

## “Bat’s So Awesome” Patch Program

### Look up to the sky: it’s a bird, it’s a plane... no it’s a BAT!

BATS are one of the most misunderstood creatures in the world. Find out more about these interesting and unique animals by completing the steps for your age level with your troop.

#### Patch Program Tips and Tricks:

- Print out the pages for your groups age level and any of the resources needed to complete the activities. These resources are listed under “materials” with green font and located in the back of the packet.
- “Bat’s so Awesome” patches can be purchased from the council shop.
- “Bat’s so Awesome” Patch Kits are also available in the G.I.R.L. resource centers at each regional office. These kits include most of the materials needed to complete the patch program. Groups using the kits will need to supply their own paper/cardstock and coloring supplies. To reserve a kit, visit <https://www.gsw.org/en/for-volunteers/council-resource-centers.html>.
- Have any fun pictures? Tag us on social media @girlscoutswoh.



#### Special Thanks

This patch program has been adapted from the “Go Batty! Discovering Bats on Long Island” patch from Girl Scouts of Nassau County.

Creation of this program was supported by our very own Girl Scouts of Western Ohio Alum and Bat Conservationist Dr. Kristen Lear, with support from the AAAS IF/THEN© Initiative and Lyda Hill Philanthropies.



# Daisy



## 1. BAT INTRODUCTION

### **Materials Needed:**

- The book *Stellaluna* by Janell Cannon or *Bats* by Gail Gibbons (included in the GSWO kit)
- Bat puppet, optional (included in the GSWO kit)

### **Start the Activity:**

- Read a book to the girls to teach them about basic bat facts. If possible, use a bat plush toy or puppet as a prop to narrate the book for fun. Discuss the information learned with the girls.
- Or, you can show this video of Pamela Reed from StorylineOnline reading *Stellaluna*: <https://www.youtube.com/watch?v=VLRivyWUzxs>

## 2. BATS MYTHS

### **Materials Needed:**

- Internet access

### **Start the Activity:**

- Show the girls a video that busts the myths about bats. The video should teach them about echolocation and what bats eat. Here is a great video called “Bats – Myths Busted”: <https://www.youtube.com/watch?v=ILxKHBzVOjw>
- Discuss the information learned with them.

## 3. BAT MEASUREMENT/ANATOMY

### **Materials Needed:**

- *Bat Anatomy Game Pieces* (included in the GSWO kit)
- *Bat Anatomy Answer Sheets*
- *Bat Measurement Sheet*
- Several paper clips, rubber bands, crayons, pennies, and a few rulers for the girls to share (included in the GSWO kit)

**Start the Activity:**

- Divide the girls into groups of 2-4. Hand out the Bat Anatomy game pieces to each group. Ask them to make their best guesses to put the body parts on the bat. Use the Bat Anatomy Answer Sheet to review the correct answers with each group.
- Using the Bat Measurement Sheet, have the girls measure the bat's wingspan with everyday objects listed on the Bat Measurement Sheet.

**4. BAT MASK-AND-TELL**

**Materials Needed:**

- Choose one *Bat mask* and cut out for each girl (included in the GSWO kit)
- Crayon or markers for girls to share
- Popsicle stick for each girl
- Glue for the girls to share

**Start the Activity:**

- Have each girl decorate one of the four bat masks. Then have them glue a popsicle stick to the bottom of the mask to use as a handle. Then have each of them tell the other girls in their troop their favorite thing about bats that they've learned.

# Brownie



## 1. BAT INTRODUCTION

### **Materials Needed:**

- *Bats* by Gail Gibbons (included in the GSWO kit)
- “The Truth About Bats” video on YouTube:  
<https://www.youtube.com/watch?v=Z8wLQ3NCBgg&feature=share>

### **Start the Activity:**

- Read a book to the girls that teaches them about basic bat facts. Show them the video “The Truth About Bats”. Discuss the information learned with the girls.

## 2. TYPES OF BATS

### **Materials Needed:**

- *Types of Bats Matching Game Pieces* (included in the GSWO kit)
- *Types of Bats Matching Game Answer Sheet*

### **Start the Activity:**

- Divide girls into groups of 2-4. Hand out the Bat Matching game pieces to each group. Ask them to make their best guess to match the six sentences to the bat images. Then use the answer sheet to review the correct answers with each group.

## 3. BAT LIFECYCLE

### **Materials Needed:**

- *Bat Life Cycle cards*
- *Bat Life Cycle Answer Sheet*

### **Start the Activity:**

- Divide girls into groups of 2-4. Hand out the Bat Lifecycle cards to each group. Read each card out loud with the girls to review the information. Then give them time to put them in order. Review the correct order with the girls.



#### 4. BAT MEASUREMENT/ANATOMY

Materials Needed:

- *Bat Anatomy Game Pieces* (included in the GSWO kit)
- *Bat Anatomy Answer Sheets*
- *Bat Measurement Sheet*
- Several paper clips, rubber bands, crayons, pennies, and a few rulers for the girls to share (included in the GSWO kit)
- Divide the girls into groups of 2-4. Hand out the Bat Anatomy Game Pieces to each group. Ask them to make their best guesses to put the body parts on the bat. Use the Bat Anatomy Answer Sheet to review the correct answers with each group.
- Using the Bat Measurement Sheet, have the girls measure the bat's wingspan with everyday objects listed on the Bat Measurement Sheet.

#### 5. BAT PRESENTATION

**Materials Needed:**

- Internet Access
- Poster boards
- Markers/crayons for the girls to share

**Start the Activity:**

- Have the girls watch a video teaching them about echolocation and anything else they want to learn about bats. Here is a great one:  
[https://www.youtube.com/watch?v=2Mii45v85YY&list=PL\\_gU-%20wp9rKHxM7ixxuYJJLYzdkuj6AV\\_a](https://www.youtube.com/watch?v=2Mii45v85YY&list=PL_gU-%20wp9rKHxM7ixxuYJJLYzdkuj6AV_a)
- Then have the girls either individually or team up to make posters, that show what they learned from the video and share it with others they know. Encourage them to be as creative as possible.

# Junior



## 1. BAT INTRODUCTION

### **Materials Needed:**

- Bats: Fact or Fiction game (included in the GSWO kit)

### **Start the Activity:**

- Divide the girls up into 2 groups. Read the instructions of the game out loud to them. Read one card and have each group answer whether or not they think it's true or false. Have them answer and then reveal the answer. After getting through the cards, have each girl share which fact was the most surprising to learn.

## 2. ECHOLOCATION

### **Materials Needed:**

- *Echolocation Game*
- One blindfold for the girls to share
- Clear open space

### **Start the Activity:**

- Explain to the girls that bats can see just as well as any other mammal. However, many bats also use something called echolocation to navigate. Basically, bats project beep-like sounds, then they collect and analyze the echoes that come bouncing back. Using sound alone, bats can see everything but color and detect obstacles as fine as human hair.
- Follow the instructions to play the Echolocation Game to teach the girls that bats have good vision.

## 3. BECOMING BAT-OLOGISTS

### **Materials Needed:**

- Poster boards for each group of 2-4 girls
- Pens/Markers for girls to share
- Internet/Books

### **Preparation:**

- Tell the girls that they will now learn about different types of bats and what they eat. Break the girls up into groups of 2-4 and tell them to pick any type of bat and bring in an image of the bat so they know what it looks like. Have the girls go to Bat Conservation International's website to find out more about different bat species (<https://www.batcon.org/about-bats/bat-profiles/>).
- Tell them to also find out what their bat eats. Have them come to the next meeting with a list of those foods.

