Teacher Packet for

Stellaluna

Written, compiled, and edited by
Lori Lewis
with contributions by
Gerri Baker and other storytellers

Packets such as this have been created for teachers and students to enjoy the classics and/or award-winning stories/books. Thanks to LORI LEWIS and MANY other people dedicated to improving education.

For any questions, contact Flora Joy at: florajoy@comcast.net.
Classroom Suggestions for Stellaluna

The story *Stellaluna* by Janell Cannon is a delightful story for all ages. Both the beautiful illustrations and the story touch the hearts of all. The activities included in this story lesson are suitable for any elementary grade, with some modifications needed for very young students.

**A. Mindset**

Begin the story lesson by introducing the story: “Let’s think about the ways in which all of us in this room are alike. Can you name some? (Expect answers such as all have arms, legs, hair, teeth, etc.) Now can you think of some ways in which we are different? (Encourage answers such as blond hair, brown hair, blue eyes, skin color, glasses, braces, etc.) *Stellaluna* is a story about a little bat who makes friends with a family very different from her own. Listen now while I tell (or read) you the story.”

**B. Tell or read the story Stellaluna.**

**C. Content Area and Integrated Activities**

These activities may be used in any sequence or as a whole to create “Bat Day.” While these activities may correlate with Halloween, they are by no means geared to that occasion only.

**Language Arts**

In the *Stellaluna* packet are activities for vocabulary words (entitled “Bat Talk”), a fun worksheet about “bat” words (entitled “Bat Words”), and a matching game (entitled “Meaning Match-Up”), as well as ideas for research, illustrating, science language, sequencing, comparison/contrast, and many exciting creative writing or discussion ideas.

**Dramatic Arts**

Ideas for *Bat Situations* appear on cards that may be covered with clear self-adhesive paper and trimmed. The situations revolve around the theme of relationships and differences. Encourage students to think through the possibilities described on each card and decide on the best action to take in that circumstance.

**Science**

Students may study the anatomy of the bat. The bat has some similarities to the human anatomy (thumb, four fingers, arm structure). The diagram (entitled “Bat-Natomy”) may be labeled by students. This may be new to many learners, and it is therefore suggested as a group activity. A fill-in-the-blank puzzle (entitled “Bat-Food”) teaches about the many types of foods that bats eat. A word search (entitled “Bat Classification by Favorite Foods”) utilizes the classifications of bats according to what they eat. These types of words are difficult, but they provide exposure to scientific words. A section on Science Language is also included with Language Arts Activities.

**Mathematics**

A teacher page entitled “Integrating *Stellaluna* into Math” gives several suggestions for math activities. A sample flash card for copying (with detailed instructions) teaches fractions and division. Students will match the bat picture with its fraction to the piece of fruit eaten to demonstrate that fraction. They will be answering questions such as “Which bat ate the fruit?” and “How much of the fruit is left for the bat to eat?” A group-work graphing activity is explained on the teacher page with appropriate questions to ask. Some multiplication and division board work sample questions are included using facts about the brown bat, the most common bat in the United States. While sharpening math skills, students also will learn more about bats.

**Social Studies**

A teacher page describes several activities to integrate *Stellaluna* into Social Studies. (See page entitled “Integrating Stellaluna into Social Studies.”) A map study activity, information on bats and their behaviors, and discussion about cultural perspectives regarding bats are also included.

**Ideas for a “Bat Day”**

Why not have a “Bat Day” devoted to the study of bats? Beginning the day with the story of Stellaluna, the teacher may choose activities appropriate to the class and have a wonderfully batty day. A teacher page entitled “Ideas for Bat Day” gives many suggestions on how to carry out this special day.

**D. Story Closure**

*Stellaluna* was a young bat who was forced into a strange situation. She made the best of the situation and grew strong. One day she had the opportunity to help those who had helped her. She knew it was all right to have friends that are different from her. Their skin may be another color, they may dress differently, or talk differently, but we can still be friends. . . . and that’s a fact . . .

Lori Lewis/Flora Joy—florajoy@comcast.net
Language Arts Activities with Stellaluna

Choose one or more of the following activities to use as a language arts follow-up to Stellaluna by Janell Cannon.

