

# What Are Birds and Mammals?

Chapter 2 Lesson 4  
Part 2

ByDesign Science, Level 5  
By Allyssa Sharpe

# Mammals



- ◆ Mammals range in size from the tiny bumble bee bat of Thailand that is less than 1.3 in. long and has a mass of only .7 oz.
- ◆ To the massive blue whale that has a length of more than 82 ft. and a mass of more than 200,000 lb.



# Characteristics of Mammals

- ◆ While there is a great diversity in mammals, they all share several basic characteristics.
  - ◆ Have hair or fur
  - ◆ Females have mammary glands to nurse their young
  - ◆ Have specialized bones in the ear
  - ◆ Give live birth (except platypus and echidna, which lay eggs)
  - ◆ Young cared for by parents
  - ◆ Have diaphragm for expanding the lungs
  - ◆ Have a four-chambered heart
  - ◆ Are endotherms



# Characteristics of Mammals

- ◆ Different kinds of mammals have special characteristics that allow them to feed on different types of foods.
- ◆ Mammals fall into one of the three eating categories.



# Characteristics of Mammals

- ◆ Herbivore Mammals:
  - ◆ Eat plants
  - ◆ Have large flat teeth for grinding up plants
  - ◆ EX: deer, sheep, horses, cows, elephants, mice, squirrels.



# Characteristics of Mammals

- ◆ Carnivore Mammals
  - ◆ Eats animals
  - ◆ Sharp claws and strong limbs to capture prey
  - ◆ Sharp, pointed teeth for killing and holding prey and for biting into meat
  - ◆ EX: coyotes, bobcats, lions, wolves, dogs



# Characteristics of Mammals

- ◆ Omnivore Mammals
  - ◆ Eats both plants and animals
  - ◆ Flat teeth for grinding plants and pointed teeth for biting into meat
  - ◆ EX: bears, raccoons, pigs, monkeys, rats



# Behaviors of Mammals

- ◆ Mammals generally reproduce and care for their young in similar ways.
- ◆ However, other patterns of behavior are different for each species.



- ◆ Some mammals, such as wolves, live in social groups to hunt and remain safe.
- ◆ Other mammals, such as tigers, are solitary.

# Behaviors of Mammals

- ◆ Mammals reproduce when male and female gametes combine.
- ◆ The fertilized egg remains within the mother's body for a set time, depending on the species.
- ◆ At birth, mammals are not able to survive on their own.
- ◆ Adult mammals must care for their young. Parents need to care for their offspring while they learn how to get food and remain safe from predators.



# Behavior of Mammals

- ◆ If you own a male dog, then you may already know about mammals that are territorial.
- ◆ Some mammals claim a certain area as their own and defend it against other animals of their species.



- ◆ Some mammals are not territorial, but instead have a home range.
- ◆ This is the area through which they travel to do their normal activities.

# Behaviors of Mammals

- ◆ Just as birds migrate, many mammals travel over large distances as the weather turns cold.
- ◆ They may be seeking food or better living conditions.



# Behaviors of Mammals

- ◆ Some mammals, such as gray whales, travel so their young can be born in better and safer conditions.
- ◆ These mammals leave the cold, arctic waters and migrate more than 5,600 mi to the coast of Mexico or California.
- ◆ Their young can be born in warm waters.



# Behaviors of Mammals

- ◆ Caribou of Canada and Alaska migrate as much as 684 miles twice each year.
- ◆ Caribou that are pregnant being migration in the spring around the same time as the snow melts.
- ◆ Their summer home provides food to help the new calves and other caribou grow strong and healthy.
- ◆ As winter arrives, the summer range becomes harsh and windy, so the caribou migrate back to areas where conditions are better



# Main Groups of Mammals

- ◆ Mammals can be grouped by the way their young develop before they are born.
- ◆ A monotreme is an egg-laying mammal.
- ◆ A mammal within this group develops within a protective shelled egg, the way reptiles develop.



# Main Groups of Mammals

- ◆ A marsupial is a pouched mammal.
- ◆ A mammal in this group develops within the mother's body for a short time.
- ◆ When a marsupial is born, it completes its development inside a special pouch located on the mother's abdomen.

