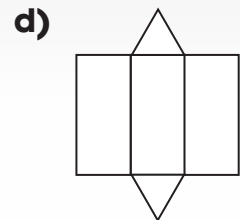
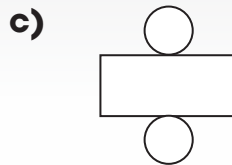
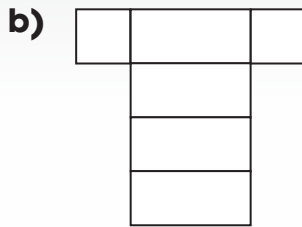
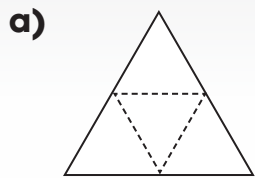


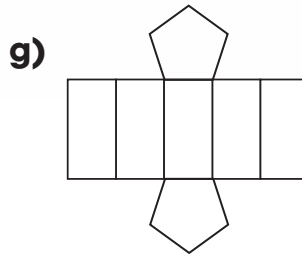
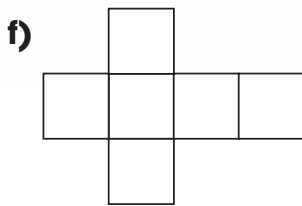
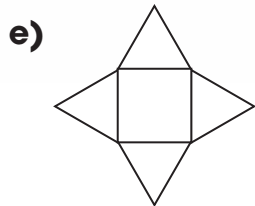


Activity Six

6) Look at each pattern below. Match the geometric solid from the word list to the pattern that will construct it.

Triangular Prism	Cube	Pentagonal Prism	Rectangular Prism
Cylinder	Rectangular Pyramid	Cone	Triangular Pyramid





Make a pattern for a pentagonal pyramid. Trace the pattern onto another piece of paper, cut the pattern out, and use tape to assemble it. Did the pattern make a pentagonal pyramid?

1.

a) length x width = square units

b) 25 square units

c) 18 square units

d) The drawn half of the shape should be symmetrical to the original.

e) Each shape should be turned, flipped or slid.

f) Each shape should be bigger or smaller.

1A

2A

2.

a) Quadrant

b) Radius

c) Diameter

d) Chord

e) Arc

f) Circumference

3A

3.

Shape	Faces	Edges	Vertices
Sphere	0	0	0
Cone	1	0	0
Cylinder	2	0	0
Rectangular Prism	6	12	8
Triangular Pyramid	4	6	4
Cube	6	12	8
Rectangular Pyramid	5	8	5

a) Cube and Rectangular Prism

b) Rectangular Pyramid and Triangular Pyramid

c) Cone and Cylinder

d) Sphere, Cone and Cylinder

e) Sphere

4A

4.

a) Parallel

b) Parallel

c) Perpendicular

d) Parallel

e) Perpendicular

f) Parallel

g) Parallel lines should run beside each other.

h) Perpendicular lines should intersect, forming a right angle.

i) Answers may vary. Possible answers include: Parallel lines do not cross each other; perpendicular lines do cross each other.

5A

5.

a) Triangular Pyramid

b) Rectangular Pyramid

c) Pentagonal Pyramid

d) Hexagonal Pyramid

e) Octagonal Pyramid

f) Irregular

g) Regular

h) Regular

i) Irregular

j) Regular

k) Irregular

6A

6.

a) Triangular Pyramid

b) Rectangular Prism

c) Cylinder

d) Triangular Prism

e) Rectangular Pyramid

f) Cube

g) Pentagonal Prism

h) Cone

