Classifying Animals

section 0 What is an animal?

LE 1.1h: Living things are classified by shared characteristics on the cellular and organism level. In classifying organisms, biologists consider details of internal and external structures. Biological classification systems are arranged from general (kingdom) to specific (species). Also covered: LE 1.1c, 1.1d, 1.1e, 1.1g

Before You Read

List the names of five animals on the lines below. Then write one thing that these animals have in common.

What You’ll Learn

- the characteristics of animals
- the differences between vertebrates and invertebrates

Read to Learn

Animal Characteristics

If you asked ten people what all animals have in common, you would get many different answers. Animals come in many different shapes and sizes. All animals, however, have five common characteristics.

1. All animals are many-celled organisms that are made of different kinds of cells.
2. Most animal cells have a nucleus and organelles. The nucleus and many of the organelles are surrounded by a membrane. A cell that contains a nucleus and organelles surrounded by membranes is called a eukaryotic (yew ker ee AH tihk) cell.
3. Animals cannot make their own food.
4. Animals digest their food. Large food particles are broken down into substances cells can use.
5. Most animals can move from place to place.

What is symmetry?

As you study different groups of animals, you will look at their symmetry (SIH muh tree). Symmetry refers to the way parts of an object are arranged. If the parts are arranged in a way that allows the object to be divided into similar halves, it is symmetrical.

Quiz Yourself As you read the section, write a question for each paragraph. Answer the question with information from the paragraph. Use the questions and answers to study the section.

Think it Over

1. Analyze Name one reason animals need to move from place to place.
What kind of symmetry do most animals have?

Most animals have either radial symmetry or bilateral symmetry. An animal with body parts arranged in a circle around a central point has radial symmetry. As you can see in the figure below, a sea anemone has radial symmetry. An animal with radial symmetry can find food and gather information from all directions. Other animals that have radial symmetry are jellyfish and sea urchins.

An animal with bilateral symmetry has parts that are nearly mirror images of each other. You can draw a line down the center of its body to divide it into two similar parts. The figure below shows that a lobster has bilateral symmetry. A human also has bilateral symmetry.

What is an asymmetrical animal like?

An animal with an uneven shape is called asymmetrical (AY suh meh trih kul). Its body cannot be divided into halves that are similar. Look at the sponge in the figure below. Notice that you cannot draw a line down the center of its body to divide it into two halves that are similar. As you learn more about invertebrates, think about their body symmetry. Notice how body symmetry affects the way they gather food and do other things. Most animals have radial or bilateral symmetry. Only a few animals are asymmetrical.

Picture This

3. Classify Draw a simple human figure beside the animal with the type of symmetry that humans have.

Sea anemones have radial symmetry.

Lobsters have bilateral symmetry.

Many sponges are asymmetrical.
Animal Classification

Animals have many characteristics in common. But when you think about the variety of animals you can name, you know that there are many different kinds of animals. Some animals have legs, others have wings. Some live on land, others live in water. Scientists use a classification system to place all animals into related groups.

Scientists separate animals into two groups—vertebrates (VUR tuh bruts) and invertebrates (ihn VUR tuh bruts). These two groups are shown in the figure below. **Vertebrates** are animals that have a backbone. **Invertebrates** are animals that do not have a backbone. About 97 percent of all animals are invertebrates.

![Diagram of Animal Kingdom with Vertebrates and Invertebrates]

Scientists further classify the invertebrates into smaller groups, as shown in the figure below. The animals in each group share similar characteristics. These characteristics show that the animals within the group may have had a common ancestor.

![Diagram of Invertebrates with Cnidarians, Roundworms, Annelids, and Echinoderms]

### Applying Math

4. **Create a Circle Graph**

In the circle below, draw a circle graph showing the percent of invertebrates and the percent of vertebrates.

![Circle Graph](image)

### Picture This

5. **Identify** Circle any words in the diagram that you do not know. When you have finished reading this chapter, review the words you circled and state a characteristic of each one.
After You Read

Mini Glossary

invertebrates (ihn VUR tuh bruts): animals that do not have a backbone

symmetry (SIH muh tree): the way parts of an object are arranged

vertebrates (VUR tuh bruts): animals that have a backbone

1. Review the terms and their definitions in the Mini Glossary. Write a sentence that explains the difference between an animal that has symmetry and one that is asymmetrical.

