

Name Key Date _____ Class _____

Sponges, Cnidarians, and Worms ▪ Key Terms

Key Terms

Answer the questions by writing the correct Key Terms in the blanks. Unscramble the circled letters from each term to find the hidden Key Terms. Then write a definition for the hidden Key Terms.

1. What is an animal without a backbone?

i n v e r t e b r a t e

2. What is a bowl-shaped cnidarian that is adapted for swimming?

m e d u s a

3. What is a basic unit of structure and function found in all living things?

c e l l

4. What is the symmetry shown by objects if there is one line that divides the object into halves that are mirror images?

b i l a t e r a l s y m m e t r y

5. What does a group of different tissues form?

o r g a n

6. What is an animal that has a backbone?

v e r t e b r a t e

7. What is an organism that lives inside or on another organism?

p a r a s i t e

Key Term: S c a v e n g e r s

Definition: organisms that feed on dead or
decaying

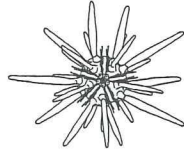
Sponges, Cnidarians, and Worms ▪ *Review and Reinforce*

Animal Symmetry

Understanding Main Ideas

Classify the following animals as having no symmetry, bilateral symmetry, or radial symmetry. If the animal has only one line of symmetry, draw the line. Write your responses on the lines below the animals.

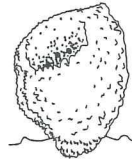
1.



Sea Urchin

Radial

2.



Sponge

No symmetry

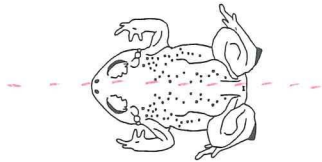
3.



Beaver

bilateral

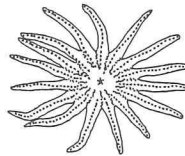
4.



Frog

bilateral

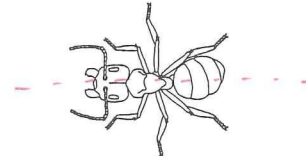
5.



Sea Star

radial

6.



Ant

bilateral

Building Vocabulary

From the list below, choose the term that best completes each sentence.

many

radial symmetry

bilateral symmetry

one

7. If an animal has a head end and a tail end, it has bilateral symmetry.
8. All animals with radial symmetry live in water.
9. Animals with radial symmetry have many line(s) of symmetry that go(es) through a central point.
10. Animals with bilateral symmetry have one line(s) of symmetry that divide(s) them into two parts.

Sponges, Cnidarians, and Worms ▪ *Review and Reinforce*

Worms

Understanding Main Ideas

If the statement is true, write true. If it is false, change the underlined word or words to make the statement true.

- | | |
|-----------------------------------|--|
| <u>Segmented worms</u> | 1. Three major phyla of worms are flatworms, roundworms, and <u>tube worms</u> . |
| <u>Through sexual and asexual</u> | 2. Worms reproduce <u>only through sexual reproduction</u> . |
| <u>True</u> | 3. Worms are the simplest organism with a <u>brain</u> . |
| <u>True</u> | 4. Planarians are nonparasitic <u>flatworms</u> . |
| <u>Flatworms</u> | 5. Tapeworms are parasitic <u>segmented worms</u> . |
| <u>True</u> | 6. Planarians have <u>one</u> opening in their digestive system. |
| <u>One-way</u> | 7. Roundworms have a <u>two-way</u> digestive system. |
| <u>True</u> | 8. Worms have <u>bilateral</u> symmetry. |
| <u>True</u> | 9. Earthworms are <u>segmented</u> worms. |
| <u>Closed</u> | 10. Earthworms have a(n) <u>open</u> circulatory system. |
| <u>True</u> | 11. Earthworms must keep their skin <u>moist</u> . |

Building Vocabulary

Match each term to its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

- | | | |
|----------|--------------------------|--|
| <u>b</u> | 12. scavenger | a. Organism that gets its food from living in or on another organism |
| <u>e</u> | 13. anus | b. Organism that feeds on dead or decaying material |
| <u>a</u> | 14. parasite | c. Organism in or on which another organism lives and gets its food from |
| <u>d</u> | 15. free-living organism | d. An organism that does not live in or on other organisms |
| <u>c</u> | 16. host | e. Opening through which wastes exit in a one-way digestive system |

Name _____ Date _____ Class _____

Mollusks, Arthropods, and Echinoderms ▪ Review and Reinforce

Mollusks

Understanding Main Ideas

Complete the table below with information about mollusks.

