ABOUT THE BOOK
Why does everyone have a belly button? Do animals have belly buttons? Where does your belly button come from?

In simple yet accurate language, award-winning science writer Mary Batten explains for young readers the answer to these and other related questions. Using clear analogies and a wide variety of examples—from the enormous blue whale to the tiny bumblebee bat—the text helps curious kids learn more about their own bodies and how they fit into the world of mammals.

All mammals are found to have belly buttons—the connection from child to mother in each mammal species. Mammary glands, live birth, and fur characterize mammals, but the placenta from inside the mother’s uterus and its umbilical lifeline to the developing fetus distinctly set mammals apart from other types of animals. The resulting navel, or belly button, in all mammals marks the outward sign of the baby’s independence as a new being upon its birth.

THEMES
• Mammals
• Characteristics of mammals
• Nurturing

BEFORE YOU READ
• Have the students fill out the questions on Anticipation Guide included in this Teacher’s Guide.
• Practice saying and reading the new vocabulary words from the glossary in the book. Instruct the students to listen for the words in the story.
• Together, fill in the correct words together from the worksheet called “Find the Word” to familiarize the students with the new, more complex vocabulary. Discuss the meanings as you write the words.
• List mammals the students might know and discuss how they might be alike.
• Discuss places where the students can find mammals, such as a yard, field, zoo, etc.
• Look up any other words from the book that children might not know in the dictionary and discuss the definitions. Add them to the vocabulary page.
• View selected pictures from the book. Ask the students what they think the book is about besides belly buttons. Have them write their predictions in a journal or logging book.
• Read the book through to get the overall view. Then read it a second time using the As You Read suggestions.

AS YOU READ
• Review the vocabulary the students filled in from the “Find the Word” worksheet. Ask students to listen for the vocabulary words and fill them in on the matching worksheet.
• Ask students to keep a running list of mammals mentioned in the story. They are:
  - cat | dog | rabbit | human | dolphin
  - African elephant | blue whale | bumblebee bat
  - red bat | rhinoceros | giant panda | monkey
  - orangutan | gorilla
• Have the students write the page number of their favorite picture. Use this information later in the writing activity.
AFTER YOU READ
Ask students to do one or more of the following activities:
- Fill in one or more of the vocabulary worksheets.
- Answer the guided reading questions together or in small groups.
- Complete the vocabulary exercise worksheets.
- Find the sentences in the book that contain each vocabulary word and write those sentences to practice locating information.

LANGUAGE ARTS
Ask students to do one or more of the following activities:
- Do simple research about the mammals in the book or additional mammals of the student’s choice. Use the Mammal Report form to direct their information discovery.
- Group the mammals into categories. Present the groupings to the class orally, explaining why they put the animals in these groups.
- Choose two different mammals. Make a simple chart with the headings shown below and compare and contrast the two mammals.

  ALIKE           DIFFERENT
- Alphabetize the mammal list or the vocabulary list.
- Look up each mammal name in a class set of dictionaries. Write the guide words found at the top of each page where the mammal is found.
- Spell out “Belly Button.” Try to name a mammal for each letter. You could also use the author’s name or the student’s name. Example:
  Bear
  Elephant
  Lion
  Lynx
  Yak
- Create an imaginary mammal. Fill in the characteristics for your mammal, using the list below. Then draw your imaginary mammal.
  o Size
  o Color
  o Number of Legs
  o Amount of Fur
  o Differences between male and female
  o Location in the world
  o Type of home (habitat)
  o Number of babies

CURRICULUM CONNECTIONS

WRITING
Ask students to complete one or more of the following activities:
- Use the information from the Mammal Report Form to write a report about your mammal. Make each numbered section one paragraph.
- Write a paragraph about your imaginary mammal using the information you made up in the Create Your Own Mammal Activity.
- Write mammal riddles. Read them to the class and have students guess the mammal. Example: I am a small mammal with gray fur. I have a dark mask of fur on my face. Who Am I? Answer: raccoon.
- Choose a favorite mammal. Write a descriptive paragraph about the mammal. Use lots of details and numerous describing words. Or use your made-up mammal and write a description of it instead.
- Choose an illustration from the book. (You can use the page you chose during the Before You Read activity.) Write a descriptive paragraph about the picture. Try to describe it exactly.

MATH
- Have students create a bar graph comparing mammal gestation. Use the book to find the four mammals mentioned. Look up additional mammals to add to the data list.
- Ask students to write a math story problem using the following information.
  o Blue whales drink 50 gallons of milk per day.
  o Blue whales gain 10 pounds per hour.
  o Whale belly buttons are 12 inches long and 8–12 inches wide.
  o A panda mother weighs 700 times more than her baby.
  o A kitten is in its mother’s uterus 2 months before it is ready to be born.
  o Human = 9 months
  o Dolphins = 1 month
  o African elephants = 22 months
Give the students an example or two to start them off. Share the problems with the class and make a class worksheet for them to solve. Challenge them to write a two-step problem. Examples: How much milk would one blue whale drink in two days? A week? A month? Convert the gallons of milk to pints, quarts, or cups.

**ART**
Ask students to do one or more of the following activities:
- Draw your favorite mammal with its baby.
- Make a mural of the class animals. Draw them in their natural surroundings.
- Make a class zoo. Design natural, animal-friendly cages similar to their original environment. Draw them or construct them in a shadow box form.

**REVIEWS**
“An informative and interesting look at how belly buttons are formed and how they differ on people and the animals that have them… This inviting book is useful for both reports and answering kids’ questions.”

