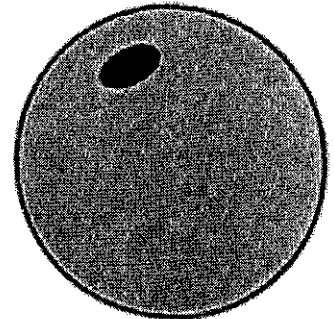
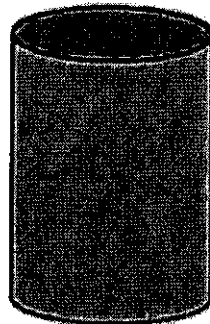
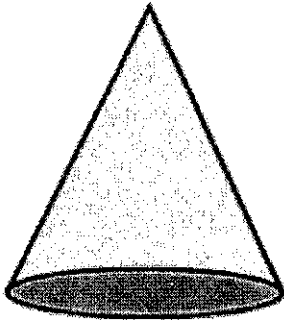


Name

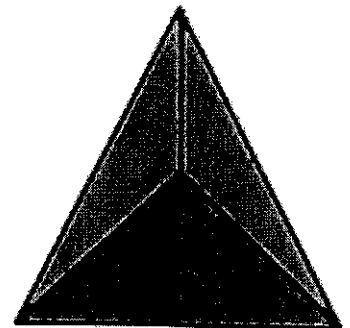
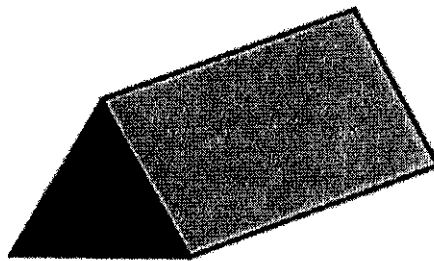
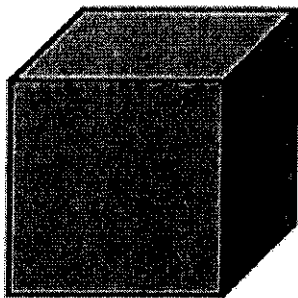
Date



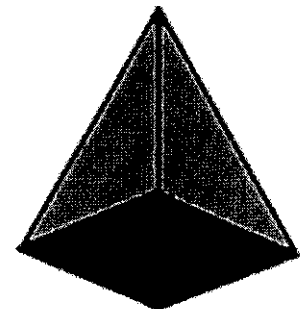
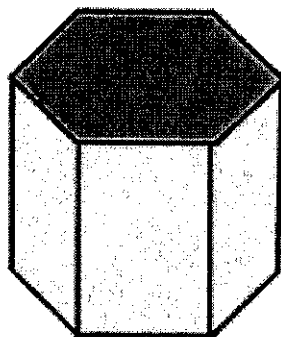
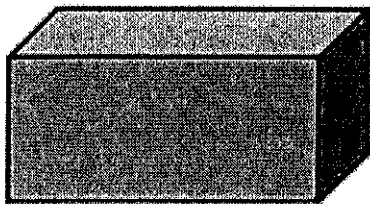
3D SHAPE SHEET



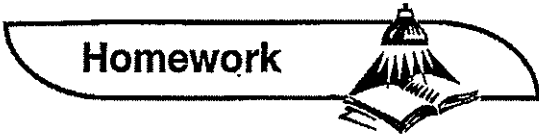
cone cylinder sphere



cube triangular prism triangular based pyramid



rectangular prism hexagonal prism square based pyramid



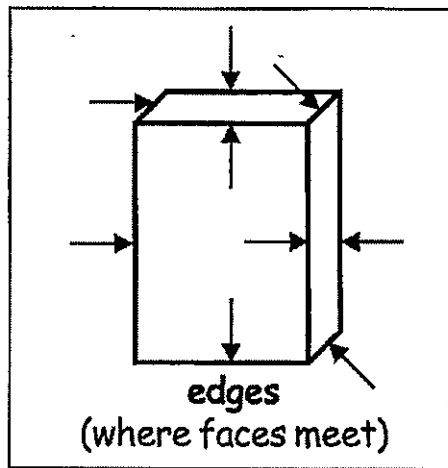
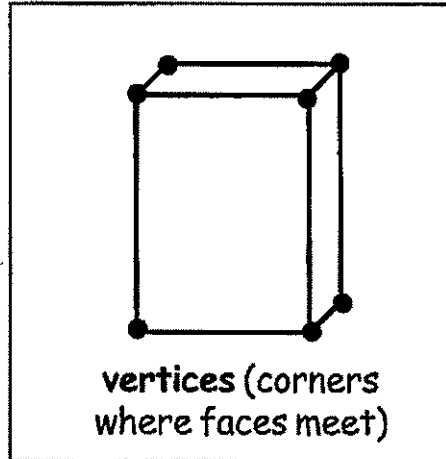
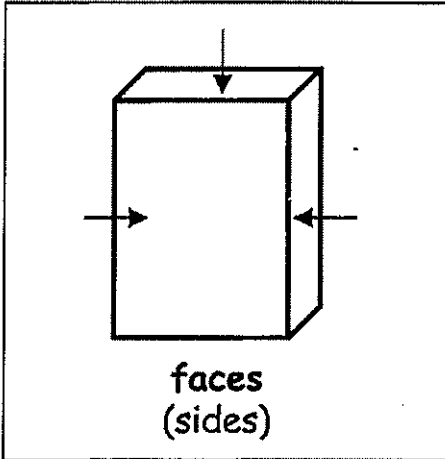
Homework

Name: _____

Learning Outcome (SO 22): Identify and count faces, vertices and edges of 3-D objects.
Real World Application: We need to know the characteristics of objects so we can determine how to package them, know the best way to store and stack containers, know how to reproduce objects, and know which objects will fit into a hole, such as keys and plugs.