2. Fill in the table below to describe the common characteristics of animals.

<table>
<thead>
<tr>
<th>Common Characteristics of All Animals</th>
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<tbody>
<tr>
<td>1.</td>
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<td>3.</td>
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<td>4.</td>
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<tr>
<td>5.</td>
</tr>
</tbody>
</table>

3. How did writing and answering quiz questions help you remember what you read about animal characteristics and classification?

End of Section

Visit glencoe.com to access your textbook, interactive games, and projects to help you learn more about the characteristics of animals.
Classifying Animals

Section 2 Invertebrate Animals

LE 1.1a Living things are classified by shared characteristics on the cellular and organism level. In classifying organisms, biologists consider details of internal and external structures. Biological classification systems are arranged from general (kingdom) to specific (species). Also covered: LE 1.1e, 4.1a, 4.3d, 5.1a, 5.1b, 5.1g

Before You Read

On the lines below, list a difference between the way plants and animals get food.

What You'll Learn

- how invertebrate animals are identified
- the major systems of invertebrate animals
- how invertebrate animals are alike and different

Read to Learn

Sponges

Scientists have identified about 15,000 species of sponges. Most sponges live in the ocean, although some live in freshwater. Adult sponges remain attached to one place for their lifetime.

How does a sponge eat?

Sponge bodies are made of two layers of cells. Water containing tiny food particles and oxygen flows through the pores of the sponge. The inner part of a sponge's body is lined with collar cells. Thin, whiplike structures called flagella (flah JEH luh) are attached to the collar cells. The whiplike movements of the flagella keep water moving through the sponge. Other cells digest the food, carry nutrients to all parts of the sponge, and remove wastes from the sponge.

How does a sponge protect itself?

Many sponges have soft bodies that are supported by sharp, glass-like structures called spicules (SPIHK yewlz). Other sponges have a material called spong in. Spong in is like foam rubber. It makes sponges soft and stretchable. Some sponges have both spicules and spong in to protect their soft bodies.
How do sponges reproduce?
Sponges can reproduce asexually and sexually. A sponge reproduces asexually when a bud on the side of the parent sponge develops into a small sponge. The small sponge breaks off, floats away, and attaches itself to a new surface. New sponges also can grow from pieces of a sponge.

Cnidarians
Jellyfish, sea anemones, hydra, and coral are cnidarians (nih DAR ee unz). Cnidarians are hollowed-bodied animals with two cell layers that are organized into tissues. Cnidarians have tentacles surrounding their mouths. The tentacles shoot out harpoon-like stinging cells to capture prey. Cnidarians have radial symmetry, so they can locate food that floats by from any direction. The inner cell layer digests the food. Nerve cells work together as a nerve net throughout the cnidarian's whole body.

How do cnidarians reproduce?
Cnidarians reproduce both sexually and asexually. Some cnidarians, such as hydrams, reproduce asexually by budding. Some can reproduce sexually by releasing eggs or sperm into the water. The eggs from one cnidarian are fertilized by the sperm from another cnidarian.

Flatworms and Roundworms
Unlike sponges and cnidarians, flatworms search for food. Flatworms are invertebrates with long, flattened bodies and bilateral symmetry. A flatworm's body is soft and has three layers of tissue organized into organs and organ systems. Some kinds of flatworms can move around and search for food. These flatworms have a digestive system with one opening. Most flatworms are parasites that live in or on their hosts. A parasite gets its food and shelter from its host.

Roundworms are the most widespread animal on Earth. There are thousands of kinds of roundworms. Billions of roundworms can live in an acre of soil.

A roundworm's body is a tube inside a tube. Between the two tubes is a cavity full of fluid. The fluid-filled cavity separates the digestive tract from the body wall. The digestive tract of a roundworm has two openings. Food enters the roundworm through the mouth, it is digested in a digestive tract, and wastes exit through the anus.
Mollusks

A mollusk is a soft-bodied invertebrate that usually has a shell. A mollusk also has a mantle and a large, muscular foot. The mantle is a thin layer of tissue that covers the mollusk's soft body. The foot is used for moving or for holding the animal in one place. Snails, mussels, and octopuses are mollusks.

Mollusks that live in water have gills. Gills are organs in which carbon dioxide from the animal is exchanged for oxygen from the water. Mollusks that live on land have lungs in which carbon dioxide from the animal is exchanged for oxygen from the air.