1. **“Bat Talk”**
   A later provided page entitled “Bat Talk” contains several word cards from the story Stellaluna. Cut this page into separate cards, and write the same words on the chalkboard. Give one card at a time to a student who will come to the front of the class and enact the meaning of the word without saying anything. The remaining class members try to guess which word is being enacted. Erase the word on the chalkboard each time one is guessed. (Consider writing several additional words on the chalkboard—as distractors—so the final words being enacted are not too obvious.)
   Adaptation 1: (For older learners) Don’t write the words on the board, but have the students try to remember the words from the story as they are being enacted.
   Adaptation 2: (An extra challenge) Give each of the twelve word cards to twelve different students. These twelve students enact their words—all at the same time. The “first one guessed” is the winner, and the “last one guessed” must erase the chalkboard (just for attention, of course).
   Adaptation 3: (A super extra challenge) Do as in adaptation 3, except have only one student matching the words with the “enactments.” Record the number of seconds needed to guess them all, then have another student (who was out of view of the first round) try to beat the first student’s time.

2. **Match Meanings (see handout entitled “Meaning Match-up” for students)**
   Copy word cards onto colored paper (for example, pink) and definition cards onto another color (for example, purple), and cut the cards apart. Have students either in groups or alone match a pink word card to a purple meaning card. This may be timed if desired. Check answers as a group.
   *(Developed by Margie Dyer)*

3. **Paragraph Writing and Illustrating**
   Have students bring in a piece of their favorite fruit. Have them write down ALL the words they can think of to describe their fruit (how does it look, smell, taste; discuss its color, shape, etc.). After students have developed a good list of descriptive terms for their fruit, have them write a paragraph about how wonderful it is. They may also wish to draw an illustration to accompany their paragraph. Display the finished work somewhere in the room.
   *(Adapted by Gerri Baker from ideas in Great Ideas from Learning, Vol. 2, Language Arts, Springhouse Corp., 1986.)*

4. **Research, Writing, and Illustrating**
   Have each student make a thumbprint on a given piece of tag board cut to 8 1/2 by 11 inches. Make sure the prints are towards the upper half of the sheet. Students are to create a bat out of the print. They are to decide what they will call it, its habitat, eating habits, behavior, and role in society. They will wish to use encyclopedias and reference books to research bats and their characteristics. Have students then write a paragraph about the bat they have created.
   *(Adapted by Gerri Baker from ideas in Great Ideas in Learning, Vol. 2, Language Arts.)*

Lori Lewis/Flora Joy—florajoy@comcast.net
5. Graffiti Wall

On the door or wall of your classroom hang a large piece of butcher paper. At the top have written “We all have differences...” and on the bottom “...but we can still be friends.” Have students come up and write something about themselves and draw a picture of themselves (for example: wear glasses, have red hair...). If you want to get really creative, students may add yarn, ribbon, fabric, etc., to their pictures.

(Adapted by Gerri Baker from ideas in Great Ideas from Learning, Vol. 2, Language Arts.)

6. Science Language

Discuss the ways in which animals are classified. Try to group as many animals as the students can think of into each classification.

Broad Classification
- Animals with Backbones (bears, sea lions, birds, fish, etc.)
- Animals without Backbones (spiders, bees, worms, etc.)

More Specific Classification
A. Amphibians—cold-blooded animals with backbones (frogs, toads, salamanders, etc.)
B. Mammals—warm-blooded animals with backbones that produce milk for their young (humans, cows, cats, whales, BATS, etc.)
C. Reptiles—cold-blooded animals with backbones, breathes with lungs, have scales (snakes, turtles, lizards, alligators, etc.)
D. Avians—warm-blooded animals with wings, non-milk-producers (birds)
E. Fish—cold-blooded aquatic animals with backbones

Teachers will need to have reference books available for this activity.
(Developed by Gerri Baker)

7. Sequencing

Have students illustrate a portion of the story Stellaluna. Using a rope stretched across the room and clothes pins, put the story in sequence with explanations below each picture. Discuss and review the story using the questions below.

A. Someone quickly retell the story of Stellaluna for us.
B. Why do you think Stellaluna began to think she was a bird?
C. Was she a bird? How do we know she was not?
D. Do you think Mother Bird’s reaction to Stellaluna was appropriate?
E. How about the way the baby birds responded to Stellaluna? Were they accepting of her?
F. Is it okay to be different from those around us?
G. How should we treat those who are different from ourselves?
H. Do you truly think Stellaluna and the birds can be friends even though they are different?
I. Can we learn anything from this story? What?
J. What are some ways that we can show our acceptance and friendship towards those who are different from us?