Activity 1

Find a cereal box in your kitchen. Use the pictures below to help you find the faces, vertices, and edges of the box.



Homework



1. Record the number of faces, edges and vertices on this chart.

	Faces	Edges	Vertices
Cereal box (rectangular prism)			

2. Complete the chart using the solids on the next pages (build them first).

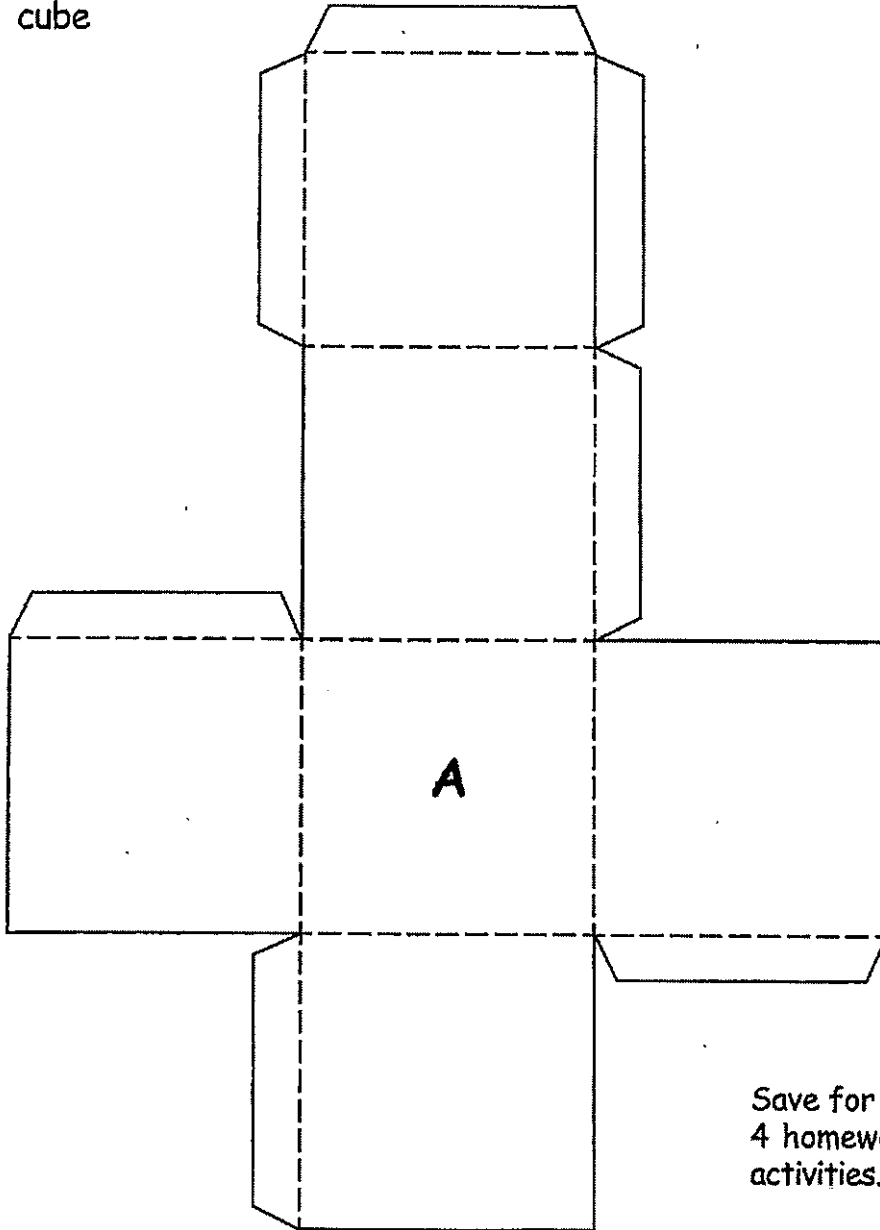
Solid	Number of faces or surfaces	Number of edges	Number of vertices
A			
B			
C			
D			
E			
F			
G			