**What body systems does a mollusk have?**

A mollusk has a digestive system with two openings. Many mollusks have a scratchy, tonguelike organ called the radula (RA juh luh). The radula has rows of tiny, sharp teeth that the mollusk uses to scrape small bits of food off rocks and other surfaces.

Some mollusks have an **open circulatory system**, which means they do not have blood vessels. Instead, the blood washes over the organs, which are grouped together in a fluid-filled cavity inside the animal's body. Others have a **closed circulatory system** in which blood is carried through blood vessels.

Segmented Worms

Earthworms, leeches, and marine worms are segmented worms. Segmented worms are also called annelids (A nul idz). A segmented worm's body is made up of repeating rings that make the worm flexible. Each ring or segment has nerve cells, blood vessels, part of the digestive tract, and the coelom (SEE lum). The coelom is a body cavity that separates the internal organs from the inside of the body wall. A segmented worm has a closed circulatory system and a complete digestive system with two body openings.

**What do earthworms eat?**

Earthworms are important in shaping the landscape. They move through soil by eating the soil. The earthworm uses the organic matter in the soil for food. The undigested wastes and soil that leave the earthworm make the soil better. Earthworms add nutrients to the soil and loosen it. This increases the fertility of the soil.
Arthropods

Scientists have discovered more than a million species of arthropods (AR thruh pahldz). An arthropod is an invertebrate animal with jointed appendages (uh PEN dih juz). **Appendages** are structures such as claws, legs, or antennae that grow from the body.

Arthropods have bilateral symmetry and segmented bodies similar to annelids. Most arthropods have fewer and more specialized segments. They have an open circulatory system. Oxygen enters the animal’s tissues through spiracles. Fertilization in most arthropods is internal.

**How does an arthropod protect itself?**

Arthropods have hard body coverings called **exoskeletons**. The exoskeleton protects and supports the animal’s body and reduces water loss. As the animal grows, it sheds the exoskeleton, which does not grow with the animal.

**What is metamorphosis?**

The young of many arthropods don’t look anything like the adults. Many arthropods completely change their body form as they grow. This change in body form is called **metamorphosis** (met uh MOR fuh sus).

Butterflies, bees, and beetles are arthropods that go through a complete metamorphosis. Complete metamorphosis has four stages—egg, larva, pupa (PYEW puh), and adult. At each stage, the arthropod looks completely different.

Some insects such as grasshoppers and dragonflies go through incomplete metamorphosis. They have only three stages—egg, nymph, and adult. The nymph looks similar to its parents, only smaller. A nymph sheds its exoskeleton by a process called molting as it grows. The two types of metamorphosis are shown in the figure below.

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**Picture This**

6. **Identify** Circle the names of the stages that are the same for complete and incomplete metamorphosis.
**Echinoderms**

Echinoderms (ih KI nuh durmz) are animals that have radial symmetry. Sea stars and sand dollars are echinoderms. Echinoderms have spines of different lengths that cover the outside of their bodies. Most echinoderms have an internal skeleton made up of bonelike plates that supports and protects the animal. Echinoderms have a simple nervous system, but no head or brain. Some echinoderms are predators, some are filter feeders, and some feed on decaying matter.

**What is a water-vascular system?**

An echinoderm has a water-vascular system, which is a network of water-filled canals and thousands of tube feet. The tube feet work like suction cups to help the animal move and capture prey. The figure below shows the parts of a sea star. A sea star eats by pushing its stomach out of its mouth and into the opened shell of its prey. After the prey’s body is digested, the sea star pulls in its stomach. Like some other invertebrates, sea stars can regrow lost or damaged parts.

**Picture This**

8. **Explain**  Highlight the name of the body structure a sea star uses to capture prey.

![Diagram of a sea star showing parts such as Anus, Ray, Stomach, Mouth, Radial canal, Tube feet.](image)
After You Read

Mini Glossary

appendage (uh PEN dihj): a structure such as a claw, leg, or antennae that grows from the body

closed circulatory system: a circulatory system in which blood is carried through blood vessels

exoskeleton: a hard body covering that protects and supports the body and reduces water loss

metamorphosis (met uh MOR fuh sus): a change in body form

open circulatory system: a circulatory system without blood vessels in which blood washes over the organs

1. Review the terms and their definitions in the Mini Glossary. Write a sentence that describes how an arthropod might use an appendage.