### **Start the Activity:**

- Using their lists, have each group create a menu to share their findings with the rest of the girls. Have each group work together to draw pictures of their bats. Below each image they can draw the foods they've selected for each bat.
- For even more fun, as a troop you can make some bat-inspired recipes with ingredients that are either plants pollinated by bats or plants protected by bats through their consumption of agricultural pest insects. Recipe ideas can be found here: <https://www.batcon.org/about-bats/games-and-activities/batty-recipes/>

## **4. BAT LIFECYCLE**

### **Materials Needed:**

- *Bat Life Cycle cards*
- *Bat Life Cycle Answer Sheet*

### **Start the Activity:**

- Divide girls into groups of 2-4. Hand out the Bat Lifecycle cards to each group. Read each card out loud with the girls to review the information. Then give them time to put them in order. Review the correct order with the girls.

## **5. BAT ANATOMY**

### **Materials Needed:**

- *Bat Anatomy Game Pieces* (included in the GSWO kit)
- *Bat Anatomy Answer Sheets*

### **Start the Activity:**

- Divide the girls into groups of 2-4. Hand out the Bat Anatomy Game Pieces to each group. Ask them to make their best guesses to put the body parts on the

bat. Use the Bat Anatomy Answer Sheet to review the correct answers with each group.

## 6. BAT PERFORMANCE

### **Materials Needed:**

- Pen for girls to share
- Paper for the girls to share

### **Start the Activity:**

- Have the girls in groups 2-4 create a song or poem about any topic they've learned so far about bats. For example, a song about what bats eat, their anatomy, etc. Tell them they can add in anything else they choose to make their song fun. When the girls are finished, have them share their song or poem with the rest of the girls.

# Cadette, Senior, and Ambassador



## 1. BAT INTRODUCTION

### **Materials Needed:**

- Bats: Fact or Fiction game (included in the GSWO kit)

### **Start the Activity:**

- Divide the girls up into 2 groups. Read the instructions of the game out loud to them. Read one card and have each group answer whether or not they think it's true or false. Have them answer and then reveal the answer. After getting through the cards, have each girl share which fact was the most surprising to learn.

## 2. BUSTING BAT MYTHS

### **Materials Needed:**

- Bats: Fact or Fiction game (included in the GSWO kit)
- Pens/Markers for girls to share
- Craft materials for posters
- Poster for each group of 2-4 girls

### **Preparation:**

- Have the girls watch these two videos about bats:
  - “Why Bats Aren’t As Scary As You Think” by National Geographic:  
[https://www.youtube.com/watch?v=D6e\\_qh3YRPs](https://www.youtube.com/watch?v=D6e_qh3YRPs)
  - “The Truth About Bats” mini-documentary:  
<https://www.youtube.com/watch?v=kW--eOLOrQ0>
- Invite younger Girl Scouts to your troop meeting, or attend a younger troops meeting

### **Start the Activity:**

- Have each group go back to the Bats: Fact or Fiction game and create a poster with all of the myths they learned about bats. Encourage the girls to make the posters as fun and creative as they want.

- Then have the girls teach younger Girl Scouts about the myths using the posters they created.

### 3. ECHOLOCATION

#### **Materials Needed:**

- *Echolocation Game*
- One blindfold for the girls to share
- Clear open space

#### **Start the Activity:**

- Explain to the girls that bats can see just as well as any other mammal. However, they also use something called echolocation to navigate. Basically, bats project beep-like sounds, then they collect and analyze the echoes that come bouncing back. Using sound alone, bats can see everything but color and detect obstacles as fine as human hair.
- Follow the instructions to play the Echolocation Game to teach the girls that bats have good vision and are not blind.

### 4. BECOMING BAT-OLOGISTS

#### **Materials Needed:**

- Poster boards for each group of 2-4 girls
- Pens/Markers for girls to share
- Internet/Books

#### **Preparation:**

- Tell the girls that they will now learn about different types of bats and what they eat. Break the girls up into groups of 2-4 and tell them to pick any type of bat and bring in an image of the bat so they know what it looks like. Have the girls go to Bat Conservation International's website to find out more about different bat species (<https://www.batcon.org/about-bats/bat-profiles/>).
- Tell them to also find out what their bat eats. Have them come to the next meeting with a list of those foods.

#### **Start the Activity:**

- Using their lists, have each group create a menu to share their findings with the rest of the girls. Have each group work together to draw pictures of their bats. Below each image they can draw the foods they've selected for each bat.

- For even more fun, as a troop you can make some bat-inspired recipes with ingredients that are either plants pollinated by bats or plants protected by bats through their consumption of agricultural pest insects. Recipe ideas can be found here: <https://www.batcon.org/about-bats/games-and-activities/batty-recipes/>

## 5. BAT ANATOMY

### **Materials Needed:**

- *Bat Anatomy Game Pieces* (included in the GSWO kit)
- *Bat Anatomy Answer Sheets*

### **Start the Activity:**

- Divide the girls into groups of 2-4. Hand out the Bat Anatomy Game Pieces to each group. Ask them to make their best guesses to put the body parts on the bat. Use the Bat Anatomy Answer Sheet to review the correct answers with each group.

## 6. BAT PERFORMANCE

### **Materials Needed:**

- Pen for girls to share
- Paper for the girls to share

### **Start the Activity:**

- Have the girls in groups of 2-4 create a song or poem about any topic they've learned so far about bats. For example, a song about what bats eat, their anatomy, etc. Tell them they can add in anything else they choose to make their song fun. When the girls are finished, have them share their song or poem with the rest of the girls.

## 7. BRAVO, BATS

### **Materials Needed:**

- Copy of *Bravo, Bats Fact Sheet* for each girl
- Small notebook for each girl
- Pens/pencils for each girl
- Craft supplies for recipe book
- Internet/books for research

### **Preparation and Activity:**

- Tell the girls that they will now learn about different types of foods that wouldn't exist without bats. Read the bats Fact Sheet as a group.
- Help the girls identify the bat-dependent ingredients while reading the fact sheet. Have them each write down what those ingredients are. Then have them go home and research six recipes, using the ingredients they wrote down as a reference. Have them bring in a list of those recipes to the next meeting.
- For some recipe ideas, visit Bat Conservation International's website: <https://www.batcon.org/about-bats/games-and-activities/batty-recipes/>

## **8. PRACTICE BEING A BAT CONSERVATIONIST**

### **Materials Needed:**

- CBS "Mission Unstoppable" bat episode from the IF/THEN© Collection: [https://ifthen.widen.net/view/video/py3sly2pkw/MIUN\\_9309\\_LEAR\\_FULL\\_SOCIAL.mp4?t.download=true&use=vthflbny&x.portal\\_shortcode\\_generated=5s8prc0r&x.app=portals](https://ifthen.widen.net/view/video/py3sly2pkw/MIUN_9309_LEAR_FULL_SOCIAL.mp4?t.download=true&use=vthflbny&x.portal_shortcode_generated=5s8prc0r&x.app=portals)
- Bat conservationist Dr. Kristen Lear's profile video from the IF/THEN© Collection: [https://ifthen.widen.net/view/video/wcgwox7vyg/05\\_LEAR\\_PROFILE.mp4?t.download=true&use=g9a3lbtm&x.portal\\_shortcode\\_generated=5s8prc0r&x.app=portals](https://ifthen.widen.net/view/video/wcgwox7vyg/05_LEAR_PROFILE.mp4?t.download=true&use=g9a3lbtm&x.portal_shortcode_generated=5s8prc0r&x.app=portals)
- I Am A Scientist "Spark Kit", found online at: <https://www.iamascientist.info/kristen-lear>
- Small notebook for each girl
- Pens/pencils for each girl

### **Preparation:**

- Watch the "Mission Unstoppable" video and Dr. Kristen Lear's profile video to see what being a bat conservationist is like.
- Either as a group or individually, read through the "Spark Kit" tabs "1. My Life", "2. My Path", and "3. My Work" to learn about what Girl Scouts of Western Ohio Alum Dr. Kristen Lear does as a bat conservationist.

