

# “GOING BATTY” IDL PROGRAM

Bats give many people the creeps but they are actually fascinating and sometimes beneficial. Learn amazing facts about them through hands-on activities and learn to appreciate them for their unique abilities.

## Kansas College and Career Ready Standards for Science

K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.

1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

### Classroom teacher provides

1. Cotton balls (12)
2. 6 blindfolds, one for each “mother bat”
3. 6 different types of flavoring extracts (such as orange, mint, vanilla, banana, lemon, and coconut extract) or other strong smelling liquids (vinegar, perfume, ammonia, coffee, laundry detergent, etc.)
4. 12 Ziploc bags (snack or sandwich size)
5. Crayons for students

## Advanced Preparation

Place a several drops of extract (or other strong smelling liquids) on two cotton balls per smell. Use a different smell for each pair. Place each cotton ball in a separate Ziploc bag. You should have a total of 12 bags. You can letter or number each pair for easier identification (i.e. two bags with A, two bags with B, etc.)

**During the “Going Batty” IDL program, we will be doing the following activities and students will need the corresponding materials:**

### Activity

**Bat anatomy/human anatomy**

**Echolocation**

**Finding Pups in the Nursery**

### Supplies

**Boning Up on Bats page (1 per student)  
Crayons**

**No supplies**

**cotton balls with smells (in Ziploc bags), blindfolds**

# Program Connections Information

- 1. All classes will take place using Zoom desktop video. If your building is already set up to use a desktop video application with a computer, simply open a browser and enter <https://zoom.us/j/3662120241> in the URL space.**
- 2. You may need to download Zoom launcher software (free download) if you don't already have it. This needs to be done in advance of the lesson.**
- 3. While it is possible to utilize the internal webcam and microphone in a laptop for the audio and video for the lesson, they do not provide optimal results. An external microphone allows the Greenbush teacher to better hear your students and provides for a more interactive experience.**
- 4. If using a Polycom videoconferencing unit (or any legacy type videoconferencing unit) to connect to a ZOOM conference, make sure the unit is in "encrypted mode" then dial the following IP on the internet: 162.255.37.11 or 162.255.36.11 and once connected, they will ask for a MEETING ID: enter 3662120241 (for Sharon at Science Center).**
- 5. It's always a good idea to touch base with your district technology facilitator prior to your program to make sure all systems/equipment are in place and operational.**
- 6. Classes take place at the following times: 9:00-9:45, 10:00, 10:45, 12:15-1:00, 1:15-2:00, and 2:15-3:00. If you log in early to your class, you may connect during another class' lesson. If you do, please check your connection to make sure things are working properly and then leave the meeting until your scheduled time by selecting "End Meeting" in the lower right corner of your Zoom screen and click on "Leave Meeting". This prevents your site from interfering with the lesson currently in progress. After your lesson is finished, please leave the meeting.**
- 7. If you have questions, please call Sharon Bertolio at Greenbush (620-724-6281.)**

**Prior to the IDL lesson, please pre-teach and practice these cooperative learning techniques with your students. These will be used in the IDL lessons this school year.**

### **Round Robin**

Each member of the team takes a turn sharing orally with the team.

### **Rally Robin**

With a partner, students take turns sharing brief oral responses.

### **Timed Pair Share**

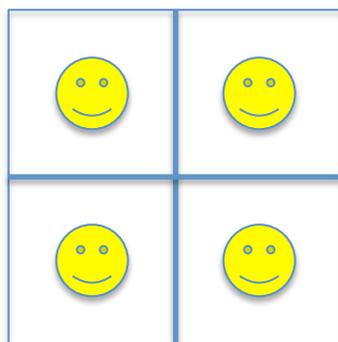
In pairs, students share with a partner for a predetermined time while the partner listens. Then partners switch roles.

### **Stand Up, Hand Up, Pair Up**

Students move around with hands in the air and quickly find a partner with whom to share or discuss. Once students find a partner, they give each other a “high five” and stand together, ready for the next instructions.