2. Complete the flowcharts to compare complete and incomplete metamorphosis.

   **Complete Metamorphosis**

   1. 
   2. 
   3. 
   4. 

   **Incomplete Metamorphosis**

   1. 
   2. 
   3. 

3. How do the sticky-notes help you remember what you have read?

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Classifying Animals

section 3 Vertebrate Animals

LE 1.1h Living things are classified by shared characteristics on the cellular and organism level. In classifying organisms, biologists consider details of internal and external structures. Biological classification systems are arranged from general (kingdom) to specific (species). Also covered: LE 1.1e, 4.1a, 4.1d, 4.3d, 5.1a, 5.1b, 5.1g

Before You Read

List three animals on the lines below. Then write one thing that all these animals have in common with humans.

What You’ll Learn

- the classification of vertebrate animals
- the systems of vertebrate animals
- the differences between vertebrate animals

Read to Learn

What is a chordate?

Familiar animals such as birds, fish, cats, and dogs belong to a large group of animals called chordates. Chordates (KOR dayts) are animals that have the following three characteristics—a notochord (NOH tuh cord), a nerve cord, and pharyngeal (fur RIN jee uhl) pouches at some time during their development.

The notochord is a flexible rod that runs the length of the developing organism. The nerve cord is made of nerve tissue. In most chordates, one end of the nerve cord develops into the organism's brain.

Pharyngeal pouches are slitslike openings between the inside of the body and the outside of the body. They are present only in the early stages of the organism's development. In some chordates, like the lancelet in the figure below, the pharyngeal pouches develop into gill slits.

Create a Quiz Write a question about the main idea under each heading. Exchange quizzes with another student. Together, discuss the answers to the quiz questions.

Foldables

Define Use a quarter sheet of notebook paper, as shown below, to define these key words in this section—chordate, ectotherm, and endotherm.

Chordate
Ectotherm
Endotherm

Movement of water
What are the characteristics of vertebrates?
Chordates are classified into several smaller groups. The largest group of chordates is made up of the vertebrates, which include humans. All vertebrates have an internal system of bones called an endoskeleton. The endoskeleton supports and protects the body’s internal organs. For example, the skull is the part of the endoskeleton that surrounds and protects the brain.

How do vertebrates control body temperature?
Vertebrates are either ectotherms or endotherms. **Ectotherms** (EK tuh thurmz) are cold-blooded animals. Their body temperature changes as the temperature of their surroundings changes. Fish and reptiles are ectotherms. **Endotherms** (EN duh thurmz) are warm-blooded animals. Their body temperature does not change with the surrounding temperature. Humans are endotherms. Your body temperature is usually about 37°C, but can vary by about 1°C, depending on the time of day.

Fish
Fish are the largest group of vertebrates. Scientists classify fish into three groups—bony, jawless, and jawed cartilaginous (kar tuh LA juh nuhs). All fish are ectotherms and live in water. Some species of fish are adapted to live in freshwater and other species are adapted to live in salt water.

Fish have gills. Gills are fleshy filaments where carbon dioxide and oxygen are exchanged. Water that contains oxygen passes over the gills. When blood is pumped into the gills, the oxygen in the water moves into the blood. At the same time, carbon dioxide moves out of the blood in the gills and into the water.

Most fish have pairs of fanlike fins. Fish use fins to steer, balance, and move. The motion of the tail fin pushes the fish through the water.

Most fish have scales. Scales are thin structures made of a bony material that overlap to cover the skin.

Amphibians
Amphibians (am FIH bee unz) are animals that spend part of their lives in water and part on land. They have many adaptations that allow for life both on land and in the water. Amphibians include frogs, toads, salamanders, and newts.
What are characteristics of amphibians?
Amphibians are vertebrates with a strong endoskeleton made of bones. The skeleton helps support their body while on land.

Adult amphibians use lungs instead of gills to exchange oxygen and carbon dioxide. Lungs are an important adaptation for living on land. Amphibians have three-chambered hearts, in which blood carrying oxygen mixes with blood carrying carbon dioxide. This mixing makes less oxygen available to the amphibian. Adult amphibians also exchange oxygen and carbon dioxide through their moist skin, which increases their oxygen supply. Amphibians can live on land, but they must stay moist for the exchange of oxygen and carbon dioxide to occur.

Amphibian hearing and vision also are adapted to life on land. Amphibians have tympanums (TIHM puh nuhmz), or eardrums, that vibrate in response to sound waves. Large eyes help some amphibians catch their prey. Land environments provide many insects as food for adult amphibians. They have long, sticky tongues used to capture the insects.