--- *School Library Journal*

“Belly buttons are just the starting point for a fascinating look at how mammals develop… An especially wonderful book to share with youngsters awaiting the birth of a sibling, and a great addition to the nonfiction library collection.”

--- *Kirkus Reviews*

“Through this beautifully illustrated book, children at kindergarten or first grade level can explore the belly buttons of gigantic blue whales and miniscule bumblebee bats…This is an ideal read-aloud to begin a study of life cycles…This delightful book will satisfy the natural curiosity of primary students within a scientific framework.”

--- *NSTA Recommends*

**AWARDS**
NSTA Recommends — National Science Teachers Association
Who Has a Belly Button?

ANTICIPATION GUIDE

Name: ______________________________________   Date: ________________

Write Yes or No

_____ 1. I have a belly button.

_____ 2. Cats have a belly button.

_____ 3. Dogs don’t have a belly button.

_____ 4. Fish and frogs have belly buttons.

_____ 5. Mammal babies grow inside their mothers.

_____ 6. If you have a belly button, you are a mammal.

_____ 7. Mammal babies can drink their mother’s milk.

_____ 8. Mammal babies float in a warm liquid before they are born.

_____ 9. Oxygen and food are not needed by mammal babies before they are born.

_____ 10. Your belly button is a place where you were connected to your mother before you were born.

Have students fill out this form before reading the book. After the second reading and the activities, invite them to review their answers and make changes according to what they have learned.
Who Has a Belly Button?

MAMMAL REPORT FORM

Name: ___________________________________________ Date: ______________

1. Name of mammal

2. Description of mammal (color, size, fur, number of legs, horns, other information)

3. Where it lives and what its home is like

4. How many babies and how long the babies are in the mother before they are born

5. What it eats

6. Interesting facts about the mammal

7. Why it is a mammal?
Who Has a Belly Button?

VOCABULARY

Name: ____________________________ Date: ______________

1. _____ mammals
2. _____ mammary glands
3. _____ uterus
4. _____ umbilical cord
5. _____ oxygen
6. _____ fetus
7. _____ placenta
8. _____ navel
9. _____ embryo

A. a gas in the air we need to breathe
B. a long, twisty cable that connects mother and fetus
C. a belly button
D. the unborn baby after it begins to grow some
E. an amazing organ in the uterus with a special job
F. what you call the baby when the mammal first begins to grow in the mother
G. animals with fur, live births, and mammary glands
H. special milk producing areas on mother mammals
I. the place in a mother’s body where the fetus grows
Who Has a Belly Button?

GUIDED READING QUESTIONS ON MAMMALS

Name: ___________________________________________ Date: __________________

1. A mammal baby is smaller than ______________________________ when it begins to grow.

2. When a mammal baby inside its mother gets bigger, it is called a______________________.

3. The umbilical ___________ connects the fetus to an organ called the placenta.

4. The mother’s body ______________________ the food she eats so it can flow to the fetus.

5. A human baby grows inside its mother for ____________________ months.

6. An elephant grows a baby for almost two ________________.

7. Another word for belly button is ____________________________.

8. Your __________________________ is the place where you were connected to your mother.

9. You can’t see belly buttons on some animals because they have ____________.

10. The largest adult mammal is a ______________________________.

11. The smallest mammal is a ________________________________.

12. Bats are _____________________ mammals.

13. A blue whale baby drinks milk and gains ____________________ pounds an hour.

14. Some people’s belly buttons turn ________ and some stick ________________.

15. Think of your belly button as your __________________________ button.

Word Bank

<table>
<thead>
<tr>
<th>flying</th>
<th>in</th>
<th>belly button</th>
<th>a grain of rice</th>
</tr>
</thead>
<tbody>
<tr>
<td>changes</td>
<td>nine</td>
<td>fur</td>
<td>blue whale</td>
</tr>
<tr>
<td>embryo</td>
<td>cord</td>
<td>years</td>
<td>navel</td>
</tr>
<tr>
<td>bumblebee bat</td>
<td>birthday</td>
<td>out</td>
<td>ten</td>
</tr>
</tbody>
</table>
Who Has a Belly Button?

FIND THE WORD

Name: ___________________________ Date: ____________

embryo  umbilical cord  navel  mammary glands  fetus zygote  oxygen  uterus  mammals

1. Animals with fur, live births, and mammary glands _______________________________

2. The place in a mother’s body where the fetus grows _______________________________

3. A gas in the air we need to breathe _____________________________________________

4. A belly button _______________________________________________________________

5. An amazing organ in the uterus with a special job _________________________________

6. Special milk producing areas on mother mammals ________________________________

7. A long, twisty cable that connects mother and fetus ________________________________

8. The unborn baby after it begins to grow some ______________________________________

9. What you call the baby when a mammal first begins to grow in the mother _______________
Who Has a Belly Button?

ANSWER KEYS

FIND THE WORD
1. mammals
2. uterus
3. oxygen
4. navel
5. placenta
6. mammary glands
7. umbilical cord
8. fetus
9. embryo

VOCABULARY
1. g
2. h
3. i
4. b
5. a
6. d
7. e
8. c
9. f

READING QUESTIONS
1. a grain of rice
2. fetus
3. cord
4. changes
5. nine
6. years
7. navel
8. belly button
9. fur
10. blue whale
11. bumblebee bat
12. flying
13. ten
14. in, out
15. birthday