(Developed by Gerri Baker)

Comparison/Contrast with Stellaluna

1. After telling or reading Stellaluna, answer the questions below with the students in a group. List their answers together on the chalkboard.

   A. From the story Stellaluna, what are some characteristics of fruit bats? (for example: baby bats fly with their mother, have wings, feet hold onto branches, eat fruit, hang upside down to sleep, see at night, live in a warm place, have thumbs, fly, etc.)

   B. What are some characteristics of birds? (for example: eat grasshoppers, sleep upright in nests, cannot see at night, stay in nest while mothers get food, fly, have wings, land on branches, etc.)

2. Using two different colors of chalk or symbols, have students indicate those listed characteristics that are the same and those that are different. Ask the question “What can we learn from studying these lists?”

3. Together make a list of some other animals that are similar but different. List these on the chalkboard. (for example: fish and whales, people and monkeys, cats and lions, dogs and wolves, etc.)

(Developed by Gerri Baker)

Writing Assignments

These may be used as independent or two-person assignments.

1. Have students choose two animals that are similar, but different, and rewrite the story using Stellaluna’s basic storyline. Students should use the characteristics of the animals they have chosen to fit the story. Before they begin, review the story sequence.

(Developed by Gerri Baker, Linda Bearfield, and Lori Lewis)

2. As an additional activity and for the final draft of the story, have students circle every descriptive word in their text. Then, using library aids such as a thesaurus or a dictionary,

Lori Lewis/Flora Joy—florajoy@comcast.net
the students may look up words to make their story more creative. Discuss descriptive words and their usage.

(Developed by Gerri Baker)

3. Review the final words of *Stellaluna*, “But we’re friends. And that’s a fact.” Have students write another story with different characters ending with these same words.

(Developed by Claudente Reese)

4. Write and then read or act out a commercial for television or radio to sell bat houses. What qualities of a bat house would you promote? Who would be your target audience? Discuss using celebrity endorsements, humor, scare tactics, the bandwagon approach, or the interview approach of selling. Try to incorporate at least three or four positive facts about bats that have been learned.

(See instructions for building bat houses included in this packet.)

(Developed by Kay Collins)

5. Write a newspaper article or journal entry about a reunion between Stellaluna and the bird family when they are adults. How will they have changed? How will they act towards each other?

(Developed by Annette Carico)

6. Pretend that Stellaluna has moved to Hollywood and become a big screen actor. Write a story about another adventure Stellaluna might have. Try to include new characters and dialogue between the characters.

(Developed by Martha Rhoton)

**Fun With Words**

A student handout entitled “Batwords!” is an activity matching words or phrases containing “bat” with their meanings. This page is designed to show the diversity of the English language.

(Developed by Lori Lewis)

**More “Batty” Stories**

Also included in this packet is a “Bat Bibliography” of reference books and literary books about bats or related to the topics covered in this storylesson. Have some of these books available in the classroom for the students to read themselves or to choose one they would like the teacher to read aloud.
<table>
<thead>
<tr>
<th>Bat Talk</th>
<th>(See earlier section for instructions.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sultry</td>
<td>tangle</td>
</tr>
<tr>
<td>clutched</td>
<td>gripping</td>
</tr>
<tr>
<td>ripe</td>
<td>gracefully</td>
</tr>
<tr>
<td>clumsy</td>
<td>babble</td>
</tr>
<tr>
<td>shrieked</td>
<td>crooned</td>
</tr>
<tr>
<td>limp</td>
<td>curious</td>
</tr>
</tbody>
</table>
# Batwords!

