Project EduBat presents





Play this fun and educational trivia game!

Two teams compete to correctly answer trivia questions about bats!

HELPFUL HINTS

In baseball:

- A full inning consists of 6 outs (3 for each team)
- A full game consists of 9 innings

For this game we recommend:

- A full inning of 2 outs (1 for each team)
- A full game of 5 innings to keep the game moving at a fun and fast pace.

GAME PLAY:

The first team up to bat is "pitched" a trivia question which is read by the opposing team.

If the player at bat answers correctly, they move to first base and are given another question to answer.

As the "batter" continues to answer **correctly**, move the player piece along the bases progressing until 4 questions have been answered **correctly**: a "home run!"

If the "batter" answers a question **incorrectly**, they are out and now the second team is up to bat.

Continue alternating between teams, one player at a time, until everyone has had a turn.

Have Fun!



Please keep in mind that first and foremost, this is a <u>bat trivia game</u>. We realize that some of you may be troubled by the fact that the rules and terms of this game do not align with the true terminology, rules, gameplay, and scoring of a real baseball game. We've merely applied a simplified baseball aesthetic to a game about bats. We hope you can forgive us!;)



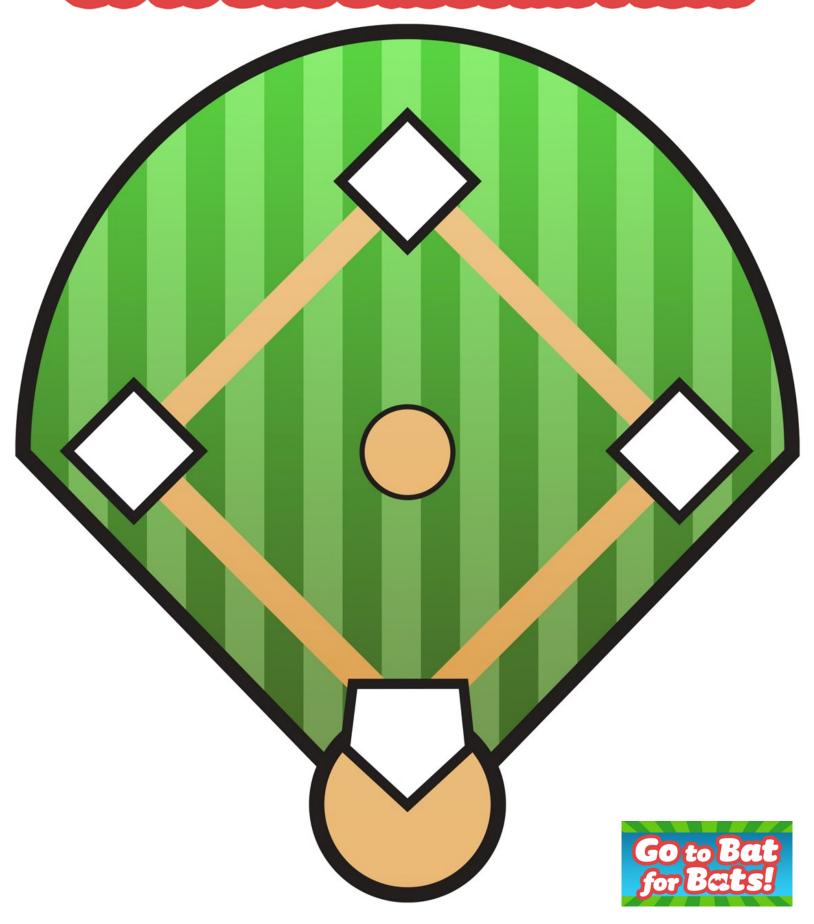
How to Play:

This game works best with exactly 10 players and when played to 5 innings with 1 out per team/player, per inning.