How do amphibians develop?
Most amphibians go through a series of body changes called metamorphosis (me tuh MOR fuh sus). Eggs are most often laid in water and hatch into larvae. Young larval forms of amphibians live in water. They have no legs and breathe through gills. Over time, they develop the body structures needed for life on land including legs and lungs. The rate of metamorphosis depends on the species, the water temperature, and the amount of available food. The figure below shows the stages of development for one amphibian—the frog.

Stage 1: Frog eggs are laid and fertilized.
Stage 2: Fertilized frog eggs are hatched into tadpoles. Tadpoles live in water. They use their gills for gas exchange.
Stage 3: Tadpoles begin to grow into adults. They develop legs and lungs.
Stage 4: The adult frog can live and move about on land.

Think it Over
2. Describe two characteristics that allow amphibians to live on land.

Picture This
3. Compare Circle the stage of metamorphosis in which frogs are most like fish.
Reptiles

Snakes, lizards, turtles, and crocodilians are reptiles. Reptiles are vertebrates and ectotherms. Most reptiles live their entire lives on land and do not depend on water for reproduction.

What are some types of reptiles?

A turtle is covered with a hard shell. Most turtles can bring their heads and legs into the shell for protection. Alligators and crocodiles are large reptiles that live in or near water. Alligators and crocodiles are predators that live in warmer climates.

Lizards and snakes make up the largest group of reptiles. Snakes and lizards have an organ in the roof of the mouth that senses molecules collected by the tongue. The constant in-and-out motion of the tongue allows a snake or lizard to smell its surroundings. Lizards have movable eyelids and external ears. Most lizards have legs with clawed toes on each foot. Snakes move without legs. They don’t have eyelids or ears. Snakes feel vibrations in the ground instead of hearing sounds.

What are some reptile adaptations?

A thick, dry waterproof skin is an adaptation that allows reptiles to live on land. Reptile skin is covered with scales to reduce water loss and help prevent injury. Reptiles breathe with lungs. Reptiles that live in water, like sea turtles, must come to the surface to breathe.

Two adaptations allow reptiles to reproduce on land—internal fertilization and laying shell-covered eggs. Sperm are deposited directly into the female’s body. Female reptiles lay fertilized eggs that are covered by tough shells. These eggs are called amniotic (am nee AH tihk) eggs. An amniotic egg supplies the embryo with everything it needs to develop. A leathery shell protects the embryo and yolk. The yolk is the embryo’s food supply. When a reptile hatches, it is fully developed.

Birds

Birds are vertebrates that have two wings, two legs, and a bill or beak. Birds are covered mostly with feathers. They lay eggs with hard shells and sit on their eggs to keep them warm until they hatch. All birds are endotherms.
How do bird species differ?

There are more than 8,600 species of birds. Different species have different adaptations. For example, ostriches have strong legs for running. Penguins can't fly, but they are excellent swimmers. Wrens have feet that allow them to perch on branches.

How are birds adapted for flight?

The bodies of most birds are designed for flight. They are streamlined and have light, strong skeletons. The inside of a bird's bones is almost hollow. Special structures make the bones strong, but lightweight. A bird's tail is designed to provide the stiffness, strength, and stability needed for flight. Birds use their tail to steer.

Birds need a lot of energy and oxygen to fly. They eat high-energy foods like nectar, insects, and meat. They have a large, efficient heart. A bird's lungs connect to air sacs that provide a constant supply of oxygen to the blood and make the bird more lightweight.

Birds beat their wings up and down as well as forward and backward. A combination of wing shape, surface area, wind speed, and angle of the wing provide the upward push needed for flight.

What is the function of feathers?

Birds are the only animals with feathers. They have two main types of feathers—contour feathers and down feathers. Contour feathers are strong and lightweight. They give adult birds their streamlined shape and coloring. Contour feathers have parallel strands, called barbs, that extend from the main shaft. Outer contour feathers on the wings and tail help a bird move, steer, and keep from spinning out of control. Feather color and patterns help attract mates. The color patterns also protect birds from predators by helping the birds blend into their surroundings.

Birds have down feathers that trap and keep warm air next to their bodies. In adult birds, down feathers provide a layer of insulation under the contour feathers. Down feathers cover the bodies of some young birds.