Match these “bat” words or phrases, which have the word “bat” in them, with their meaning.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>__1.</td>
<td>Batboy</td>
<td>a. Ocean dwelling creature</td>
</tr>
<tr>
<td>__2.</td>
<td>Bats in the belfry</td>
<td>b. Doing everything right</td>
</tr>
<tr>
<td>__3.</td>
<td>Batter up!</td>
<td>c. Mixture used in cake-baking</td>
</tr>
<tr>
<td>__4.</td>
<td>Driving me batty</td>
<td>d. Not able to see</td>
</tr>
<tr>
<td>__5.</td>
<td>Batting a thousand</td>
<td>e. He drives a Batmobile</td>
</tr>
<tr>
<td>__6.</td>
<td>Batman</td>
<td>f. Combat or war</td>
</tr>
<tr>
<td>__7.</td>
<td>Batten the hatches</td>
<td>g. Material used for lining quilts</td>
</tr>
<tr>
<td>__8.</td>
<td>Batfish</td>
<td>h. Next batter’s turn in baseball</td>
</tr>
<tr>
<td>__9.</td>
<td>Blind as a bat</td>
<td>i. One who looks after equipment for a baseball team</td>
</tr>
<tr>
<td>_10.</td>
<td>Batter</td>
<td>j. To drive someone CRAZY!</td>
</tr>
<tr>
<td>_11.</td>
<td>Batting</td>
<td>k. Said of someone who is mentally unstable</td>
</tr>
<tr>
<td>_12.</td>
<td>Battle</td>
<td>l. Secure a boat or a building for a storm</td>
</tr>
</tbody>
</table>

How did you do? Can you think of any more “bat” words or phrases?

Where do you think phrases like “hanging around” or “hanging out” came from?

*(Developed by Lori Lewis)*

Cut this section off before making student copies! Answers: 1) i, 2) k, 3) h, 4) j, 5) b, 6) e, 7) l, 8) a, 9) d, 10) c, 11) g, 12) f.

Lori Lewis/Flora Joy—florajoy@comcast.net
<table>
<thead>
<tr>
<th>murmur</th>
<th>sniff</th>
<th>gasp</th>
</tr>
</thead>
<tbody>
<tr>
<td>stutter</td>
<td>shriek</td>
<td>limp</td>
</tr>
<tr>
<td>hiss</td>
<td>flitter</td>
<td>clumsy</td>
</tr>
<tr>
<td>grasp</td>
<td>sultry</td>
<td>croon</td>
</tr>
<tr>
<td>clutch</td>
<td>swoop</td>
<td>dodge</td>
</tr>
<tr>
<td>twig</td>
<td>babble</td>
<td>downy</td>
</tr>
<tr>
<td>anxious</td>
<td>perch</td>
<td>howl</td>
</tr>
</tbody>
</table>

(Developed by Margie Dyer)
<table>
<thead>
<tr>
<th>to make a low, steady sound</th>
<th>to make a noise by drawing in air through the nose</th>
<th>to breathe in suddenly, as in surprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>to speak with short stops that one cannot control</td>
<td>a loud, sharp, shrill cry</td>
<td>to walk in an uneven way because of an injured leg</td>
</tr>
<tr>
<td>to make a sound like the sound of an “s” held a long time</td>
<td>to flap the wings rapidly</td>
<td>not having good control, as of one’s hands or feet</td>
</tr>
<tr>
<td>to seize firmly with the hand</td>
<td>hot and damp, without a breeze</td>
<td>to sing or hum in a low, gentle tone</td>
</tr>
<tr>
<td>to grasp or hold tightly</td>
<td>to sweep down or pounce upon suddenly</td>
<td>to move quickly aside, as to get away</td>
</tr>
<tr>
<td>A small branch of of a tree or shrub</td>
<td>to talk or say fast or foolishly</td>
<td>of, or covered with, soft, fine feathers or hair</td>
</tr>
<tr>
<td>uneasy in mind; worried</td>
<td>a branch on a tree a bird might roost on</td>
<td>to make the long, wailing cry of a dog or a wolf</td>
</tr>
</tbody>
</table>
Bat Bibliography
For use with Stellaluna Storylesson

Reference Books
See also World Book Encyclopedia
See also New Grolier Encyclopedia—CD Rom