### **Start the Activity:**

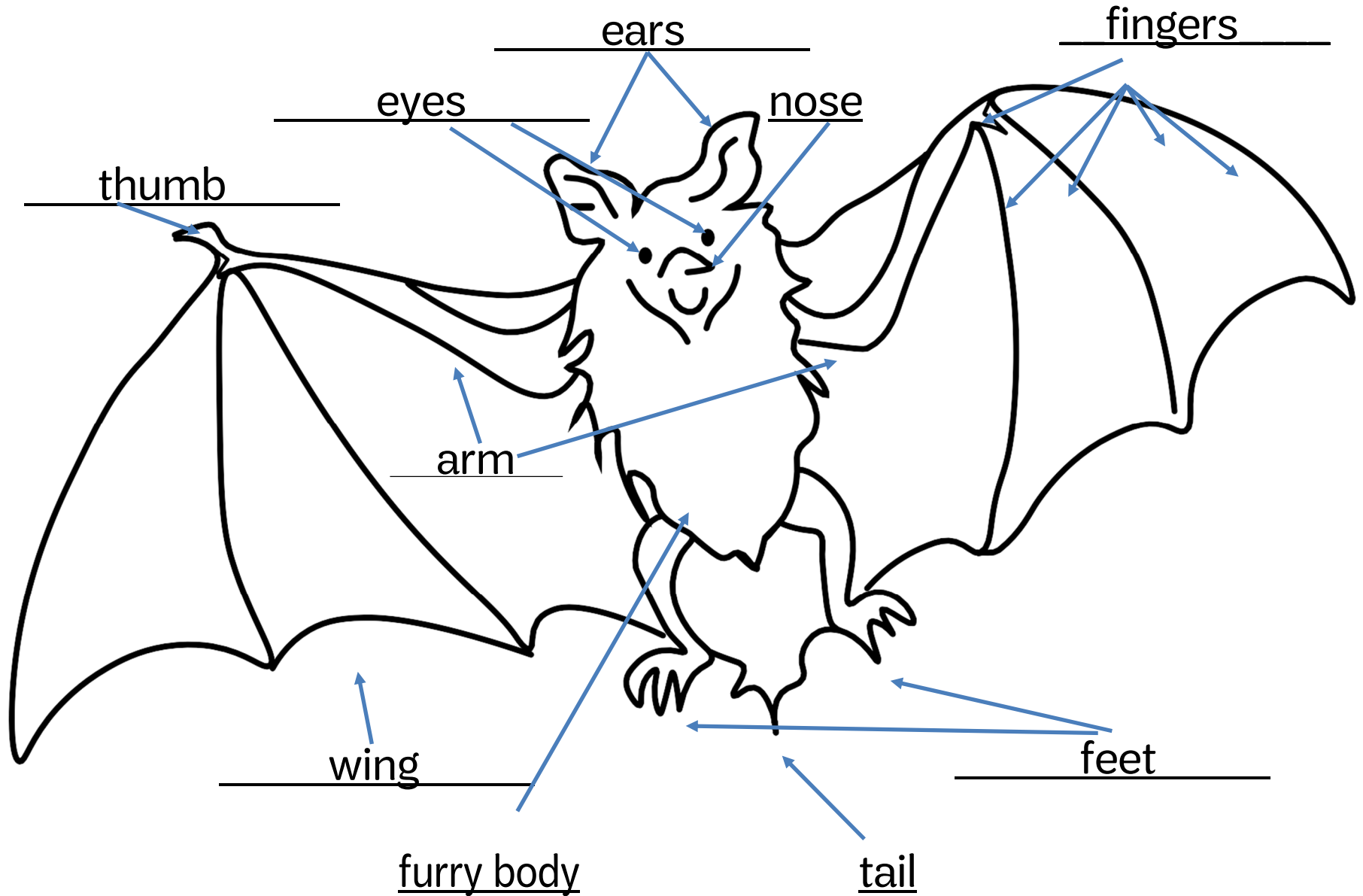
- As a group, work through section 4 of the Spark Kit ("The Challenge) to learn about a real-world bat conservation challenge and come up with your own conservation solutions!
- Once you have completed section 4, reflect as a group on what you learned (see section 5 of the Spark Kit "Reflection" for reflection prompts).
- Additional resources about bat conservation can be found under the "Resources" tab of the Spark Kit.



# Bat Anatomy

Label the body parts

Answer Key



WORD BANK:

Furry Body

Feet

Nose

Wing

Thumb

Fingers

Tail

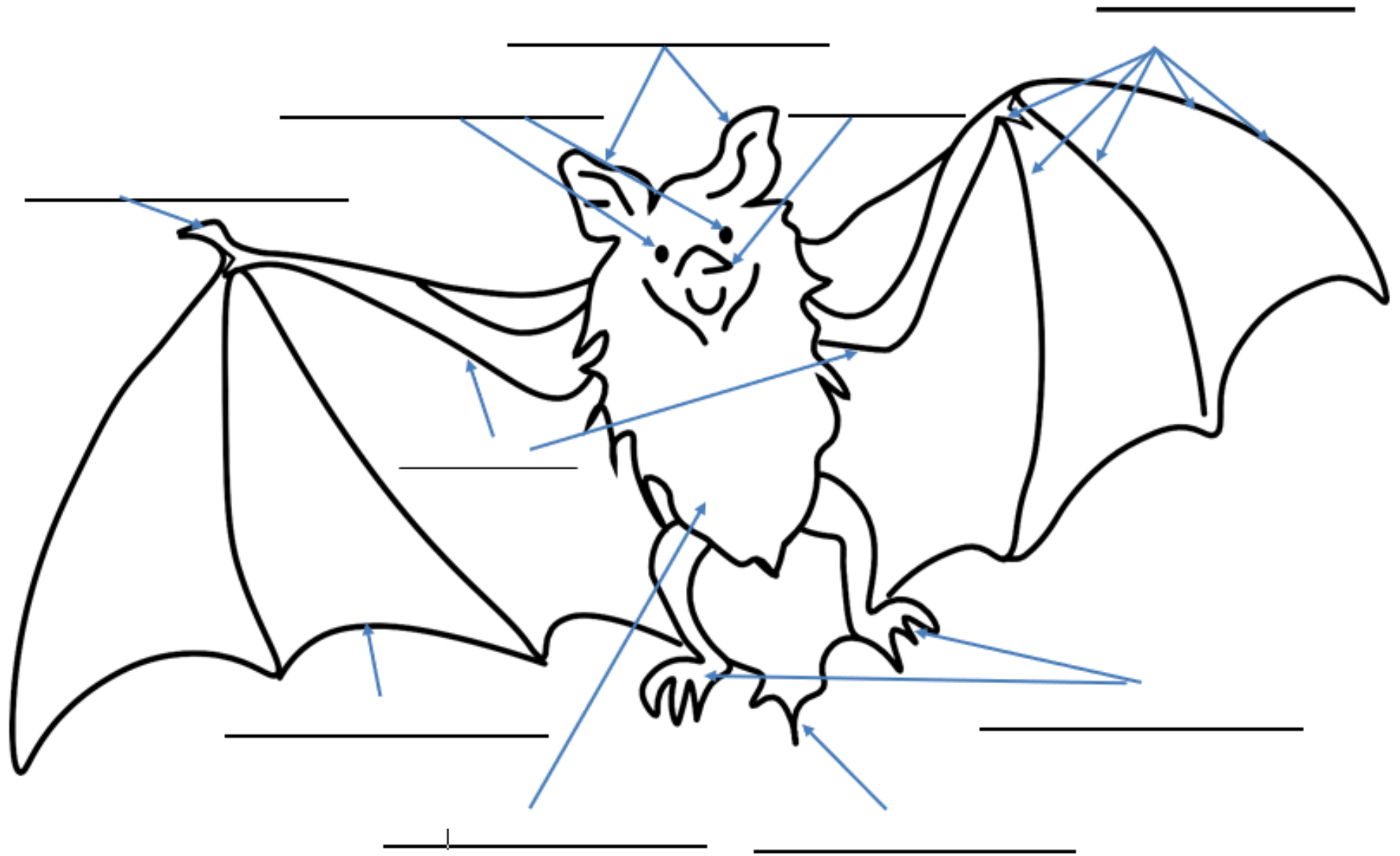
Eyes

Arm

Ears

# Bat Anatomy

Label the body parts



WORD BANK:

