

6TH GRADE

BLIZZARD BAGS



MANCHESTER

ELEMENTARY



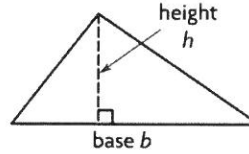
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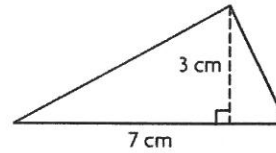
Name _____

Algebra • Area of Triangles

To find the area of a triangle, use the formula
 $A = \frac{1}{2} \times \text{base} \times \text{height}$.



Find the area of the triangle.



Step 1 Write the formula.

$$A = \frac{1}{2} bh$$

Step 2 Rewrite the formula.
 Substitute the base and height measurements for b and h .

$$A = \frac{1}{2} \times 7 \times 3$$

Step 3 Simplify by multiplying.

$$A = \frac{1}{2} \times 21$$

$$A = 10.5$$

Step 4 Use the appropriate units.

$$A = 10.5 \text{ cm}^2$$

Find the area of the triangle.

1.



Write the formula.

$$A = \frac{1}{2} \times \underline{\hspace{2cm}}$$

Substitute for b and h .

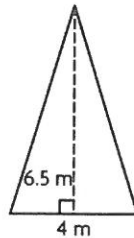
$$A = \frac{1}{2} \times \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$$

Simplify.

$$A = \frac{1}{2} \times \underline{\hspace{2cm}}$$

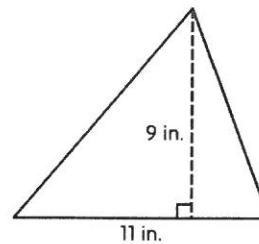
$$A = \underline{\hspace{2cm}} \text{ ft}^2$$

2.



$$A = \underline{\hspace{2cm}}$$

3.



$$A = \underline{\hspace{2cm}}$$

Name _____

Explore Area of Triangles

You can use grid paper to find a relationship between the areas of triangles and rectangles.

Step 1 On grid paper, draw a rectangle with a base of 8 units and a height of 6 units. Find and record the area of the rectangle.

$A =$ _____ 48 square units

Step 2 Cut out the rectangle.

Step 3 Draw a diagonal from the bottom left corner up to the top right corner.

Step 4 Cut the rectangle along the diagonal.

You have made 2 _____ triangles

- Are the triangles congruent? _____ yes
- How does the area of one triangle compare to the area of the rectangle?

The area of the triangle is half the area of the rectangle. _____

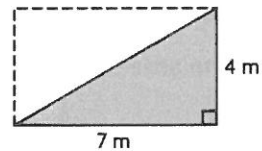
If l is the length and w is the width, you can use a rectangle to find the area of a triangle.

Find the area of the triangle.

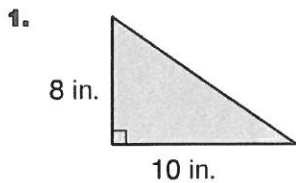
Area of rectangle: $A = lw = 7 \times 4 = 28 \text{ m}^2$

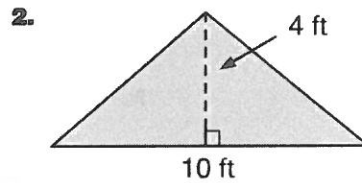
Area of triangle: $A = \frac{1}{2} \times \text{area of rectangle} = \frac{1}{2} \times 28 = 14 \text{ m}^2$

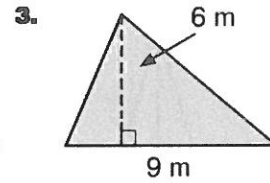
So, the area is 14 square meters.



Find the area of the triangle.









Name _____

Dinosaur Provincial Park

Would you like to visit a park entirely dedicated to dinosaurs? Then you should go to Dinosaur Provincial Park. For dinosaur enthusiasts, it is the park to visit. It is in Alberta, Canada.

In 1884, a scientist went searching for coal and oil deposits. This was in the mostly unexplored lands of western Canada. He found a huge dinosaur skull along the Red Deer River. Scientists realized it was a new dinosaur. They called it the Albertosaurus. Why? It was found near the city of Alberta.

Explorers and scientists soon discovered that the area was a **treasure-trove** of dinosaur remains. A mixture of mud, sand, and minerals had perfectly preserved them. More than 150 complete dinosaur skeletons have

been found there. Thousands of individual bones have been uncovered, too.

In 1955, the Canadian government created Dinosaur Provincial Park. This was done to display many of the skeletons and protect the remaining bones. In some parts of the park, scientists still search for bones. Visitors are not allowed to search for bones and remove them.

The park has displays of many dinosaurs, including the Styracosaurus. Its name means "spiked lizard." It was an eighteen-foot-long, six-foot-high horned species. It weighed 600 pounds. The Albertosaurus was thirty feet long and weighed 4,000 pounds. It walked on two legs.

Check Your Understanding

- From the context of the passage, what is the best meaning of **treasure-trove**?
 - hidden treasure
 - gold deposits
 - worthless junk
 - a dinosaur skull
- From your prior knowledge of dinosaurs and the context of the passage, which well-known dinosaur appears to be a close relative of the Albertosaurus?
 - Brontosaurus
 - Tyrannosaurus rex
 - Iguanodon
 - Triceratops
- Which word refers to a mixture of mud, sand, and minerals?
 - dinosaur
 - sediment
 - riverbed
 - specimen
- Where is Dinosaur Provincial Park located?
 - Mexico
 - the United States
 - Canada
 - California





Name _____

Deer Cave, Malaysia

You probably wouldn't want to visit Deer Cave in Malaysia. The cave is massive—so massive that it can hold more people than the largest football stadium on Earth. However, millions of bats live inside. Each night as dusk falls, hundreds of thousands of bats from twelve different species fly out. They use echolocation to find and devour insects in the Malaysian rain forest. Each bat eats about one-third of an ounce of insects. Altogether, the bats eat about sixteen tons of insects every night! After the bugs are digested, the bats produce about five tons of fresh guano. That's the name for bat waste.

The guano falls to the cave floor. It is the largest pile of bat dung in the world. This dung supplies food to tens of millions of

cockroaches, flies, worms, centipedes, and millipedes. The dung is rich in nutrients. That's why Deer Cave has the biggest population of cockroaches on Earth. There are so many roaches that the cave floor looks like a moving river of roaches. For this reason alone, Deer Cave is not likely to become a tourist attraction any time soon. However, the roaches and other small creatures provide food for millions of spiders, scorpions, and snakes.

Check Your Understanding

- From the context of the passage, which of the following means the same as "guano"?
 - dung
 - manure
 - waste
 - all of the above
- What do bats eat?
 - insects
 - flowers
 - guano
 - snakes
- Which of the following is an opinion and *not* a fact?
 - Bats eat one-third of an ounce of insects every night.
 - Bats produce guano.
 - Bats are interesting creatures.
 - Bats hunt at night.
- What can you infer from the passage?
 - Bats have lived in Deer Cave for a long time.
 - Bats hatch from eggs.
 - People would be comfortable spending time in Deer Cave.
 - both a and c



USE WORDS FROM THE WORD BANKS TO COMPLETE THE VENN DIAGRAM COMPARISON