Literary Books

(Compiled by Lori Lewis, Gerri Baker and Betsy Street)
**Bat SKIT-uations**

*(Developed by Gerri Baker)*

Use as a follow-up activity to *Stellaluna* by Janelle Cannon.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>A guest shows up at your house to live for a few weeks. He/she will be sharing your room with you. This person cannot speak English. Act out your first discussion with this new person. (2 people)</td>
<td></td>
</tr>
<tr>
<td>Tommy is mean. He is not a very nice person and none of your friends like him. You see him having trouble getting his wheel chair through a door. You decide to help him, but he responds very hatefully. What do you do? Act out this scene. (2 or more people)</td>
<td></td>
</tr>
<tr>
<td>You go to a new school and everyone is wearing plaid. They think it is cool. You don’t own any plaid and your parents won’t let you buy any. Act out a conversation with the cool “gang” in which you are trying to convince them that wearing plaid does not represent who you are. (3 or 4 people)</td>
<td></td>
</tr>
<tr>
<td>Your friend tries to “fit in” with all the different groups at the school. Act out a scene where you try to help your friend see his/her own worth. (2 people)</td>
<td></td>
</tr>
<tr>
<td>Sometimes we choose friends who are not good for us. The baby birds’ mother was afraid Stellaluna was a bad friend. She told Stellaluna she had to obey the rules of the house. Act out a scene similar to this that might happen at your house. (2 or more people)</td>
<td></td>
</tr>
<tr>
<td>Act out a scene in which one of your friends is trying to learn to roller skate and you are trying to encourage him/her. Your friend isn’t very good though, and you roller skate much better. What would you say or do? (2 people)</td>
<td></td>
</tr>
</tbody>
</table>
You meet a talking dog that tries to convince you that you are also a dog. What would the dog say to you? Act out this scene. (2 people)

You are a mother bat who just found your baby who has been missing. How would you respond? Would it be different from Stellaluna’s mother? Act out this meeting. (2 people)

You are lost and meet up with a family of monkeys. What things might you have to change about yourself to fit in with them? Act out this scene. (3 or 4 people)

Pretend you and a friend are bats. What things do you think you would see that you don’t always see during the day? Take us on a verbal tour and have us “fly” with you. (2 people)

Add your own ideas:

Lori Lewis/Flora Joy—florajoy@comcast.net
Bat Classification by Favorite Foods

(Developed by Lori Lewis with information taken from Bats of the World, by Gary Graham and The Bat, by Nina Leen)

Bats may be classified by the type of food they eat. Search for the **classification name** and then what **food** that type of bat eats.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Type food eaten</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frugivorous</td>
<td>Fruit</td>
</tr>
<tr>
<td>Insectivorous</td>
<td>Insects</td>
</tr>
<tr>
<td>Carnivorous</td>
<td>Meat</td>
</tr>
<tr>
<td>Piscivorous</td>
<td>Fish</td>
</tr>
<tr>
<td>Sanguivorous</td>
<td>Blood</td>
</tr>
<tr>
<td>Nectarivorous</td>
<td>Nectar and Pollen</td>
</tr>
</tbody>
</table>

---

Lori Lewis/Flora Joy—florajoy@comcast.net
Bat Food!
(Developed by Lori Lewis with information taken from Bats of the World by Gary Graham)

Stellaluna was a fruit bat. Remember that she did not like insects.
Different types of bats eat different types of food.
Try to fill in the blanks from the clues given below to see what types of foods bats eat.

1. __ __ S __
2. __ __ T __
3. __ __ E __
4. __ __ L __
5. __ __ L __
6. __ __ A __
7. __ L __
8. __ U __
9. __ N __
10. __ A __

Clues:
1. Bats that eat this type of food have long legs, big feet and sharp claws. Their feet are flattened to make them glide through water easier.
2. Bats that eat this type of food have long tongues to get this food from the center of the flower.
3. This eight-legged food is preferred by bats that also enjoy eating insects.
4. The vampire bats of South America prefer this food, drinking about one ounce each night--mostly from cattle and other large mammals.
5. Bats that eat this food help to pollinate many types of tropical plants.
6. Some types of large bats may eat this food, including frogs, birds, rodents or other bats.
7. These green plant parts are eaten by many types of bats.
8. This type of food is best if ripe and sweet.
9. About 70% of all bats eat these, including mosquitoes, as their main food source.
10. This long-tailed reptile is a favorite with the meat-eating bats.

Cut this section off before making student copies! Answers: 1) fish, 2) nectar, 3) spiders, 4) blood, 5) pollen, 6) meat, 7) leaves, 8) fruit, 9) insects, 10) lizards.

Lori Lewis/Flora Joy—florajoy@comcast.net
With your teacher, or using reference books, label the parts of the bat as indicated. Notice that bats have a hand and arm structure very similar to humans.

1. arm, 2) forearm, 3) hand, 4) ears, 5) thumb, 6) second finger, 7) third finger, 8) fourth finger, 9) fifth finger, 10) knee, 11) tail, 12) tail membrane, 13) foot.