Furry Body

Feet

Nose

Wing

Thumb

Fingers

Tail

Eyes

Arm

Ears

Furry Body
Feet
Nose
Wing
Thumb
Fingers
Tail
Eyes
Arm
Ears



**California leaf-nosed bat**  
*Macrotus californicus*

***Fun Fact***

California leaf-nosed bats usually use their sense of sight (rather than echolocation) when they are foraging, and resort to echolocation only in total darkness.

[www.batcon.org](http://www.batcon.org)

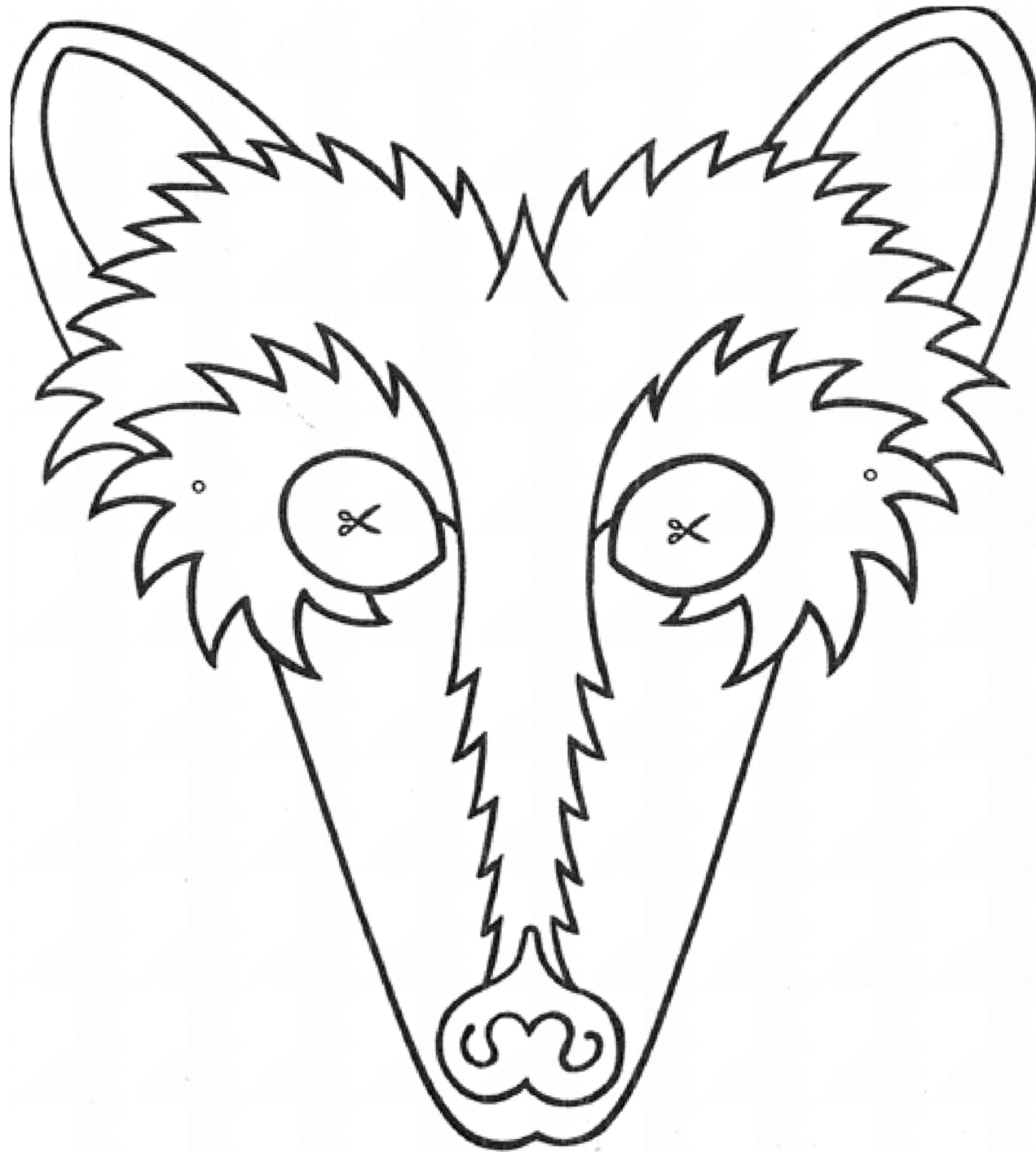


**Dobson's horseshoe bat**  
*Rhinolophus yunanensis*

**Fun Fact**  
This bat is often found  
among bamboo clumps in  
the dense hilly forests of  
Southeast Asia

[www.batcon.org](http://www.batcon.org)