Homework




3. With adult help, cut out the nets on the next 7 pages and make into 3-D objects by folding and taping.

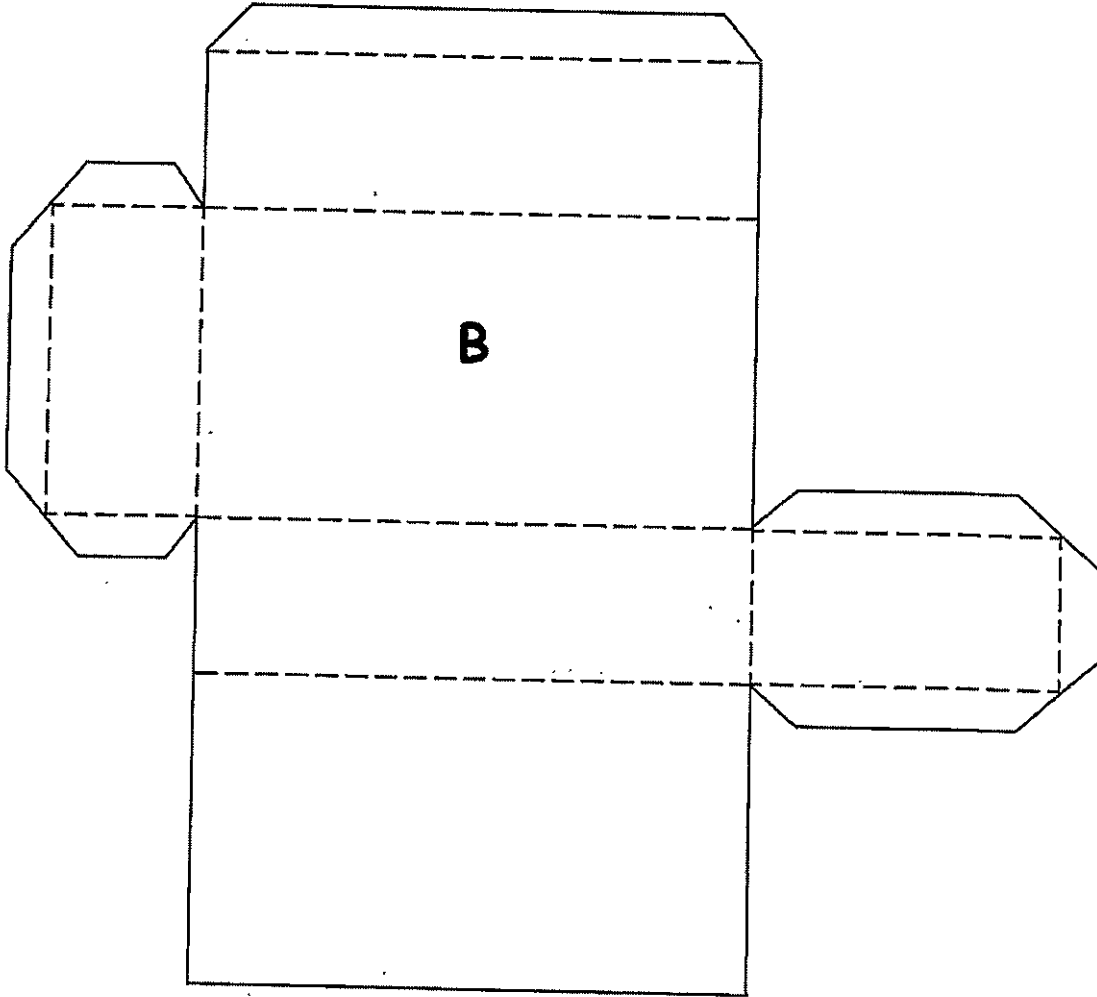
A cube



Save for the next
4 homework
activities.