- If you play with less than 10 players, match the number of innings to half the number of players to make sure each player gets at least one turn in the game (i.e. an 8 player game should have 4 innings. A 6 player game should have 3 innings).
- Designate a scorekeeper.
- Assemble your player pieces. Cut out the bases, attaching a coin if you wish for added weight. With the colored square facing down on the table, fold the edge flaps inwards along the dotted lines. Crease the edge firmly, then stand the flaps upwards. Snip each flap along the solid middle black line so that there are notches to insert your player piece. Note: you can also just use a coin as your player piece.
- Cut out a species photo (or custom player piece) and insert it into the notches of the base.
- Come up with a really cool team name.

- Set out the game board. Line up Team A along the left-hand side of the baseball diamond and Team B along the right-hand side.
- Cut out all the cards and shuffle them together fully mixing the screwball cards with the trivia cards.
- Set the cards at the bottom of the baseball diamond.
- Be sure that either the scorekeeper is the designated reader throughout the game or that the opposing team always reads the cards. You don't want to reveal the answers written on them. Multiple choice questions have the correct answer choice highlighted in green.
- During each inning, each team will send a player to bat. The player will have a turn "at bat" to answer questions continuously until batter has either:
 - answered 1 question incorrectly (one out for the team)
 - answered 4 questions correctly (a home run!)
 - answered a screwball
 - incorrectly answering is equivalent to an out
 - correctly answering is equivalent to a "homerun"
- Optionally, you may choose to implement the rule that when a player incorrectly answers (either a standard "pitch" trivia, a screwball card, or both), the opposing team has a chance to answer. If they answer correctly, they gain an additional 1 point that can be added to their inning total.
- Record your points on the scorecard. Add up the points from each inning to get the team total.
- The game ends when you have completed all of the innings.
- Every correctly answered card (base touched) counts as 1 point. A screwball counts as a "homerun" and is therefore worth 4 points.
- The team with the highest score wins!

Go to Bat Baseball Field



Going to Bat Sample Score Card

During each inning both teams will send one player to bat. That player will answer cards continuously until they either answer 4 questions or 1 screwball **CORRECTLY** OR answer 1 question or screwball **INCORRECTLY**. Each right answer is worth 1 point and a screwball is worth 4 points (homerun!).

Team	Inning	Player	Points	Team Total
	1	Antoine	1	
The	2	Brad	0	
Echolocators	3	Aliyah	3	7 9
	4	Hannah	4	
	5	Javier	1	·
	1	Brandí	0	
Muntic	2	Raphael	0	
Myotis Machine	3	María	4	[10]
1 4.1.07107.00	4	Danielle	2	
	5	Symíra	4	

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	1			
	2			
	3			
	4			
	5			·
	1			
	2			
	3			
	4			
	5			

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	5			·
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	2			
	3			
	4			
	5			



Are most bats rabid?

- Yes, 86% of all bats carry rabies Ä
- No, less than half of 1% carry rabies
- Yes, 98% of all bats carry rabies ن
- D. No, only about 40% carry rabies



True or False: If you see a bat on the ground, you should pick it up

Answer: False, you should never handle a wild animal!



True or False: Bats make nests like birds

Answer: False, bats will live in trees, caves, bridges, or even buildings, but they do not build nests



True or False: Bats in the United States eat mostly bugs

Answer: True, they save farmers over 3 billion dollars on pest control in the US annually by eating insects. Many of these insects are serious agricultural or forests pests, and others spread disease to humans or livestock.

Describe the habitat used by the gray bat for raising their young and for hibernation.

caves that are 57° to 80° F (14-27° C). In the winter they have to hibercaves year round. In the summer, they must raise their young in warm Answer: Gray Bats are one of the few North American bats that use nate in cooler caves that stay at 40° to 49° F (4.5-9.5° C).



Bats can be found on every continent except...

- Antarctica
- Africa ω.
- Enrope ن
- D. Australia



<u>True or False</u>: A pregnant Mexican Free-Tailed Bat can eat up to her body weight in insects in one night.

Answer: True, that'd be the same as you eating about 45 large pizzas in one night!

Goto Bat for Bats!

True or False: Most bats drink blood.

Answer: False. Only 3 out of 1,300+ species of bats drink blood, and none of them live in the US.

Goto Bat

True or False: Bats are the world's only flying mammal.