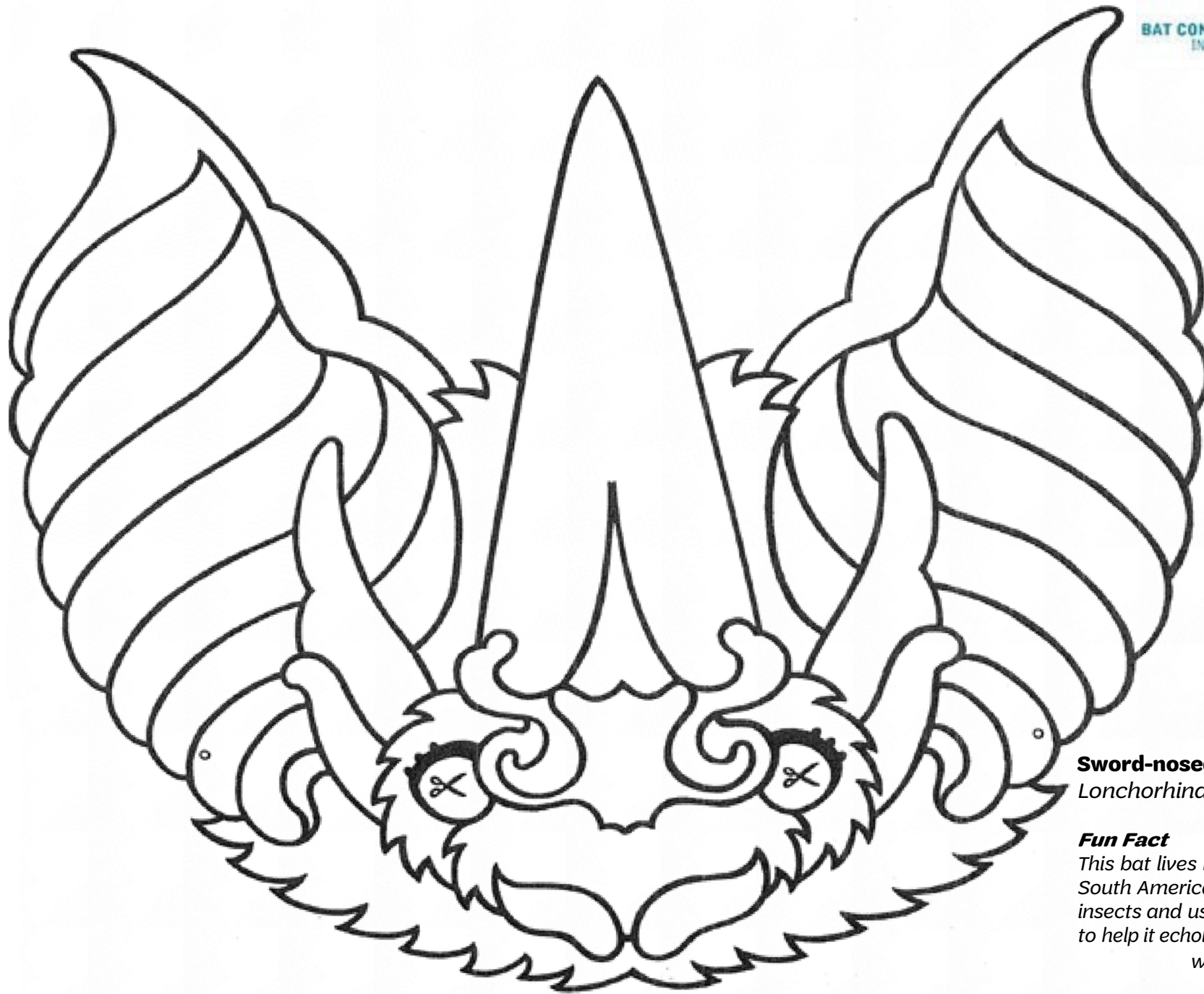


**Grey-headed flying-fox**  
*Pteropus poliocephalus*

***Fun Fact***

*This megabat is native to Australia and likes to eat fruit. This bat only uses its eyes to find its food - it does not echolocate!*

[www.batcon.org](http://www.batcon.org)



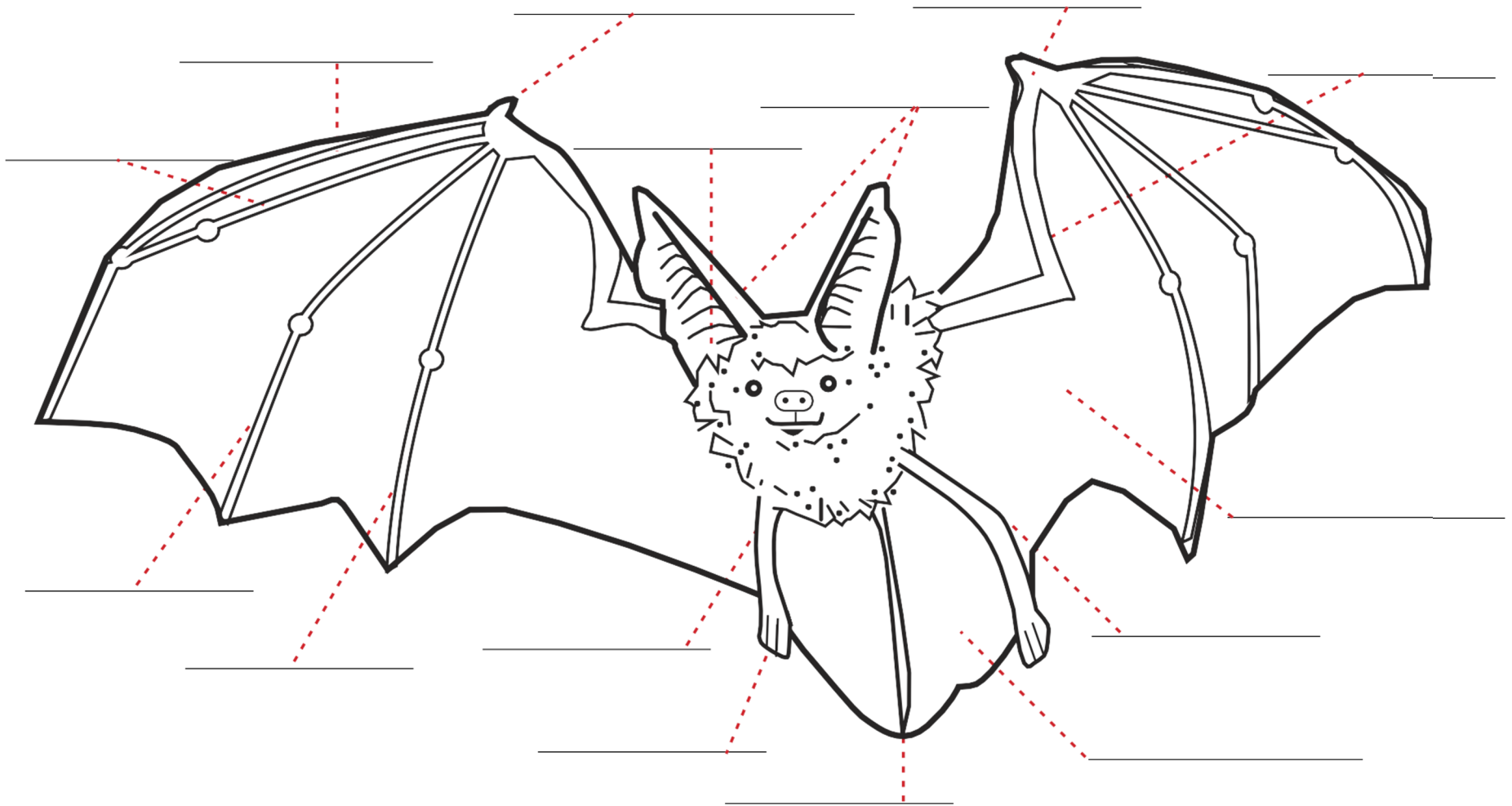
**Sword-nosed bat**  
*Lonchorhina aurita*

**Fun Fact**  
*This bat lives in Central, and South America. It eats insects and uses its big ears to help it echolocate!*

[www.batcon.org](http://www.batcon.org)

# Bat Anatomy

Label the body parts.