Lori Lewis/Flora Joy—florajoy@comcast.net
Integrating *Stellaluna* into Math

Choose from the activities below to integrate *Stellaluna* by Janell Cannon into a math lesson.

1. **Division:** Included is a sample bat-fraction flashcard that can be used to integrate bats into a math session. The supplied materials have been prepared with great flexibility in mind. We suggest the following:
   
a. Teachers copy and cut apart bat flashcards.
   b. Color in a section of each fruit representing the remaining portion of fruit to help students work on the type fractions you are studying.
   c. Laminate or cover cards with clear contact paper.
   d. Complete the flashcards by writing in a fraction on the card with the bat picture and a question on the fruit card.
   
   **example:** Which bat ate the piece of fruit below?
   
   Which bats could eat the amount of fruit left?
   
   ![Bat Flashcard Example](image)
   
   e. Instruct students to match the right bat with the right fruit. You may do this as a class or as small groups.
   f. Depending on the age of the students and their level, you may color code the correct matches on the back of the cards (e.g. red for two that match, purple for another pair, green, etc.)


2. **Graphing:** Make a simple line graph showing the favorite fruits of the children in your class. Give students a list of 5 to 7 fruits and ask them to indicate which is their favorite. Then make a graph listing the fruit and indicating how many students chose each fruit. You can then do further study on graphs by answering the following questions.
   
a. How many students like oranges the best?
   b. Which fruit is the most popular in this class?
   c. Which fruit is the least popular?
   d. How many students voted on their favorite piece of fruit?
   e. How many different fruits were there?
   f. How could we make a change in this graph to show the difference between boys and girls who like which fruits? (If this sounds interesting to the class, you may make another graph to show these differences.)
   g. How many students did not choose apples as their favorite fruit?

   *(Developed by Gerri Baker)*

3. **Division or Multiplication Boardwork:** In America, the brown bat is the most common type of bat. The brown bat eats 1/2 of its weight in bugs every night. With this in mind, give the students the approximate weight of a bat and have them divide it by two to get the correct weight of the bugs eaten. If you are working on fraction

---

Lori Lewis/Flora Joy—florajoy@comcast.net
multiplication, you may have students multiply the weight of the bat by 1/2 to get the weight of the bugs eaten. Change to meet the needs of your students.

A. A bat weighing 16 ounces ate its fill of bugs last night. About how much did the amount of bugs it ate weigh?
B. A bat ate about 3 ounces of bugs. About how much does it weigh?
C. A bat is having a hard time flying. It ate 2 ounces more bugs than it should have, so it has to rest. The bat weighs about 10 ounces. How many ounces of bugs did it eat?
D. A bat weighing 4 and 1/2 ounces will eat about what weight of bugs?

(Developed by Gerri Baker)

Bat-Fraction Flashcard to Copy:
Integrating *Stellaluna* into Social Studies  
(Developed by Gerri Baker, Lori Lewis, Betsy Street and Marcia Mc Murray)

Below are given several ideas for integrating *Stellaluna* by Janell Cannon into social studies. Choose whichever best fits your group of students.

**Map Studies:** Have students research bats and how many different types there are. Have each student choose a type of bat. As a class, take a huge wall map and let students place bat-shaped markers, properly classified, in regions where their bat lives. Talk about the bats’ behaviors and facts about the bats such as those listed below.

1. **Bats are mammals.** They make up nearly a quarter of all mammals on the earth and live on all continents except Antarctica. They are the only mammals that can fly.

2. There are **two main classifications** of bats.
   a. **Megabats** are large, fruit-eating bats usually called flying foxes, but are not related to foxes. There are 200 species of megabats, and they live in the tropics of Asia and Africa. Some have wingspans of nearly six feet. Some fly about during the day, while most fly at night. They have big eyes and can see very well. Stellaluna is a flying fox.
   b. **Microbats** are small, insect-eating bats. There are over 800 species of microbats. Forty-two different species live in Canada and the United States alone. The smallest mammal on earth is a bat called the Bumblebee Bat of Thailand. It weighs less than a penny.

   Some of these microbats catch things to eat other than insects. Some eat frogs, rats, mice, and even fish. The type of bat we call a vampire bat does lap blood from the bites it gives cattle and other warm-blooded prey (usually not human). These vampire bats live in the warmest regions of South and Central America.