Homework 

B rectangular prism

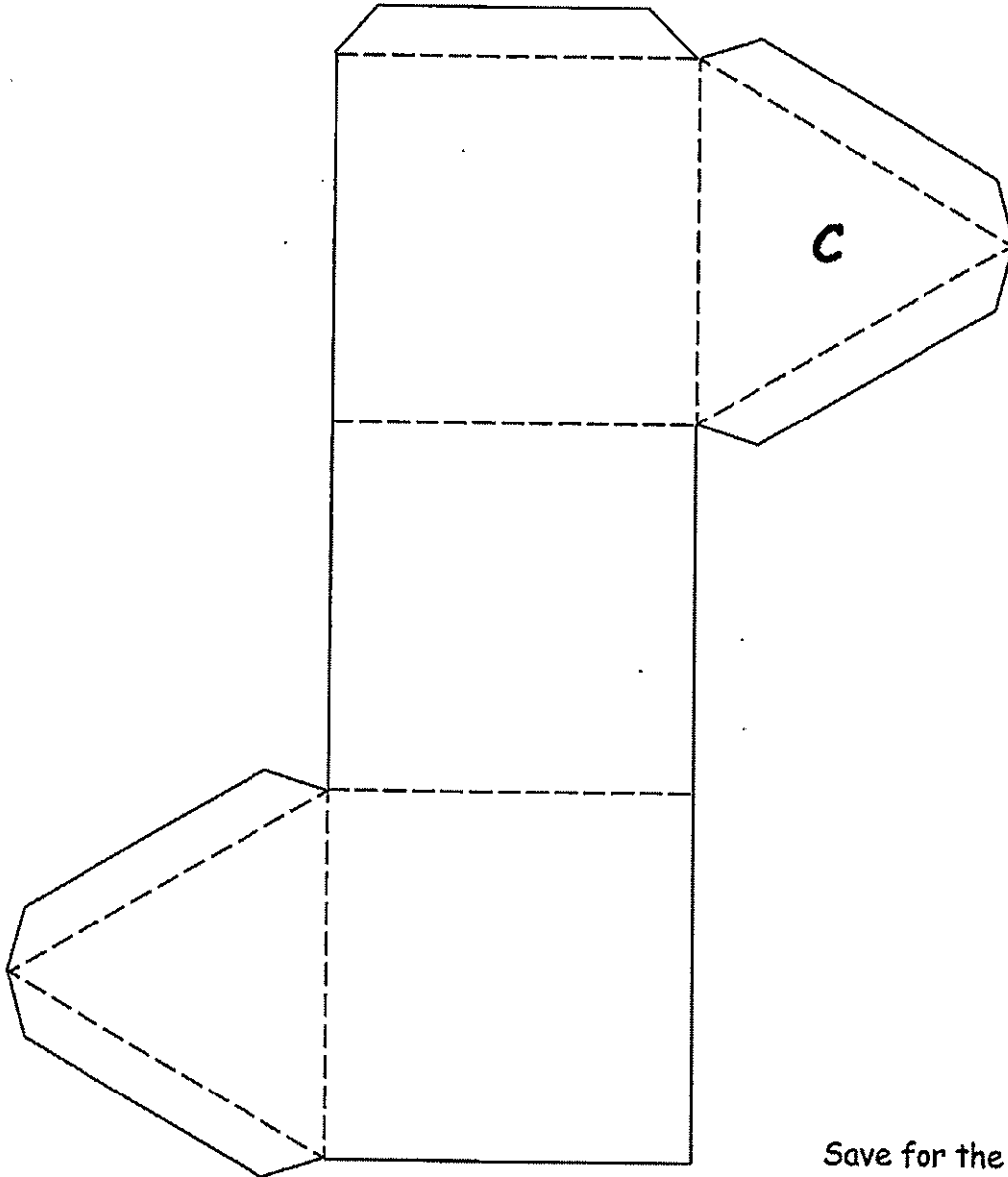


Save for the next
4 homework
activities.



Homework 

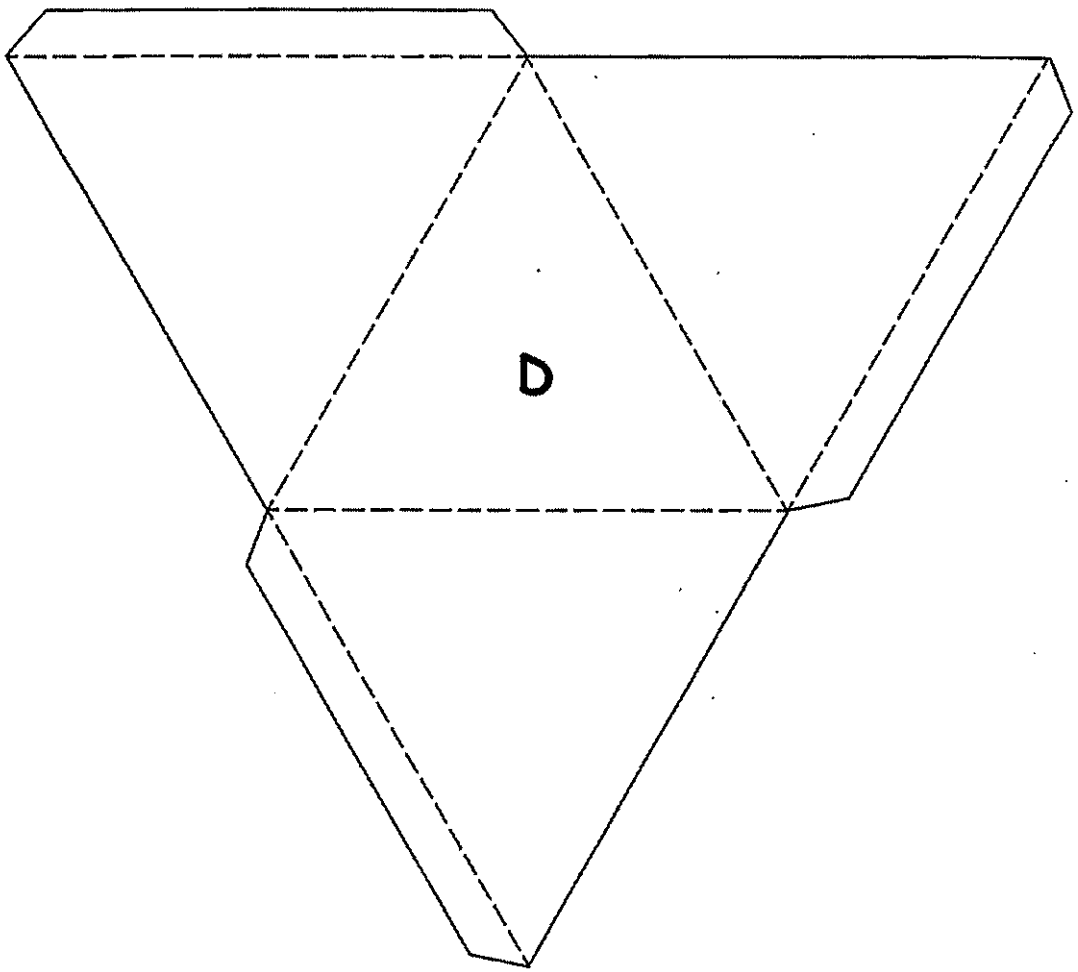
C triangular prism



Save for the next
4 homework
activities.