**WORD BANK:**

Thumb (first finger)  
Second finger  
Third finger

Fourth finger  
Fifth finger  
Wrist

Forearm  
Ear  
Tragus

Wing membrane  
Tail membrane  
Tail

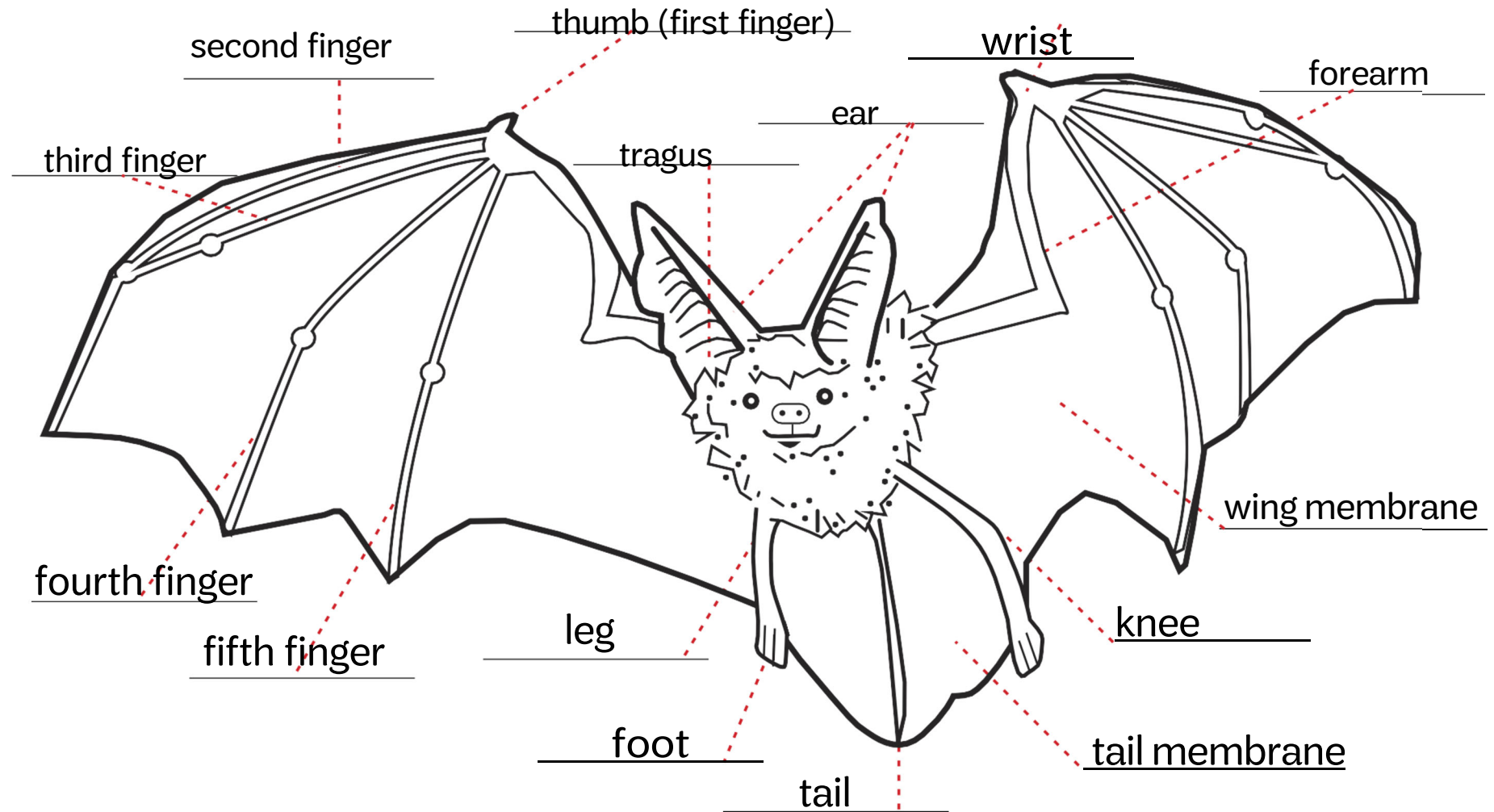
Knee  
Foot  
Leg



# Bat Anatomy

Answer key

Label the body parts.



WORD BANK:

Thumb (first finger)  
Second finger  
Third finger

Fourth finger  
Fifth finger  
Wrist

Forearm  
Ear  
Tragus

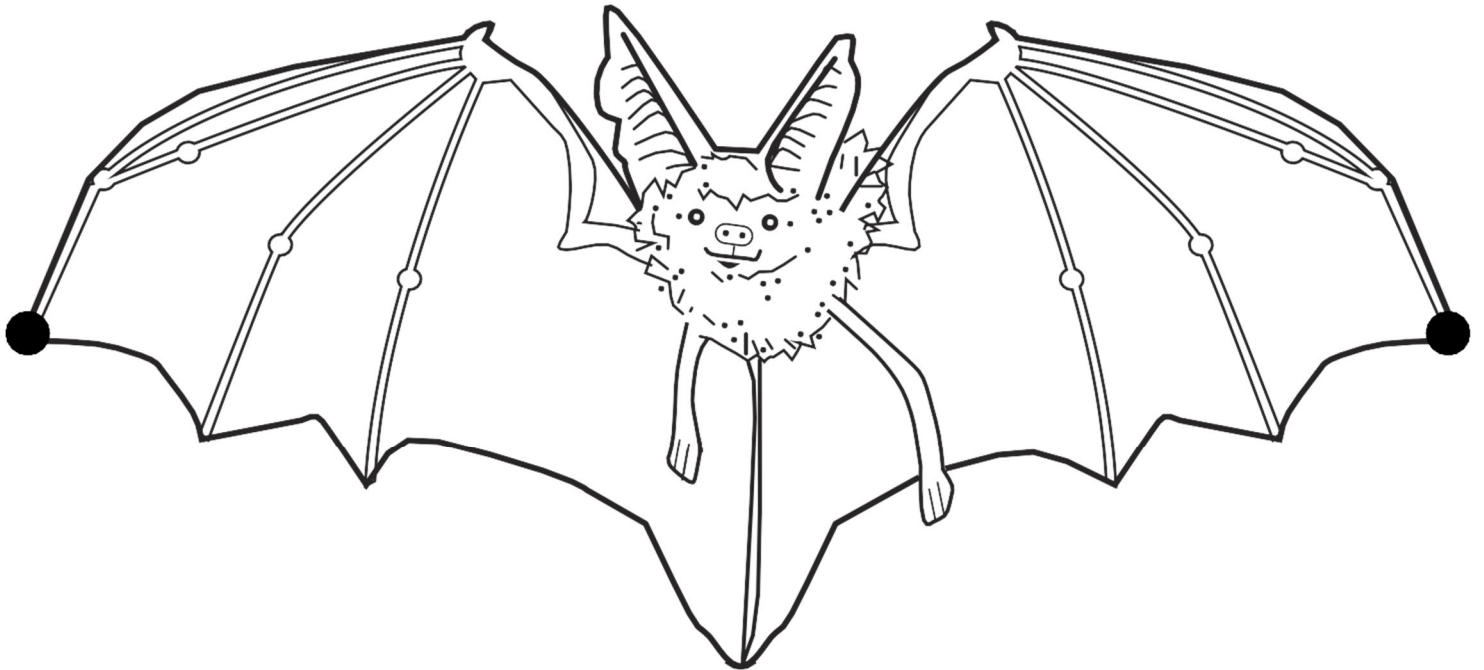
Wing membrane  
Tail membrane  
Tail

Knee  
Foot  
Leg

Thumb (first finger)	Tragus	Knee
Second Finger	Ear	Tail Membrane
Third Finger	Wrist	Tail
Fourth Finger	Forearm	Foot
Fifth Finger	Wing Membrane	Leg

# BAT MEASUREMENT

A bat's wingspan is from 1 to 60 inches!  
Let's measure bats with other things.



My bat is \_\_\_\_\_ paper clips long.

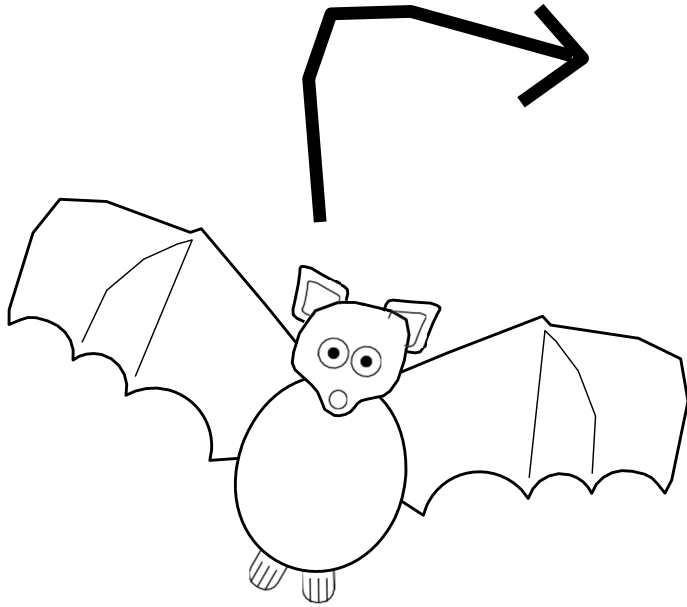
My bat is \_\_\_\_\_ rubber bands long.