Answer: True, sugar gliders and flying squirrels don't fly, they glide!

Son Beat Si

True or False: Bat wings have the same structure as you hand.

Answer: True. A bat's wing structure is actually a modified hand with elongated finger bones. If you were to have wings like a bat, your fingers would have to be 9-13 feet long.

Goro Bar for Barksi

What species of bat has the longest tongue-to-body ratio?

- A. Mexican free-tailed bat
- B. Lesser long-nosed bat
- C. Tube-lipped nectar bat



What is the name of the disease killing hibernating bats in North America?

- A. White-face Syndrome
- B. White-nosed Syndrome
- C. White-skin Disease



How many species of bats are there?

True or False: Bats are blind.

Answer: False! Bats have eyesight about as good as humans do, and they can echolocate.

C. Less than 300

B. About 500

A. 1,300+

The largest colony of bats in the world is located in:

- A. Austin, Texas
- San Antonio, Texas œ.
- C. Manila, Phillipines
- Sulawesi Island, Indonesia

What is the sense that bats use to hunt?

- A. Taste
- B. Touch

What do flying fox bats eat?

- Bugs
- Fruit
- Fish cن

Which bat is immune to the venom of scorpions?

- A. Mexican free-tailed bat
- Pallid bat
- C. Tricolor bat



What threatened Bracken Cave (home to the largest colony of bats in the world) in 2013?

- A. Someone tried to go into the cave.
- The Mexican Free-tailed bats stopped showing up. <u>ю</u>
- A company wanted to build a neighborhood next door.

Which bat has the worst eyesight?

- **Epauletted Fruit bat** Æ
- Vampire bat
- C. Eastern Red bat

Which of the following items is not eaten by any bat species?

How many babies do most bats have in one year?

- A. Grass
- Bugs <u>а</u>
- Pollen ပ
- Fig <u>۔</u>

Three

ပ

Fi Ke

Ä

One

Mexican Free-Tailed bats

Which species flies the fastest?

- B. Northern Yellow bats
- C. Malaysian Flying foxes

Which bat species is the smallest?

- A. Philippine Pygmy Fruit bat
- Pygmy Long-eared bat <u>а</u>
- **Bumblebee bat** ပ



Which bat species is the biggest?

Which one of these habitat types is not a home for bats?

B. Cracks and holes in trees

A. Caves

Under bridges

ن

- A. African Giant Free-tailed bat
- . Giant Golden-crowned Flying Fox
- C. Giant Ghost-faced bat

Goto Bat

Which of the following is not a real bat?

True or False: Bats help protect walnuts, tomatoes, peppers, cot-

ton, corn, and strawberries from insect pests.

Answer: True. Believe it or not, many of the foods found on grocery

store shelves and in kitchen pantries are protected by our bats.

- A. Sooty Mustached bat
- B. Pale-winged Dog-like bat
- C. Heart-faced bat

GotoBat forBats!

How do bats help farmers grow healthy foods?

- A. By eating insects that destroy crops.
- B. By pollinating important crop plants.
- C. By spreading seeds to start new plants.
- D. All of the above.

How many bats in North America are pollinators?

- A. One
- 3. Four
- C. Nine
- D. Fifteen





Without bats eating insects, cocoa bean yields fall by up to 22%. What tasty treat do we get from cocoa beans?

- A. Licorice
- Chewing gum <u>а</u>

body weight. That would be the same as a human mom giving birth to a

40 pound baby! Yikes!

Answer: True. Baby bats can weigh up to one-third of their mother's

True or False: Newborn bats are born relatively large compared to

other mammals.

D. Lollipops

What bat species is nicknamed the "social myotis" because they like to pack tightly together when roosting?

- Indiana bat ď
- California Leaf-nosed bat മ
- Gray bat ن
- Thompson's Big-eared bat

syndrome has killed over six million bats in just six years.

Which of the following are not dangers that bats face in the wild?

- A. Increased pesticide use
- Wind turbines <u>а</u>
- Habitat loss ن

found in front of a bat's ear, which can often be used to help identify What is the name of the tiny protrusion of skin-covered cartilage which species it belongs to?