Homework 

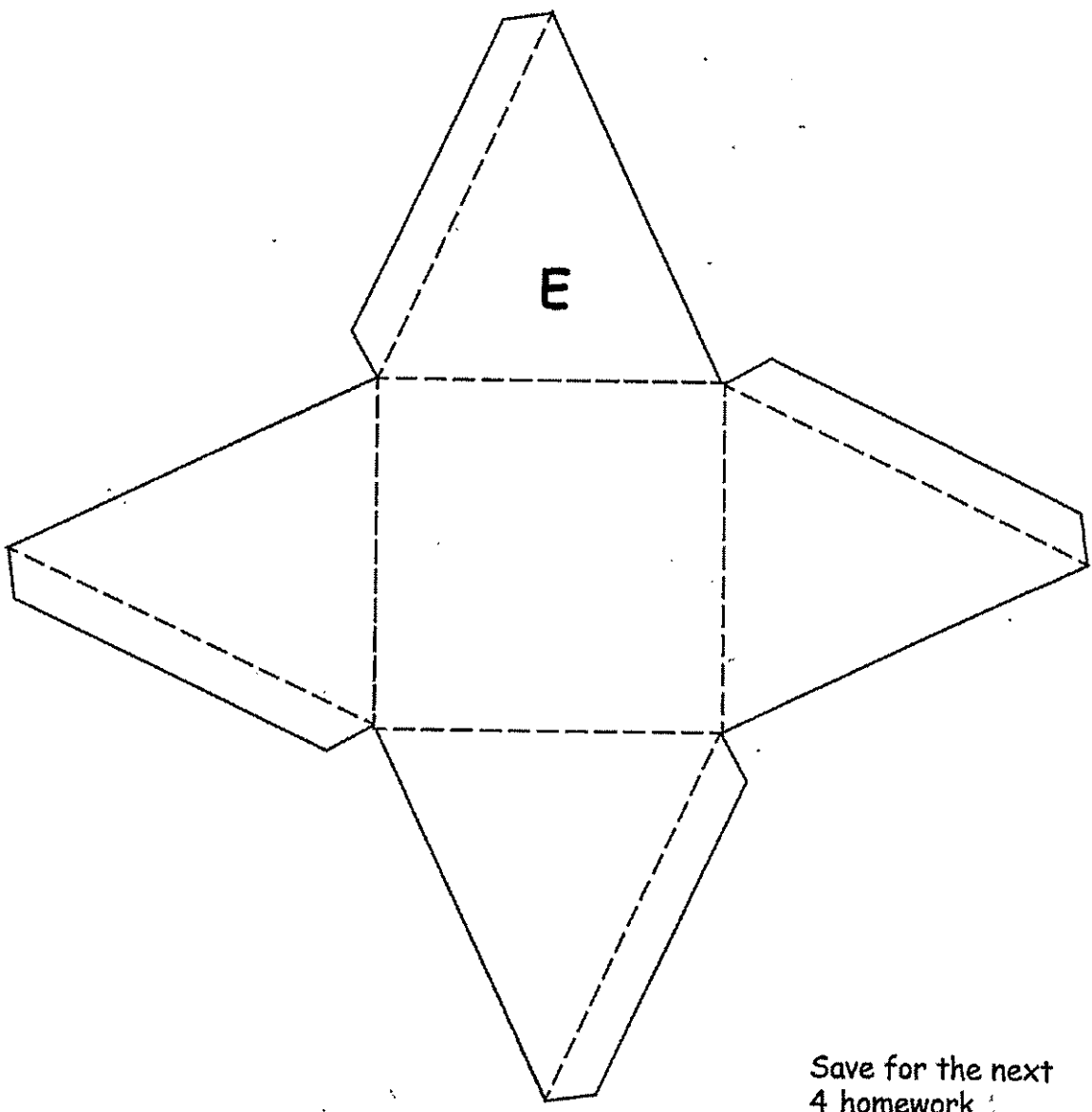
D triangular pyramid



Save for the next
4 homework
activities.