	Gastropods	Bivalves	Cephalopods
Common Example	Snail, slug	clams,	Squid
How do they eat?	gather food w/radula	filter feed	tentacles
How do they move?	foot	foot or squirt water	jet propulsion
Do they have a shell?	No	2	some do
Adaptations of their feet	broad for creeping	thin for digging	are tentacles

Building Vocabulary

From the list below, choose the term that best completes each sentence.

- omnivore
- cephalopod
- bivalve
- radula
- gills
- gastropod

1. A row of tiny teeth found in gastropods and cephalopods is called a radula.
2. The most intelligent group of mollusks is the Cephalopod group.
3. A(n) omnivore eats both plants and animals.
4. A bivalve is a two-shelled mollusk.
5. A snail is a gastropod.
6. Most water-dwelling mollusks have gills, organs that remove oxygen from water.

Mollusks, Arthropods, and Echinoderms

Mollusks, Arthropods, and Echinoderms ▪ *Review and Reinforce*

Insects

Understanding Main Ideas

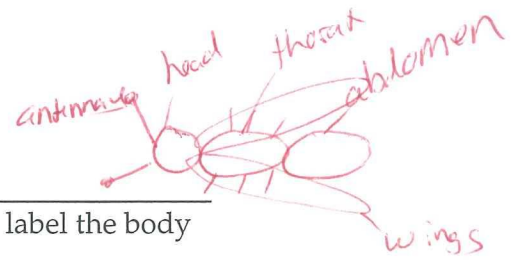
Answer the following questions.

1. How many body sections does an insect have? 3
Sketch an insect on a separate sheet of paper. Name and label the body parts on your sketch.
2. How many legs does an insect have? 6 Show them on your sketch.
3. List two other features that most insects have. Show them on your sketch, and label them.

Exoskeleton, wings, antennae

4. Name two ways that insect mouthparts are used for feeding.

Sponge-like for lapping up nectar
Sharp for sucking blood



Building Vocabulary

From the list below, choose the term that best completes each sentence.

thorax nymph gradual metamorphosis
complete metamorphosis pupa

5. The wings and legs of an insect are attached to the thorax.
6. The four stages of complete metamorphosis in order are egg, larva, pupa, and adult.
7. In the pattern of development known as gradual, the young insect, called a nymph, looks much like a miniature adult.

Mollusks, Arthropods, and Echinoderms ▪ *Key Terms*

Key Terms

Use the clues to help you unscramble the Key Terms from the chapter. Then put the numbered letters in order to find the answer to the riddle.

Clues

Key Terms

It's a dramatic change in an animal's body.

ashosmtemopri metamorphosis
1

It looks like a small adult.

myphn nymph
2

It's a flexible ribbon of teeth.

dalaru radula
3

It's shedding an outgrown exoskeleton.

tlnomig molting
4

It's a mollusk with one shell or none.

sogpotdar gastropod
5

It's a soft-bodied invertebrate with a mantle and a foot.

skulmlo mollusk
6

It's the hind section of an arthropod.

omabnde abdomen
7

It's an animal that carries pollen from one plant to another.

intorpallo pollinator
8

It's an animal with a water vascular system.

nehroicmde echinoderm
9

It's the middle section in insects.

rxaoht thorax
10 11

It's on the head and has sense organs.

neantan antenna
12

Riddle: What are the calcium plates that support echinoderms?