My bat is \_\_\_\_\_ inches long.

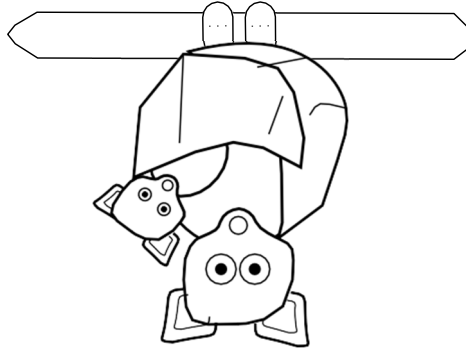
My bat is \_\_\_\_\_ crayons long.

My bat is \_\_\_\_\_ pennies long.

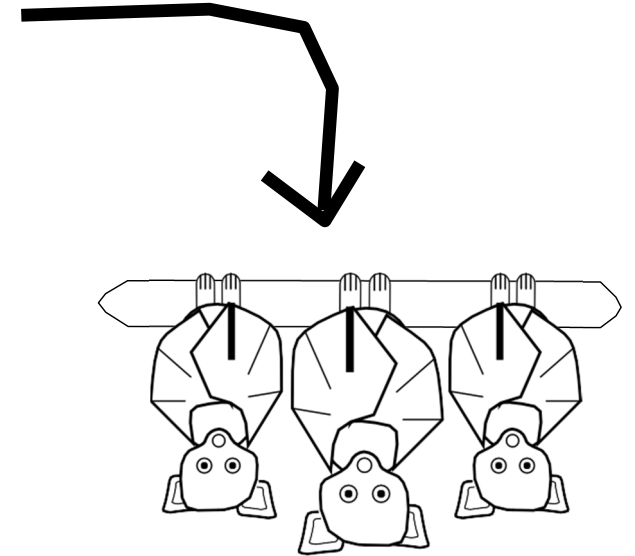
# Bat Life Cycle



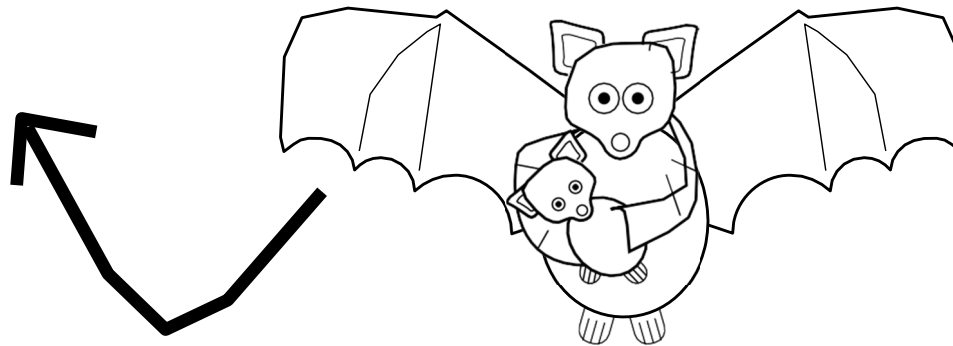
A bat is an adult when it is around one year old



A bat pup is born. Mother bats usually have only one pup.

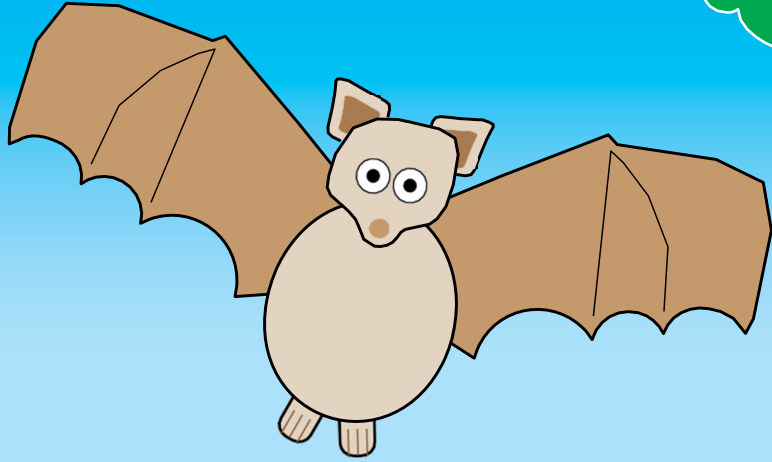


Pups spend time together in a nursery while their mothers are hunting.



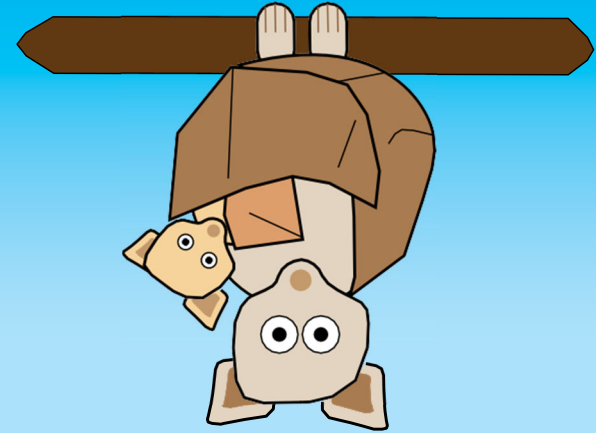
Pups cling to their mothers while she flies to roost. The pup cannot fly on its own until it is one to two months old.

## BAT LIFE CYCLE



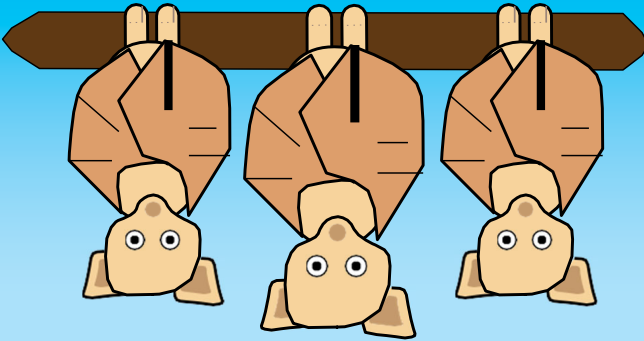
A bat is an adult when it is around one year old.

## BAT LIFE CYCLE



A bat pup is born. Mother bats usually have only one pup.

## BAT LIFE CYCLE



Pups spend time together in a nursery while their mothers are hunting.

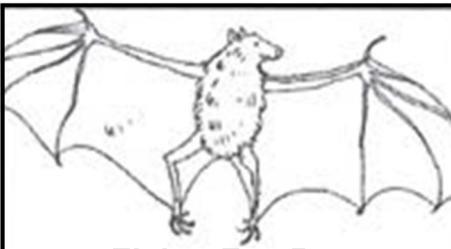
## BAT LIFE CYCLE



Pups cling to their mothers while she flies to roost. The pup cannot fly on its own until it is one to two months old.

# TYPES OF BATS

Directions: Cut out each black fact square below and paste it on the matching bat card. Bonus: Put two sets together and play "Concentration."



**Flying Fox Bat**

Paste square here.



**Bumblebee Bat**

Paste square here.



**Vampire Bat**

Paste square here.



**Bulldog Bat**

Paste square here.