Homework 

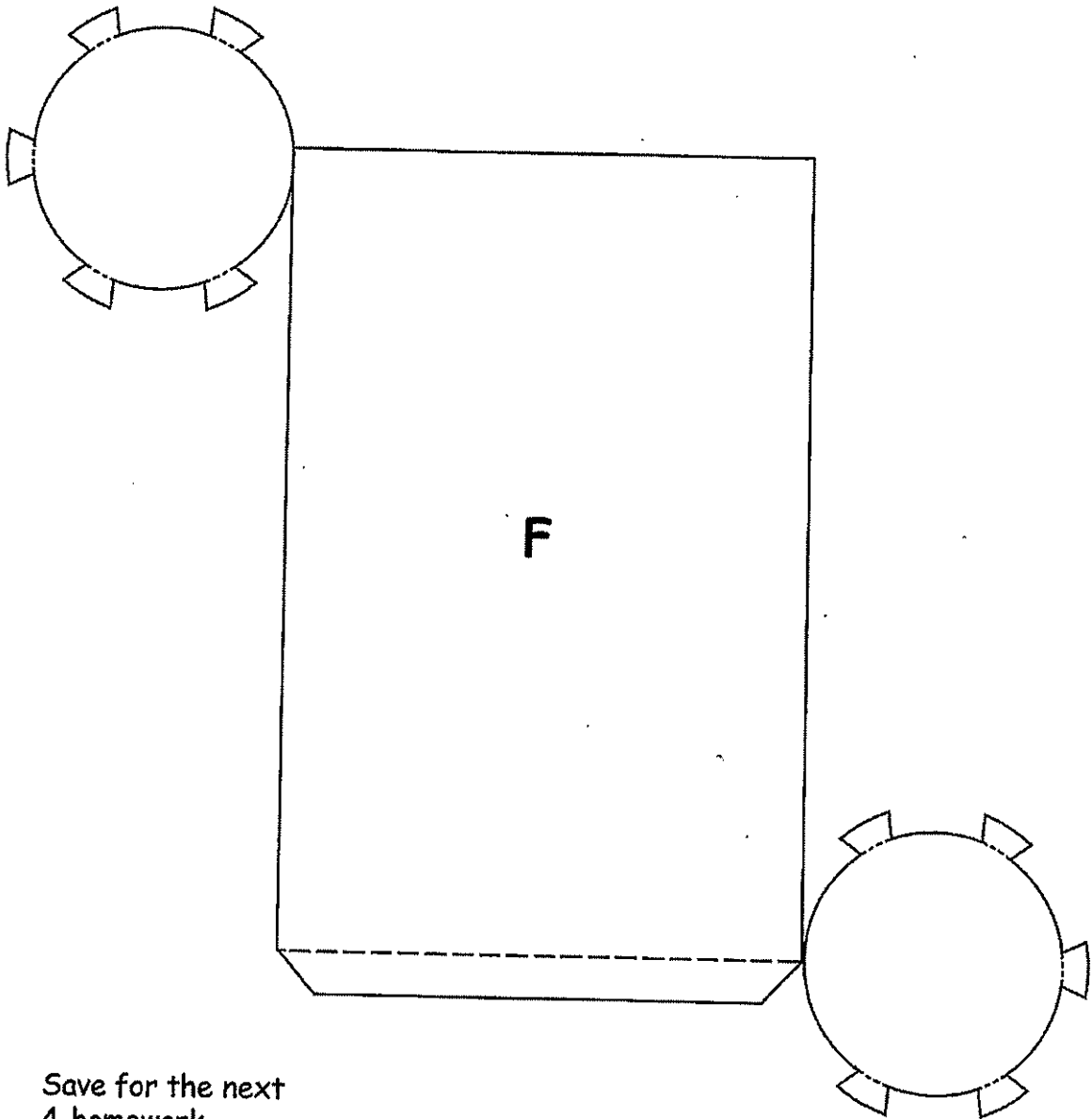
E square pyramid




Save for the next
4 homework
activities.

Homework 

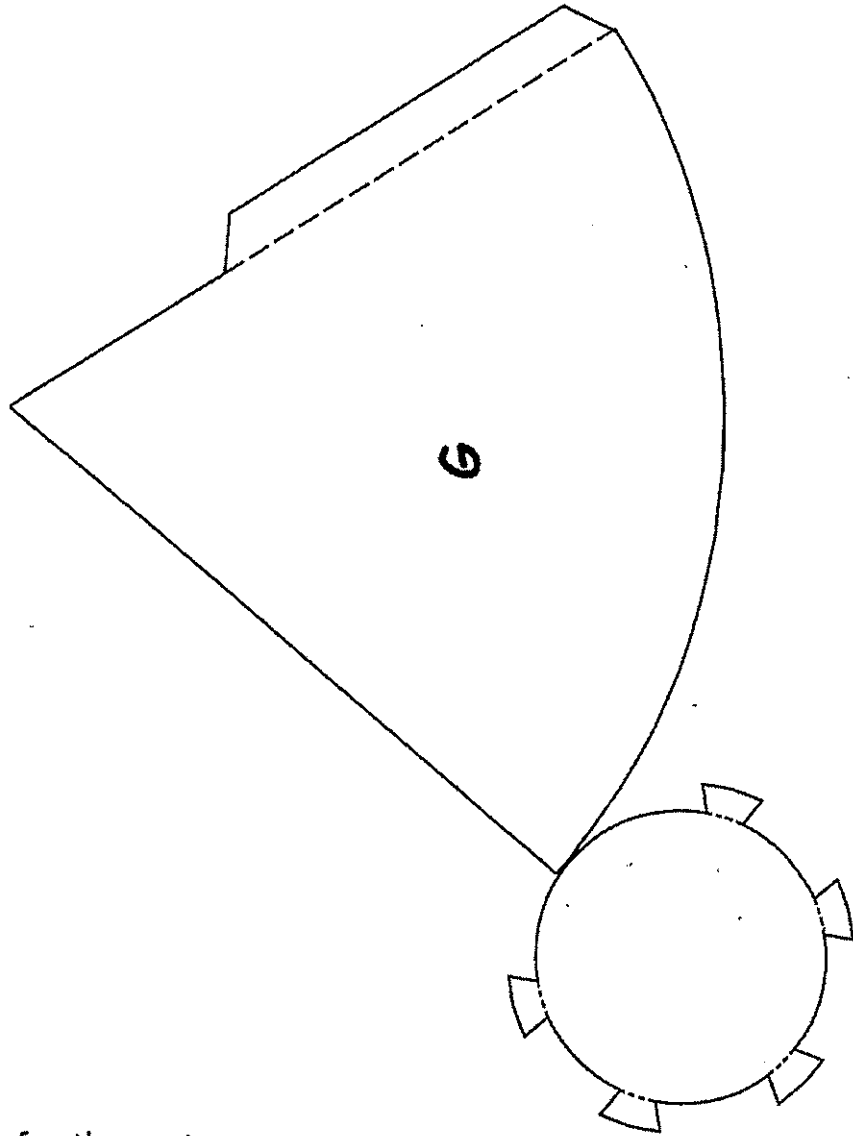
F cylinder



Save for the next
4 homework
activities.