Birds care for their feathers by preening. Birds preen, or use their bills, to clean and rearrange their feathers. During preening, birds also spread oil over their bodies and feathers. The oil keeps the bird's skin soft and keeps feathers and scales from becoming brittle.
Mammals

Moles, dogs, bats, and humans are some examples of mammals. Mammals are vertebrates and endotherms. They live in water and in many different climates on land. They burrow through the ground and fly through the air. Mammals have mammary glands in their skin.

A mammal’s skin usually is covered with hair that keeps the body from being too hot or too cold. The hair also protects mammals from wind and water. Some mammals, like bears, have thick fur. Other mammals, like humans, have a few patches of thick hair while the rest of the body has little hair. Dolphins have little hair. Porcupines have quills, which are a kind of modified hair.

Why do mammals have mammary glands?

In females, the mammary glands produce and release milk for the young. For the first few weeks or months of life, the milk provides all the nutrients the young mammal needs.

What kinds of teeth do mammals have?

Plant-eating animals are called herbivores. Animals that eat meat are called carnivores. Animals that eat plants and meat are called omnivores.

Mammals have four types of teeth—incisors, canines, premolars, and molars. As the figure below shows, you usually can tell from the kind of teeth a mammal has whether it eats plants, meat, or both.

- Mountain lions are carnivores. They have sharp canines that are used to rip and tear flesh.
- Humans are omnivores. They have incisors that cut vegetables, premolars that are sharp enough to chew meat, and molars that grind food.
- Herbivores, like this beaver, have incisors that cut vegetation and large, flat molars that grind it.
What body systems do mammals have?

Mammals have well-developed lungs made of millions of small sacs called alveoli. Alveoli allow the exchange of carbon dioxide and oxygen during breathing. Mammals also have a complex nervous system that lets them learn and remember more than many other animals. Mammals have larger brains than other animals of similar size.

All mammals have internal fertilization. After an egg is fertilized, the developing mammal is called an embryo. Most mammal embryos develop inside the female in an organ called the uterus.

Monotremes make up the smallest group of mammals. They lay eggs instead of having live births. The female monotreme sits on the eggs for about ten days before they hatch. The mammary glands of monotremes do not have nipples. The milk seeps through the skin onto their fur. The young monotremes lick the milk off the fur. Duck-billed platypuses are an example of monotremes.

How do young marsupials develop?

Most marsupials, such as kangaroos and koalas, live in Australia. The opossum is the only marsupial native to North America. A marsupial embryo develops for only a few weeks within the uterus. When a marsupial is born, it is not fully formed. It has no hair and is blind. The young marsupial uses its sense of smell to find its way to a nipple usually within the mother’s pouch. It attaches to the nipple to feed and finishes developing in the pouch.

How do placental embryos develop?

Most mammals belong to a group called placentals. Placentals are named for the placenta, which is a saclike organ that develops from tissues of the embryo in the uterus.

An umbilical cord connects the embryo to the placenta. Food and oxygen are absorbed from the mother’s blood. Blood vessels in the umbilical cord carry food and oxygen to the developing young. The blood vessels also take away wastes. In the placenta, the mother’s blood absorbs wastes from the developing young. The blood of the mother and the embryo do not mix.

The time of development from fertilization to birth is called the gestation period. Gestation periods vary widely, from about 21 days in rats to about 616 days in elephants. Human gestation lasts about 280 days.
Mini Glossary

amniotic (am nee AH thik) egg: the environment for the development of a reptile embryo
carnivore: an animal that eats meat
chordate (KOR dayt): an animal that has, at some time during its development, three characteristics present—a notochord, nerve cord, and pharyngeal pouches

ectotherm (EK tuh thurm): a cold-blooded animal whose body temperature changes as the temperature of its surroundings change
endotherm (EN duh thurm): a warm-blooded animal whose body temperature does not change with the temperature of its surroundings
herbivore: a plant-eating animal
omnivore: an animal that eats plants and meat

1. Review the terms and their definitions in the Mini Glossary. Write one or more sentences to explain how herbivores, carnivores, and omnivores are different.

2. Complete the table below to list the adaptations birds have for flight.

<table>
<thead>
<tr>
<th>Adaptations for Flight</th>
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<tbody>
<tr>
<td>1.</td>
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<td>3.</td>
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3. Complete the diagram below to identify the three types of mammals.

End of Section

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