3. **Echolocation** is the name for a bat’s “sonar.” Microbats fly with their mouths open, emitting a high-pitched squeak that cannot be heard by the human ear. The sound echoes off objects, letting the bat know what is in front of it. By this sonar, a bat can fly in the dark with great perception, catch insects in the air, and detect motion, distance, speed, and the shapes of things around it.

   Some microbats have unusual faces, with large ears and odd-looking noses. These are its sonar equipment--helping to direct and detect the echoes that return to the bats.

4. Bats are helpful in **pollination** of plants and flowers. In some instances nectar-feeding bats help pollinate certain plant life. For example, in the southwestern United States and Mexico, long-nosed bats are the main pollinators of two types of cacti: the large organ pipe and the saguaro. In East Africa, bats provide pollination for the giant baobab, known as the “Tree of Life” because many other plants and animals depend on it for survival.

5. Bats have many different types of **habitats.** Most bats live in caves, but many roost in trees, in towers, under bridges, in country barns, and in city houses. Most of

Lori Lewis/Flora Joy—florajoy@comcast.net
them roost hanging upside down; however, some do sleep resting on flat rocks or in rock crevices—head up.

6. **Cultures have different perceptions** about bats. Other countries and cultures have a better perception of bats than most Americans. For example, in China the word for the bat is “fu.” The same word means “happiness” or “good luck.” Bats used on the cover of a gift mean special things. Two bats mean good wishes from the giver. The design of a tree surrounded by five bats is a symbol of happiness, health, wealth, long life, and tranquillity.

7. Before beginning a bat study, find out the students’ attitudes about bats. Are they afraid of them? How many have seen them? Are bats cute? Have the students heard stories about bats before? Have the students draw a picture of a bat and write one sentence that describes how they feel about bats. Collect and store these papers. At the end of the bat study, ask students to repeat this exercise. Hand out the first papers. How have their “Bat-itudes” changed?

(from Lollipops 14,1, Sept./Oct. 1993.)

8. As an additional map study, have students give directions from the school to their home. Check their directions on a map of your area. As an alternative, have older students draw and label a map to their home.

9. **Bat Conservation International.** Formed in 1982, BCI was created to save bats and help inform the public regarding bats. Several bats are endangered, such as the gray bat, because of misuse of pesticides and lack of understanding regarding bats’ vital role in nature as insect-eaters and pollinators. Further information about bats may be obtained by writing BCI at the following address:

    Bat Conservation International
    P.O. Box 162603
    Austin TX 78716
    or phoning (512) 327-9721

**Further Social Studies Integration**
(Developed by Gerri Baker)

For additional integration of the theme of acceptance and care of the environment, the teacher may choose the following activities.

1. Geography and acceptance. Have students write letters to students in foreign countries about their likes, dislikes, how they spend their time, the United States, etc. Encourage a map and culture study of the areas from which students respond.

2. Geography/Rain Forests/Environment. Talk with students about bats that live in the jungle, and then guide the discussion more into the rain forest and its preservation. The bats play an important part in the rain forest in that they are pollinators of certain plant forms found only in the rain forest.

Lori Lewis/Flora Joy—florajoy@comcast.net
Ideas for “Bat Day”

With a little advance planning and a bit of parental help, Bat Day can be an easy success.

Begin the day with the story *Stellaluna* by Janell Cannon. The accompanying activities may be done in any order that fits your students and your situation.

In addition to the suggestions given in the areas of Language Arts, Dramatic Arts, Science, Mathematics, and Social Studies, here are several ideas to make Bat Day even more fun!

Children may enjoy choosing a type of bat to be for the day. There are more than 1000 species of bats. Have reference books available for research (see bibliography).

The teacher may choose to have a “Bat-Mobile” already made to hang up (see instructions for Happy Bat) or have the children each make his/her own bat and hang it from the ceiling.

Instructions for two Bat-Games are given. Bat and Moth reinforces the ideas of echolocation. Bat Race is just for fun.

Why not have special refreshments on Bat Day? Ask a mom or two to make Bat-Cupcakes and send fresh, sliced fruit, gummy worms, perhaps a mango to taste, and serve either a fruit punch or clear soft drink. Or even make a black drink by mixing grape and orange flavored pre-sweetened drink mixes!

Have children bring a towel to school. Using a clothespin, clip the towel to the neck of their shirt in the back to make wings. Kindergarteners may like to wrap up in their wings for rest period.