- A. Muzzle
- C. Calcar
- D. Forearm

numbers in the US and Canada have declined dramatically as white-nose they are considered a nuisance, or because they are eaten as food. Bat Answer: True. In some countries, bats are killed out of fear, because True or False: Bats are in trouble in almost every place they are

found.

Screwball

Spell the word ECHOLOCATION without writing it down.



Screwball!

Explain what a mist net is and how scientists use them to study bats.

Answer: Scientists use mist nests to safely capture bats to check on their health and to collect important data. Mist nets are usually made of nylon mesh suspended between two poles, resembling an oversized volleyball net. When properly set up the nets are virtually invisible. You can't see the net and neither can the bats!



Screwball

What are Epauletted Fruit Bats named for?

Answer: The white patches on their shoulders look like epaulettes. An epaulette is a shoulder patch on a uniform.



Screwball!

Explain how bats use echolocation.

Answer: Bats emit high-pitched sounds (above human hearing range) that bounce off obstacles in their path, like trees, buildings, and their main target—delicious insects! Bats use those reflected sounds to identify an object, how big it is, and what direction it is moving.



Screwball!

Phyllostomidae are a family of bats known for what distinctive trait?

Answer: Leaf-shaped noses



Screwbally

Spell the word CHIROPTERA without writing it down.

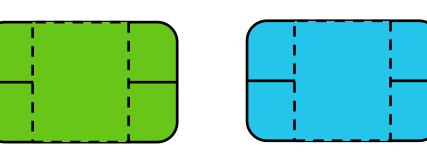


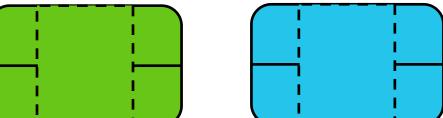
piece. edges. Answer: True! It is an uncommon behavior in the True or False: Vampire bats share food with animal kingdom to help 'strangers' survive. unrelated adults of their species. Name the genus that flying foxes are in. Answer: Pteropus

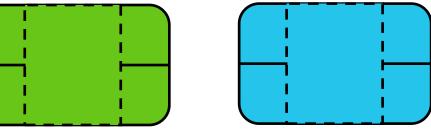
Player Pieces: Bases

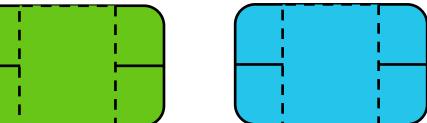
Cut out each base piece. Fold up along the dotted line, then cut along the solid middle line to create a notch for your player

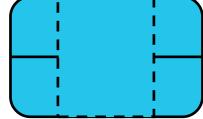
Your species portrait will slide into the base where you cut the











This game was adapted with permission from:

Sticks & Stones Rescue

PLAYER PIECES: Species Portrait

Species portraits courtesy of Merlin Tuttle Photography in accordance with non-profit, educational use agreement.

See excerpt below:

Merlin Tuttle's Bat Conservation—World Class Photos

Merlin Tuttle's Bat Conservation (MTBC) is Dr. Tuttle's most recent contribution to the world of bats. With over 60 years of experience studying and photographing them, he has led conservation efforts internationally for decades. It was through the global impact of his unique photography and communication that people first began to appreciate bats as safe, invaluable, even cute, and likable. He founded and led Bat Conservation International for 30 years, then retired. But requests for his unique photos and experience followed him, leading to the founding of MTBC. His efforts are now supported solely through MTBC and their goal is to extend Merlin's invaluable legacy for use by future conservationists wherever most needed.

There are over 2,000 bat photos available for download on the <u>MTBC</u> site for both non-profit and commercial use. The collection encompasses 19 families, 125 genera, and 298 species from 38 countries.

Some photos are immediately available for low resolution (150 ppi) download at \$10 per image for any nonprofit, educational use. No need to submit a request form for uses aligned with MTBC's <u>Terms of Use</u>.

For non-profit and educational high resolution uses please CLICK HERE TO FILL OUT A PHOTO REQUEST FORM.





