

Build A Bat

This fun activity will help students understand a bat's adaptations and what a bat needs in order to survive. It's also a great visual comparison between megabats and microbats. This activity is a great way to get a whole class involved.

To build a microbat, you need:

- Wings made of a black table cloth----Fold in half and cut a half circle on the fold to form a hole for the student's head to slip through so they can wear it like a poncho. Then make some scallops on the other edge to represent the bat's wings or you might purchase a pair of bat wings at a costume store.
- A pair of glasses with small lenses (such as ½ glasses used for reading) to represent small eyes. Because microbats often rely on echolocation to find their way around, they don't need big eyes (although all bats can see).
- A witch's nose (or unusually shaped animal nose) to represent the oddly shaped noses of some microbats. Oddly shaped noses help microbats echolocate.
- Large plastic ears to slip over student's ears to represent large microbat ears. You might even be able to find some with a visible tragus. Or, make your own using a plastic hairband and foam sheets or heavy felt. Large ears help microbats hear their echolocation.
- Sharp-looking plastic teeth for the needle-sharp teeth of many of the microbat species.
- A baby bottle to represent the milk that all baby mammals require in order to survive.
- A small net (such as an aquarium net) to represent the microbat's tail membrane which is often used to scoop up insects when it hunts.
- A whistle to represent the incredible volume of a bat's echolocation. Remind the students that the sound is above our range of hearing, so we wouldn't be able to hear it, even though it is so loud.
- A hair clip to represent the bat's strong, curved toes that naturally hold tight, even when the bat is at rest.
- Tie small rubber or plastic insects, other invertebrates, frogs, lizards, fish, a small mammal (mouse, for example), fruit, and flowers to a ribbon or heavy

yarn and fashion into a necklace. This represents the many types of food eaten by the hundreds of species of microbat. A bag of candy blood (or fake Halloween blood) would represent the food of vampire bats. Or tie to individual strings and have other students hold them around the “bat” student.

- A globe or world map shaded to represent the range of microbat species living around the world. They live on all continents except Antarctica! They live in all areas except the coldest and hottest places---the artic, Antarctica, some deserts and some islands.
- Poster board, fun foam, or plastic moon and stars to represent the nocturnal nature of bats.

To build a megabat, you need:

- Wings made of a black table cloth----Fold in half and cut a half circle on the fold to form a hole for the student’s head to slip through so they can wear it like a poncho. Then make some scallops on the other edge to represent the bat’s wings or you might purchase a pair of bat wings at a costume store.
- A pair of glasses with large lenses (such as oversized sunglasses) to represent large eyes. Most megabats don’t echolocate, so they need large eyes to see well at night.
- A “normal” dog-like nose to represent the dog-like face of the megabat.
- Round plastic ears that slip over student’s ears or a headband with dog or cat ears for the smaller ears of the megabat to represent the small ears of a megabat.
- Sharp plastic teeth to represent the strong, sharp teeth used by the megabat to break through tough skins on fruit.
- A baby bottle to represent the milk that all baby mammals require in order to survive.
- An artificial flower and fruit to represent the foods that megabats eat as adults.
- A paintbrush to represent the megabat’s tongue which is used to pick up fruit juices and nectar.

- A compass and clicker or clapper to represent the echolocation sounds of the species of fruit bats (such as Egyptian fruit bats) that use audible clicks of the tongue to navigate out of dark cave roosts.
- A small shovel represents the dispersal of seeds by fruit bats.
- Pollen which can be made by punching yellow paper dots with a hole puncher and sticking them to the nose (see bullet 3 above) and to the flower in bullet 7 above. This represents pollination.
- A hair clip to represent the strong, curved toes that they use to hang on to branches.
- A globe or world map shaded to represent the range of megabat species. (Old World tropics)
- Poster board, fun foam, or plastic moon and stars represent the nocturnal nature of bats.

Procedure for Building a Bat:

Choose one student to be the microbat and one to be a megabat. And then begin to Build a Bat using one of the options below.

Option 1: Pass out the above items to other students and talk about various adaptations and have the children bring the item that represents that adaptation to the bat and either place it on the “bat” or hand it the “bat” to hold. Some items can just be held by other students who stand beside the “bat”.

Option 2: Beginning with the body parts, hold the items up one at a time. Explain what it is and what it represents and then place it on the “bat” student. Once the bats are holding as many items as is reasonable, you can bring additional children up to hold items grouped around the appropriate bat. This helps get more children involved in the activity.