Homework 

G cone



Save for the next
4 homework
activities.

Homework



Name: _____

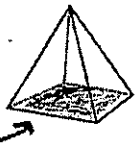
Learning Outcome (SO 24): Describe and name pyramids and prisms by the shape of the base.

Real World Application: In order to calculate surface area and volume, a person must recognize and name the shape of a solid's base and identify the shapes of the faces.

Activity 3

Example

This solid is a pyramid because all the edges meet at a vertex. It can also be named a square pyramid because of the base shape.



Use the solids you built in lesson one to help you to complete this table.

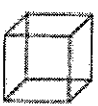





Solid	Number of bases	Shape of base(s)	Name
A			
B			
C			
D			
E			
F			
G			

Name: _____

GOING ON A SHAPE HUNT

Look around your home for objects that have a three-dimensional shape.

Write or draw them below.

cube	sphere	rectangular prism	pyramid	cone	cylinder
					

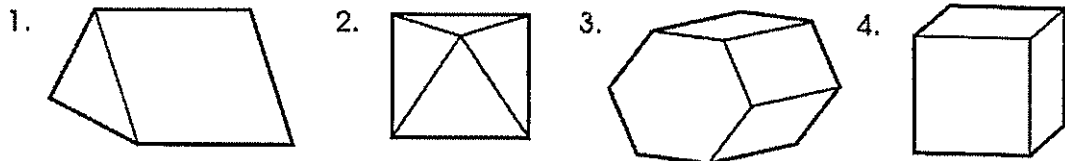
Unit 11
Lesson 4 Exploring 3-D Objects

GOAL Explore and describe 3-D objects.

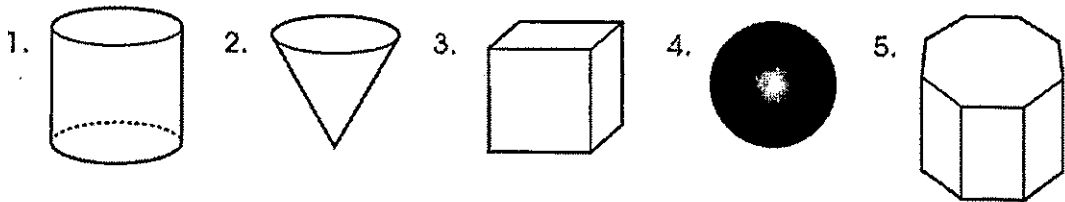


Take a variety of different-coloured pencil crayons. Use your knowledge of 3-D objects to answer the following questions.

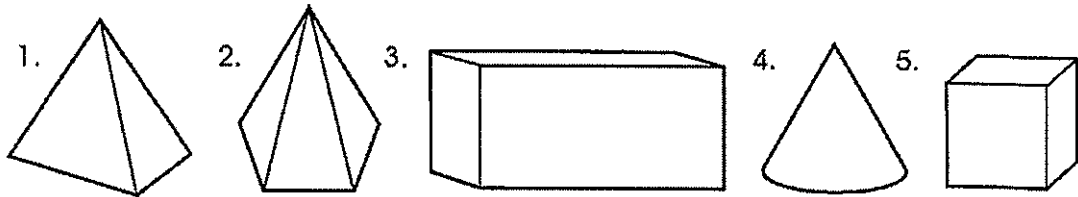
A. Fill in each face you see with a different colour.



B. Outline each edge you see. You only need to use one colour.



C. Mark each vertex you see with a coloured dot. You only need to use one colour.



Unit 11
Lesson 5

Identifying Faces of 3-D Objects

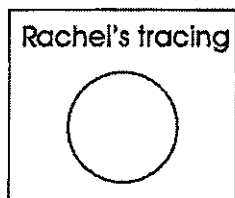


Recognize and count the faces of 3-D objects.

You will need

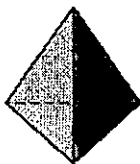
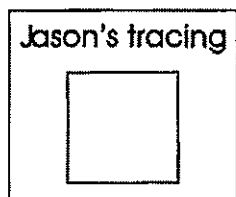
- 3-D models
- a tissue box
- a Rubik's cube
- a soup can

1. a) Rachel chose a model and traced one of the faces.
Circle the object below that she chose.



How do you know that is the shape that Rachel chose?

- b) Jason chose a model and traced one of the faces.
Circle the object below that he chose.













How do you know that is the shape that Jason chose?

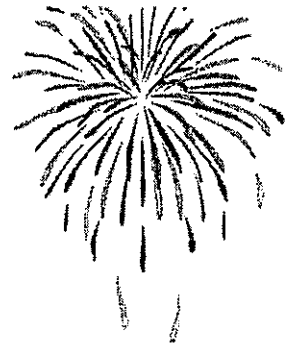
Unit 11
Lesson 6

Counting Edges and Vertices of 3-D Objects

GOAL Identify and count the number of edges and vertices of 3-D objects.

1. Complete the chart.

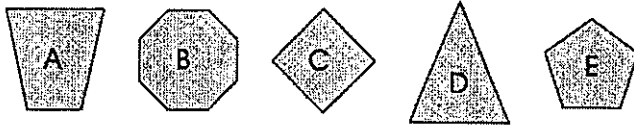
3-D object	Number of faces	Number of vertices	Number of edges
cube A 			
prism B 			
pyramid C 			
prism D 			
pyramid E 			
prism F 			
cylinder G 			
pyramid H 			
cone I 			
sphere J 			



Follows Student Book page 272

Lesson 1

1. a) Sort these polygons into the groups below.