**Little Brown Bat**

Paste square here.



**Big-Eared Bat**

Paste square here.

**This tiny bat is the smallest kind of bat in the world.**

**This bat looks like a rabbit with its ears and nose.**

**This bat uses its fangs to feed on cows, pigs, and mules.**

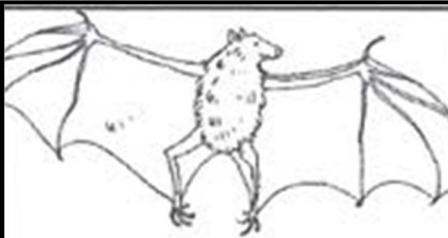
**This plain brown bat is the most common bat in the United States.**

**This giant, fluffy bat has a face that makes it look like a fox.**

**This bat swoops out of the sky and catches fish for its dinner.**

# TYPES OF BATS

## ANSWER SHEET



**Flying Fox Bat**

This giant, fluffy bat has a face that makes it look like a fox.



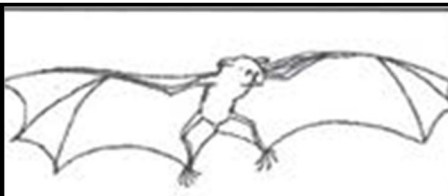
**Bumblebee Bat**

This tiny bat is the smallest kind of bat in the world.



**Vampire Bat**

This bat uses its fangs to feed on cows, pigs, and mules.



**Bulldog Bat**

This bat swoops out of the sky and catches fish for its dinner.



**Little Brown Bat**

This plain brown bat is the most common bat in the United States.



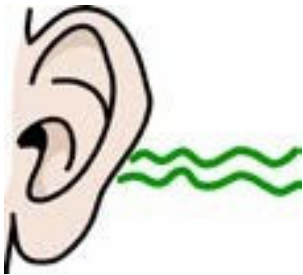
**Big-Eared Bat**

This bat looks like a rabbit with its ears and nose.



# ECHOLOCATION GAME

*Although BATS do have good vision, this game will illustrate how some bats also use sound to locate an object.*



## WHAT YOU'LL NEED:

- A few blindfolds
- A group of people
- A space to move around in that doesn't have any obstacles.

## OBJECT OF THE GAME:

To find the person the sound came from.

## HOW TO PLAY:

Put a blindfold on one person (the BAT) and place them in one part of the area you will play in. Turn them around a few times.

Have the rest of the group (insects to be eaten) pick a spot in the area and stand still. Quietly select a player to be the insect who will echo the BAT's sound.

Start the game by having the BAT make a sound (any sound, like a clap).

Then the previously selected person (insect) will echo the same sound as best they can.

Have the blind-folded person (BAT) try to locate where the sound came from and find the person (insect).

The BAT can continue to make the sound. Every time the BAT makes the sound the other player should echo the BAT's sound.

Once located, the person making the sound takes a turn at being blind folded, listening and locating the sound of a new player:

## TO MAKE THE GAME MORE CHALLENGING:

Have two or three blind-folded people (BATS) make three different sounds one at a time. Three different players will echo an assigned BAT. For example: Bat 1 makes a sound, Insect 1 echoes the sound; Bat 2 makes a sound, Insect 2 echoes sound; Bat 3 makes a sound, Insect 3 echoes sound. After the BATS and insects' sounds have been established, they can all make the sounds together as BATS would flying at night. When the BAT has located their insect, the insect can take its turn being the BAT. You can add as many BATS as you want to continue the insect feeding frenzy.



# Bravo, Bats Fact Sheet

FOR CADETTES, SENIORS AND AMBASSADORS

- Without bats, we might not be able to enjoy some of our favorite foods such as peanut butter, chocolate, bananas, bread, French fries, ketchup, or orange juice.
- There are over 1,400 species of bats, and they live on every continent except Antarctica. Only three species of bats eat blood (and they don't SUCK blood, they just make a cut and lap it up). Most bats (70%) eat insects. The other 30% of bats eat fruit, pollen, or nectar, or are carnivores that eat other animals such as fish, frogs, birds, rodents, and even other smaller bats.
- Most of what we eat comes from plants. Bats help provide us with these foods, and many other products, by eating insects that destroy certain plants, by pollinating plants and dispersing seeds, and even by providing fertilizer with their guano.
- Bats also help keep humans healthy. We obtain 80 different medicines from plants that rely on bats for their survival. Bats keep us from getting sick by eating disease-carrying insects, such as mosquitoes which carry malaria and West Nile virus.
- Bats also protect the environment; if bats were not around to eat so many insects, we would have to use many more harmful pesticides, which can harm animals, including us!
- Bats eat insects that would damage or destroy a wide variety of agricultural products. Small bats can easily eat up to 1,000 insects every night. Here are just a few foods that bats save from insects:
  - Vegetables: asparagus, beans, carrots, celery, corn, cucumbers, eggplant, spinach, lettuce, broccoli, cauliflower, cabbage, olives, peas, potatoes, tomatoes, and peppers
  - Fruit: apples, avocados, cherries, citrus fruit, grapes, peaches, pears, pumpkin, squash, and all sorts of berries such as blackberries, blueberries, strawberries, and cranberries

Seasonings: garlic, basil, ginger, honey (Bats eat insects whose larvae destroy beehives.)

Seeds and Grains: oats, rice, wheat, and sesame seeds

Nuts: almonds, pecans, pea nuts, and pistachios

Other: coffee and mushrooms

- We usually think of bees and butterflies as pollinators of flowers, but bats are major pollinators as well. The following items depend on bats for pollination: bananas, dates, coconut, cloves, vanilla, Brazil nuts, agaves, and avocados.
- Bats help spread seeds of many plants over a wide area, making sure that more plants grow and produce food. Bats also help regenerate, or regrow, tropical rainforests by dispersing the trees' seeds.
- Bats may carry off a piece of fruit, eat the fruit, and drop the seeds some distance from the original plant, or they might eat the seeds, which then pass through their bodies and are discarded in their feces (guano).
- Without bats to spread seeds, we might not have these tasty treats: almonds and cashews, figs, allspice, chocolate. (Chocolate is made from the cacao plant. Fruit bats eat the cacao fruit pulp and discard the cocoa bean, which will grow into a new tree. This is especially important because cacao fruit won't fall from the tree by itself, so we depend on bats to provide us with more cacao trees.)
- Bat guano, or feces, makes a very rich fertilizer. One particular seasoning is very dependent on bat guano for fertilizer: peppercorns, from which we make black pepper.

# **“Bat’s so Awesome”**

## **Patch Program Kit Inventory**

- *Stellaluna* book by Janell Cannon
- *Bats* book by Gail Gibbons
- Bat Puppet
- Bat Anatomy Game Pieces and Answer Sheet for Daisies and Brownies
- Bat Anatomy Game pieces for Brownies, Juniors, Cadettes, Seniors and Ambassadors
- Four sample bat masks
- Types of Bats Matching Game pieces for Brownies
- Bat Measurement Sheet for Daisies and Brownies
- Bat Life Cycle Cards and Answer Sheet for Brownies and Juniors
- A few rulers for the girls to share, several pennies for the girls to share, and several paper clips for the girls to share
- Bats Fact or Fiction Game for Juniors, Cadettes, Seniors and Ambassadors
- Echolocation Game for Juniors, Cadettes, Seniors and Ambassadors
- Bravo, Bats Fact Sheet for Cadettes, Seniors and Ambassadors
- For additional information and bat activities, visit:
  - <https://batweek.org/>
  - <https://www.batcon.org/about-bats/games-and-activities/>
  - <https://batslive.pwnet.org/>