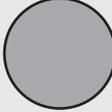
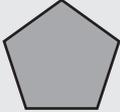


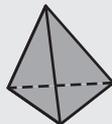
Learn About

Using Geometry: Plane Figures and Solid Figures

Plane figures are flat. Five kinds of plane figures are shown here.

Plane Figures				
Circle  0 sides 0 angles	Triangle  3 sides 3 angles	Square  4 equal sides 4 right angles	Rectangle  2 pairs of equal sides 4 right angles	Pentagon  5 sides 5 angles

Solid figures are *not* flat. The sides on a solid figure are called **faces**.
Two faces meet at an **edge**.

Solid Figures					
Triangular Pyramid  4 faces 6 edges	Sphere  0 faces 0 edges	Cylinder  2 faces 0 edges	Cube  6 square faces 12 edges	Rectangular Prism  6 faces 12 edges	Triangular Prism  5 faces 9 edges

Name the figures shown. Which is a plane figure?
Which is a solid figure?



The figures are a **pentagon** and a **cylinder**. The pentagon is a plane figure. The cylinder is a solid figure.



Plane figures are flat. **Solid figures** are *not* flat. The sides on a solid figure are called **faces**. Two faces meet at an **edge**.

*Look at the answer choices for each question.
Read why each answer choice is correct or
not correct.*

1. Aaron's new toy chest is in the shape of what figure?

Ⓐ rectangle

This is not correct. The toy chest is a solid figure. A rectangle is a plane figure. The toy chest is in the shape of a rectangular prism, not a rectangle.

Ⓑ rectangular pyramid

This is not correct. A rectangular pyramid has a rectangular base and 4 triangular faces. This figure has 6 rectangular faces, so it is a rectangular prism.

Ⓒ cylinder

This is not correct. A cylinder has 2 circular faces and 0 edges. This figure has 6 rectangular faces and 12 edges, so it is a rectangular prism.

● rectangular prism

This is correct. The toy chest is a solid figure. It has 6 rectangular faces and 12 edges. It is in the shape of a rectangular prism.

2. What is the area of the base of the toy chest?

Ⓐ 1 square metre

This answer is not correct. The area of the base of the toy chest is found by multiplying the length by the width.
 $2 \times 1 = 2 \text{ m}^2$, not 1 m^2 .

● 2 square metres

This answer is correct. The area of the base of the toy chest is found by multiplying the length by the width.
 $2 \times 1 = 2 \text{ m}^2$.

Ⓒ 6 square metres

This answer is not correct. The area of the base of the toy chest is found by multiplying the length by the width, not by adding together the lengths of each side.
 $2 \times 1 = 2 \text{ m}^2$, not
 $2 + 2 + 1 + 1 = 6 \text{ m}^2$.

Ⓓ 8 square metres

This answer is not correct. The area of the base of the toy chest is found by multiplying the length by the width.
 $2 \times 1 = 2 \text{ m}^2$, not 8 m^2 .

Lesson

4

*Read the passage.
Then do Numbers 1–5.*

Flower Power

Nadine and her classmates made a flower garden at their school. People gave them flower seeds, spades and rakes. The students cleared a rectangular section of land. Then they planted seeds in different parts of the garden. They watered the soil and waited. Soon, plants began to grow. Each time Nadine passes the garden, she smiles because she helped make it.



1. The flower garden is eight metres wide and ten metres long. What is the area of the garden?

- Ⓐ 18 square metres
- Ⓑ 36 square metres
- Ⓒ 80 square metres
- Ⓓ 100 square metres

2. The students put a fence around the edges of the garden. How many metres of fencing did they use?

- Ⓐ 80 metres
- Ⓑ 36 metres
- Ⓒ 26 metres
- Ⓓ 18 metres

Lesson 19

*Read the passage.
Then do Numbers 1–5.*

Celebration Quilt

Britt and her grandmother are making a celebration quilt. Last week, they cut squares from rolls of fabric. This week, they are sewing symbols on the squares. Each symbol stands for a family celebration. For example, a wedding ring stands for the day Britt's mum and dad were married. A baby bottle stands for the day that Britt was born. Britt and her grandmother are having fun making this quilt.



1. Britt's grandmother bought a large piece of chequered cloth for the quilt. The cloth was 1.5 metres wide and 4 metres long. How much chequered cloth did she buy?

- Ⓐ 3 square metres
- Ⓑ 3.5 square metres
- Ⓒ 4.5 square metres
- Ⓓ 6 square metres

2. The finished quilt will be 2 metres wide and 2.5 metres long. Britt will sew lace trim around the edges of the quilt. How much lace does she need?

- Ⓐ 5 metres
- Ⓑ 6.5 metres
- Ⓒ 9 metres
- Ⓓ 10.5 metres

Self-Assessment 3

Lessons 11–15

Answer these questions after you have completed Lessons 11–15. Before you begin, re-read what you wrote in Self-Assessment 2.

FOCUS on Using Geometry, Book D

Name _____ Date _____

1. Rate your work in Lessons 11–15. Circle your answer.

successful

somewhat successful

needs improvement

2. Did any of the questions give you trouble? _____

If so, what kind of trouble did you have?

Is this the same kind of trouble you had in Lessons 6–10? _____

3. Did you find the questions easier or more difficult than those in Lessons 6–10?

Why do you think this is so?

4. Did you meet the goal you set for yourself for Lessons 11–15? _____

Why or why not?

5. What is your goal for Lessons 16–20?

Cut along the dotted line.