Have children lie on their backs on the floor with feet up in chairs to simulate how bats sleep. Flashlights may be used to simulate Stellaluna’s ability to see at night.

These suggestions can be used as a Halloween activity, but consider having Bat Day as a non-Halloween event. Use it to teach new ideas and acceptance for animals that are usually considered unlovable.

Most importantly, have fun and know that it is okay to be a bit batty at times!

Lori Lewis/Flora Joy—florajoy@comcast.net
Happy Bat Craft

Use a toilet paper cardboard tube for the bat’s body. Cover with black or brown construction paper or paint. Add accordion-folded strips of black or brown construction paper for its feet and wings. Cut two pointed paper ears; glue on paper parts. Use crayons or markers to put on a “happy face!”

These can be made to hang from a mobile (you’ve made a Bat-Mobile!) or from the classroom ceiling.

(From Lollipops, 14.1 Sept/Oct. 1993.)

Bat Race

Set up two chairs and tie a piece of string to the back of each. (The longer the string, the more difficult the game.) Cut two bat shapes out of black construction paper and make a hole in the top center of each with a hole punch. Thread one bat on each piece of string. Divide students into two teams. Have the first player of each team stand at the end of the room opposite the chair with the string lying on the floor in front of him or her. At the signal to begin, the player picks up the loose end of the string and tries to get his/her bat to fly to the chair by raising the string in the air. The team who wins the most two-person heats wins the game. More teams can be used if desired. (From Parties Kids will Love! by Vicki Kuypers for Current, Inc. 1987.)

Bat and Moth

Choose one player to be the bat and one to be the moth. Use a handkerchief or bandanna to blindfold the bat. Remaining players stand in a circle holding hands around the bat and moth. Both bat and moth must stay inside the circle at all times. The bat will call out “Bat.” Everytime he does this, the moth must answer “Moth.” After listening for the moth’s reply, the bat moves in that direction to try to capture the moth. The moth may move anywhere in the circle to avoid capture and must always answer the bat. When the bat captures the moth, the bat-player becomes the moth and the moth-player chooses a new bat. Continue as long as desired.

(From the depths of Lori Lewis’ memory banks. No source found.)

Bat Cupcakes

White ready-to-spread frosting
Blue and red food colors
Cupcakes baked in foil liners

Small purple gumdrops
White Tic-Tac breathmints
Red M&M’s
Red “Fruit by the Foot” snacks

Tint frosting with food colors to make light purple (or any color you desire). Frost cupcake, piling high to make rounded top. Add gumdrops for ears, M&M’s for eyes, Tic-Tac’s for teeth. Unroll Fruit by the Foot and cut diagonally to make pieces about 2 inches long for wings. Insert into sides of frosting. Refrigerate to set frosting.

(From Cupcakes for Kids, by Current, Inc., Colorado Springs, CO 80941)

Lori Lewis/Flora Joy—florajoy@comcast.net
A "Bat Rap"
(Written by Rhonda Autrey, Kay Collins, and Claudene Rease)
Begin by singing the Batman theme song twice.

Chorus: Bats have a bad rap and we're here to say
We don't deserve to be treated this way.
   We're here to dispel some rumors we know
So you can be a friend instead of a foe.
   
   One lady said I attacked her hair,
   But that's a lie; I don't want to be there!
   Chorus

   Somebody said I tried to drink his blood,
   But I got a bad rap from my cousin Jud.
   A South American bat, he is very rare.
   Vampire bats drink blood but I wouldn't dare.
   Chorus
   
   "You're very dirty," I heard someone say.
   But I clean and groom myself throughout the day.
   Chorus

   "Blind as a bat"-- how can that be true?
   For we can see just as well as you.
   To avoid our enemies, we fly at night.
   That's when we have our very best sight.
   Chorus

   I use my sonar along with my sight.
   I just open my mouth and go into the night.
   We're making a sound that humans can't hear;
   Echoes return and the picture is clear.
   Chorus

   They say we're rodents, mice with wings,
   Worthless pests, even evil things!
   Eating mosquitoes is within my power.
   I can eat 600 in only an hour!
   Chorus

   Bats don't ever drive people insane.
   That fact is simple; it's very plain.
   But once you get to know us, you'll like us for sure.
   You'll be a bat-a-holic----and there is no cure.

   Bats have a bad rap and we're here to say:
   "Wrapping it up, have a nice day!"
   End by singing Batman theme song twice.