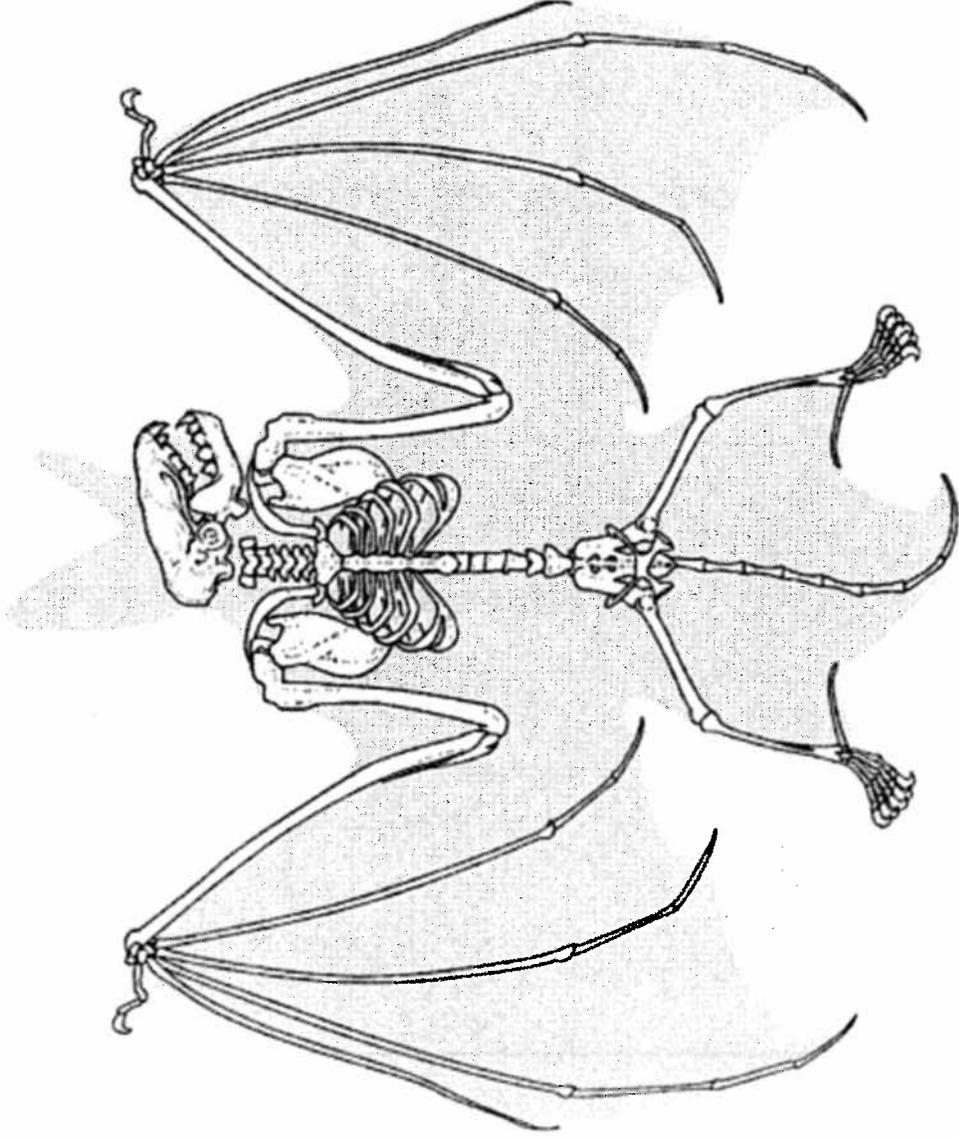
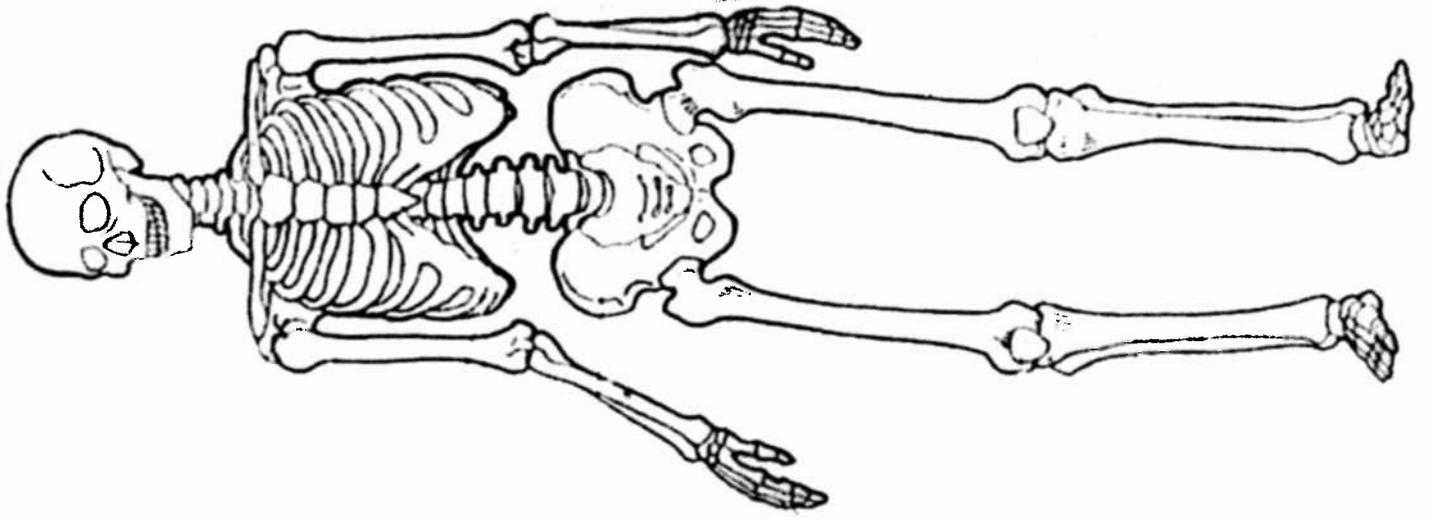
### **More terms to know –**