Shapes with 4 sides or less: _____

Shapes with more than 4 sides: _____

b) Draw a different shape that would belong in each group.

Lesson 2

2. Here are 4 cookie-cutter shapes and the cookies they made.



a) Which cookie shapes have the same number of sides?



How many sides do they have? _____

b) Draw lines to match the cookies with their cookie cutters.

Lesson 3

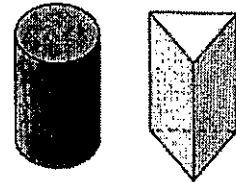
3. Put these shapes in order so they make a pattern using this pattern rule: Start with a 12-sided polygon and decrease the number of sides by 2 each time.

Write the letters of the shapes in order. _____



Lesson 4

4. a) How are these 3-D objects the same?

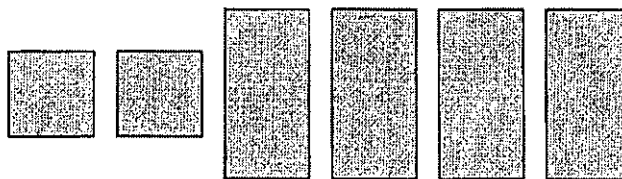


- b) How are these 3-D objects different?

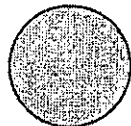
Lesson 5

5. Name the 3-D object that has only these faces.

a)


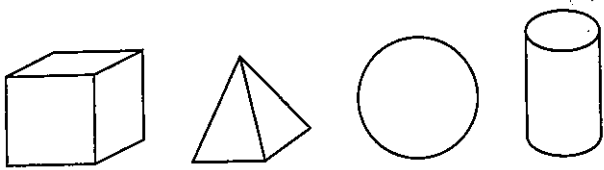


b)



Name: _____ Date: _____

Chapter 11: 2-D and 3-D Geometry Page 1

<p>These are 2-D shapes.</p> 	<p>These are 3-D objects.</p> 
--	--

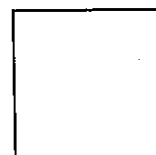
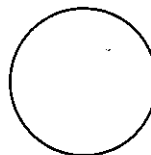
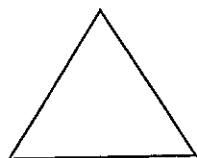
1. Match each shape with its name.

circle

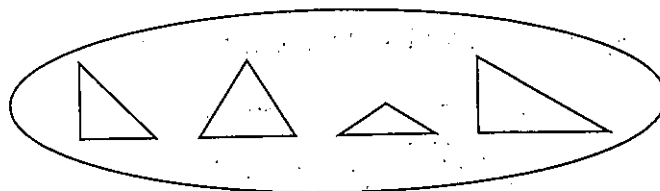
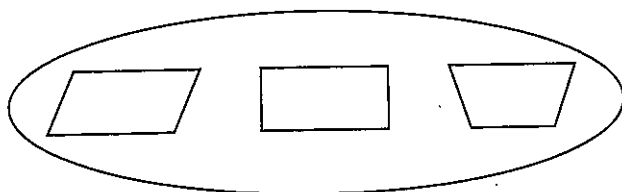
triangle

square

rectangle

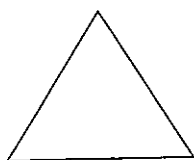


2. Gavin sorted shapes into 2 groups.

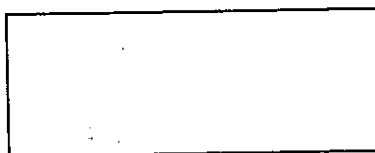


Explain Gavin's sorting rule. _____

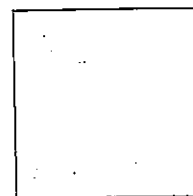
3. Write the number of sides of each shape.



_____ sides



_____ sides

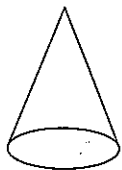


_____ sides

Chapter 11: 2-D and 3-D Geometry Page 2

4. Match each 3-D object with its name.

ball or sphere



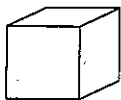
can



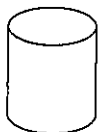
box or cube



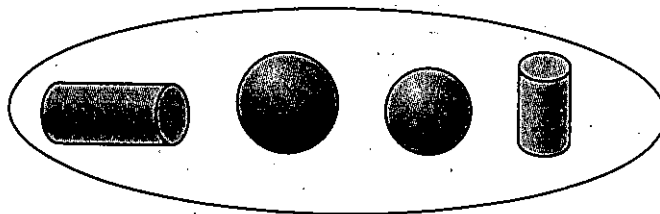
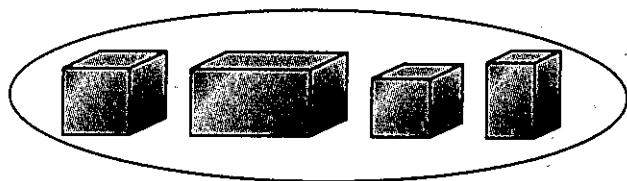
cone



pyramid



5. Nicole sorted objects into 2 groups.



Explain Nicole's sorting rule. _____