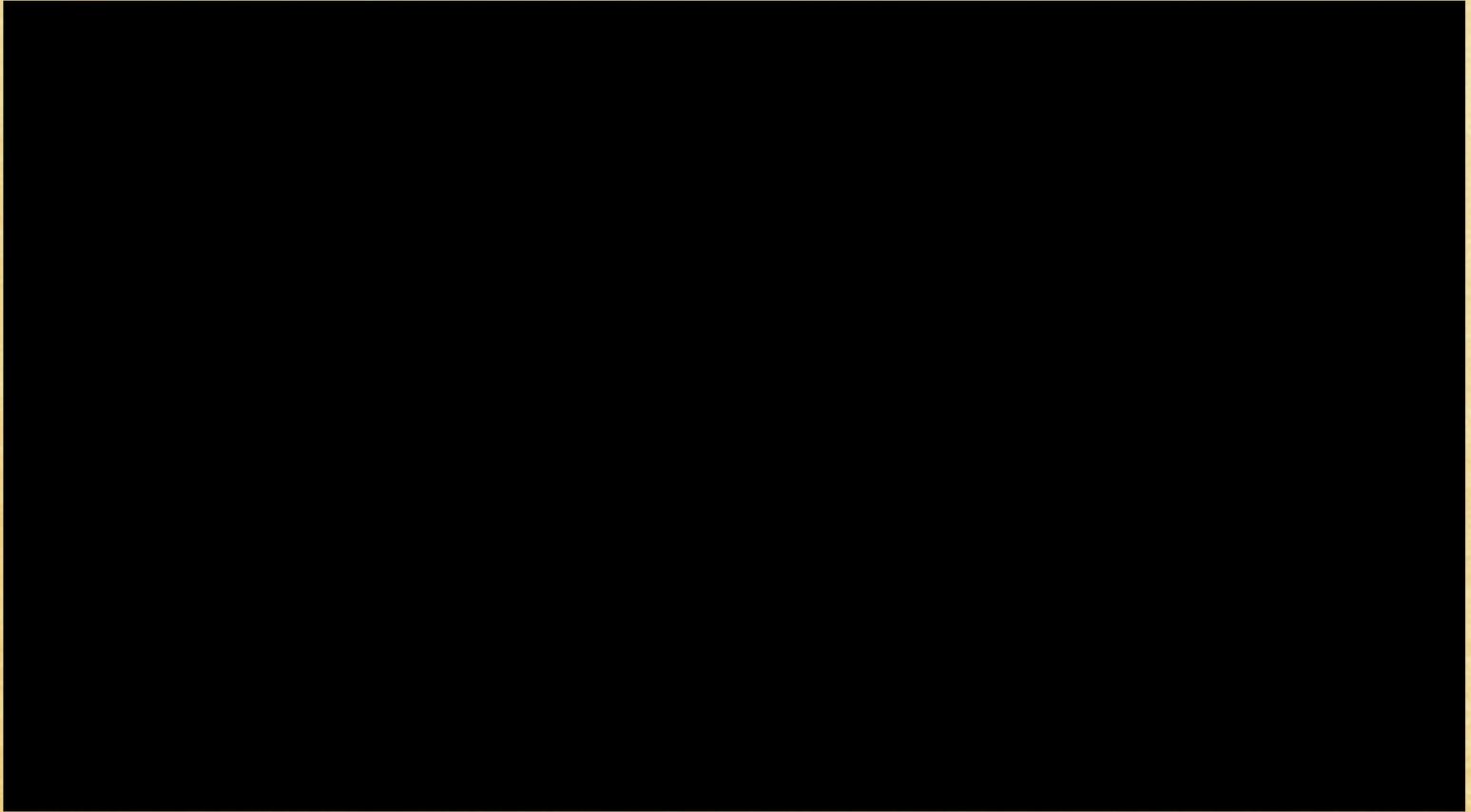


# Main Groups of Mammals

- ♦ A placental mammal is one in which the young develop completely within the mother's body.
- ♦ An organ known as the placenta connects the unborn young to the mother.



# Ways Mammals Give Birth



# Scripture Spotlight



What mammals are mentioned in 1 Kings 10:22? Whose  
were they?

# Scripture Spotlight



What mammals are mentioned in 1 Kings 10:22? Whose where they?

1 Kings 10:22 describes King Solomon's fleet of trading ships that brought him treasures every three years. It mentions apes and, depending on the translation, either monkeys or peacocks!

# Mammals