**Shoulder Partner:**  
The person sitting on the student’s right or left.



**Face Partner:**  
The person sitting facing the student.

# Bony Up on Bats



David Chapman. Modified from Hill and Smith, 1984.

# **Additional Lesson Resources**

# Bat Poems

## Bats

Are all bats hairy, scary things  
Rushing past on muffled wings,  
Out of caves into the night,  
On some silent, secret flight?  
I think not! I think they're great!  
No matter size or shape or weight.  
From radio waves to airplane wings  
Bats can teach me many things.

## Bats Are Sleeping (tune: Frere Jacques)

Bats are sleeping  
Bats are sleeping  
Upside down.  
Upside down.  
Sleeping in the morning sun.  
Waiting for the night to come.  
Then they'll fly all around.  
Then they'll fly all around.

## Baby

The baby bat  
Screamed out in fright,  
"Turn on the dark,  
I'm afraid of the light."  
Two little bats hanging in a cave  
One named Dan, one named Dave  
Fly away Dan  
Fly away Dave  
Come back Dan, come back Dave!

## Five Batty Bats

Five batty bats  
Were hanging 'neath the moon.  
"Quiet!" said the first.  
"The witch is coming soon."  
"She's green," said the second,  
"With a purple pointy nose."  
"Black boots," said the third,  
"Cover up her ugly toes."  
"Her broom," said the fourth,  
"Can scratch you - that I know!"  
"I'm scared," said the fifth.  
"I think we'd better go."  
Five batty bats  
Escaped into the night.  
"Dear me," said the witch.  
"That's a scary sight!"

## Little Bat

Small and furry,  
little bat,  
fly through the sky at night.  
Listen, listen,  
little bat  
as echoes guide your flight.  
Swoop and dive,  
little bat,  
catch insects as you fly.  
Hurry, hurry,  
little bat,  
back to your nearby cave.  
Snug and warm,  
little bat,  
toes hold the ceiling light.  
Sleepy, sleepy,  
little bat,  
wrapped in your wings until night.

## Bat

A bat can hang upside down  
It holds on with its toes  
When it wants to find some food  
It spreads its wings and goes  
A bat might live inside a cave  
And fly around at night  
And when it's dark a bat knows how  
to get around all right.

## Flying Bats

If I could hide inside this cave,  
What wondrous sights I'd see;  
Brown bats all hanging upside down  
Like dark leaves on a tree.  
Their mouths wide open as they fly,  
Shouting sounds as they go by;  
The echoes bounce off rocks and things.  
To help them steer their hunter's wings.

## Spooky Bats

Spooky bats go flying at night,  
Flapping about in the pale moonlight.  
Spreading their wings, they're a scary sight!  
But truth be told, there's no need for fright.  
Spooky bats are really not bad.  
They eat harmful insects, for which we're  
glad!  
They're somewhat shy, I might also add.  
But never grab one - it could get mad!  
Spooky bats like to sleep in the day.  
They hang upside down and doze that way!  
Caves and trees are where they stay.  
Until it grows dark - then it's up and away.

Five Black Bats  
By Shel Silverstein  
Five black bats  
Ready to soar;  
One stayed behind,  
Now there are four.  
Four black bats  
Hanging from a tree;  
One fell down,  
Now there are three.  
Three black bats  
Wondering what to do;  
One flew away,  
Now there are two.  
Two black bats  
Sitting in the sun;  
One fell asleep,  
Leaving only one.  
One lonesome bat  
With no place to go,  
Went hiding in a cave,  
Now there are zero.

Amazing Bats  
Amazing bats like to eat  
Thousands of bugs for a tasty treat.  
Flying through the moonlit air,  
Traveling here and traveling there.  
Hibernating when the weather's cold,  
Gathered with hundreds of friends,  
I'm told.  
Many bats are endangered, I'm sad to say  
There are fewer and fewer bats every day.  
Be kind to bats, that's the thing to do,  
Tell your friends and your family too!

Bats Are Neat  
Flying, flying in the sky,  
Bats are neat, I'll tell you why.  
Flying foxes are the tallest,  
Bumblebee bats are the smallest.  
Bats are yellow, red, and brown,  
Bats sleep hanging upside-down.  
Some eat bugs and some eat fruit,  
Some look mean and some look cute.  
Flying, flying in the sky,  
Bats are neat, now you know why!

Those Bats  
They come in many colors,  
Flying through the nighttime air.  
They use sonar to guide their way,  
Those bats are everywhere!  
They eat so many little bugs,  
The farmers love them so.  
But when the daylight comes along,  
Do you know where they go?  
5 little bats came flying in the door,  
One flew away and that left only 4  
4 little bats hiding in a tree,  
One flew away and that left 3  
3 little bats looking down at you,  
One flew away and that left 2  
2 little bats hiding from the sun,  
One flew away and that left just one.  
One little bat hanging all alone,  
He flew away and then there were none.

## Activity 5

### Echo, Echo, Echo—Location Game

#### **Background**

Bats are amazing nighttime hunters. Bats make rapid, squeaking sounds that are too high-pitched for humans to hear. These sound waves bounce off insects and the echoes are heard by the bat. The echoes tell the bat how far away the insect is, and its size and shape. The echoes also help the bats fly through the night, avoiding trees and other obstacles. This sound wave/echo system is called echolocation.

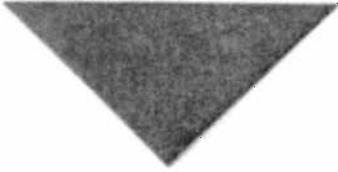
#### **To play:**

Have students form a large circle in an open area. Choose one child to be the bat and have him or her come to the center of the circle. Blindfold “the bat.” Secretly choose several other students to be “moths” and have them step inside the circle. The rest of the students are “trees” and should even out the circle.

As the game begins, the bat and moths move carefully around the inside of the circle. The bat calls out in a squeaky voice, “Moth!” while the moths respond in loud voices, “Moth!”

The goal of the game is for the bat to tag as many moths as possible in a given period of time. Tagged moths become trees. During play, when the bat comes too close to the edge of the circle, trees whisper, “Tree, tree.” Play as many rounds as you wish.

# Origami Bats



1. Fold an 8 by 8 inch square of black paper in half on the diagonal.



2. Fold down the top 2 inches of the triangle.



3. Fold each side flap in along the inside lines you see here, and then back out along the outer lines. This makes the wings.



4. Make ears by cutting a notch out in between the wings.



5. Make a vertical crease down the middle to give the body more dimension. Then add wiggly eyes for fun.