Answer: endoskeleton
1 2 3 4 5 6 7 8 9 10 11 12

Fishes, Amphibians, and Reptiles ▪ *Review and Reinforce*

What Is a Vertebrate?

Understanding Main Ideas

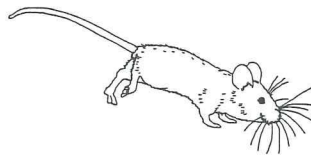
Answer the following questions on a separate sheet of paper.

1. What three characteristics do all chordates share? *Notochord, dorsal nerve, gill slits*
2. What is a vertebrate? *has a backbone*
3. What are three functions of an endoskeleton? *protect, give shape, gives muscles a place to attach*

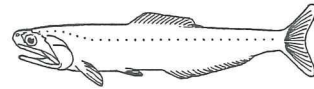
State whether the following animals are ectotherms or endotherms. Write your answer on the line provided.



4. ectotherm



5. endotherm



6. ectotherm

Building Vocabulary

From the list below, choose the term that best completes each sentence.

chordates

vertebra

endotherm

notochord

ectotherm

7. The body of a(n) ectotherm doesn't produce much internal heat. Its body temperature changes depending on the temperature of its environment.
8. The body of a(n) endotherm regulates its temperature.
9. Some chordates keep the notochord all their lives, while in others it is replaced by a backbone.
10. One of the bones of the spinal column is called a(n) vertebra.
11. Vertebrates are a subgroup of the phylum known as the Chordates.

Fishes, Amphibians, and Reptiles ▪ Review and Reinforce

Amphibians

Understanding Main Ideas

Answer the following questions in the spaces provided.

1. How do salamanders obtain food? How does blood move in a tadpole's circulatory system? How does it move in an adult's circulatory system?
Stalk & ambush prey
Tadpole - one-loop w/ 2 chambered heart;
2. How do frogs and toads obtain food?
Wait until food comes close and then they grab it.
3. What are two adaptations amphibians have for moving on land?
Strong skeletons and muscular limbs
4. Identify two factors that are probably responsible for the decline in amphibian populations.
Loss of habitat
amphibians are very sensitive to pollution

Building Vocabulary

Write an answer to the questions below in the spaces provided.

5. What is an amphibian?
Ectothermic vertebrates that spend larval stage in water
6. What is a tadpole?
Larval form of frog or toad
7. What are the names of the two types of chambers in an amphibian's heart?
Atrium & ventricle
8. What is an animal's habitat?
Where an animal lives

Fishes, Amphibians, and Reptiles ▪ *Review and Reinforce*

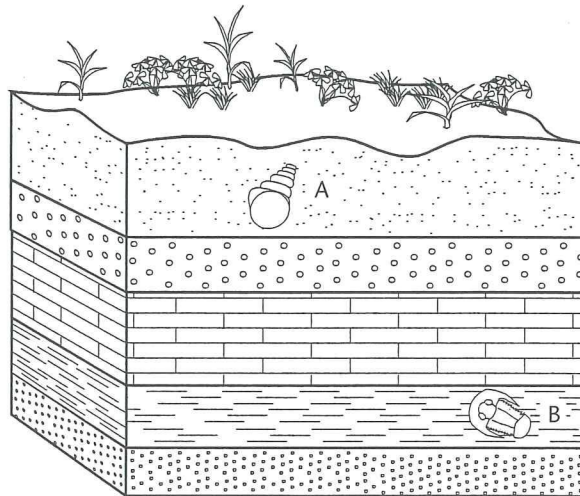
Vertebrate History in Rocks

Understanding Main Ideas

Answer the following questions on a separate sheet of paper.

1. How are sedimentary rocks formed? *when layers of sediment harden*
2. What can paleontologists learn about present-day organisms from the study of fossils? *Learn about relationships between organisms & when they*
3. Describe two ways a paleontologist determines the approximate age of a fossil. *From position in rock layers*
Radioactive dating

Use the diagram below to answer the question that follows.



4. Based on its position in the rock, which fossil is probably older? How do you know? *B - is deeper*

Building Vocabulary

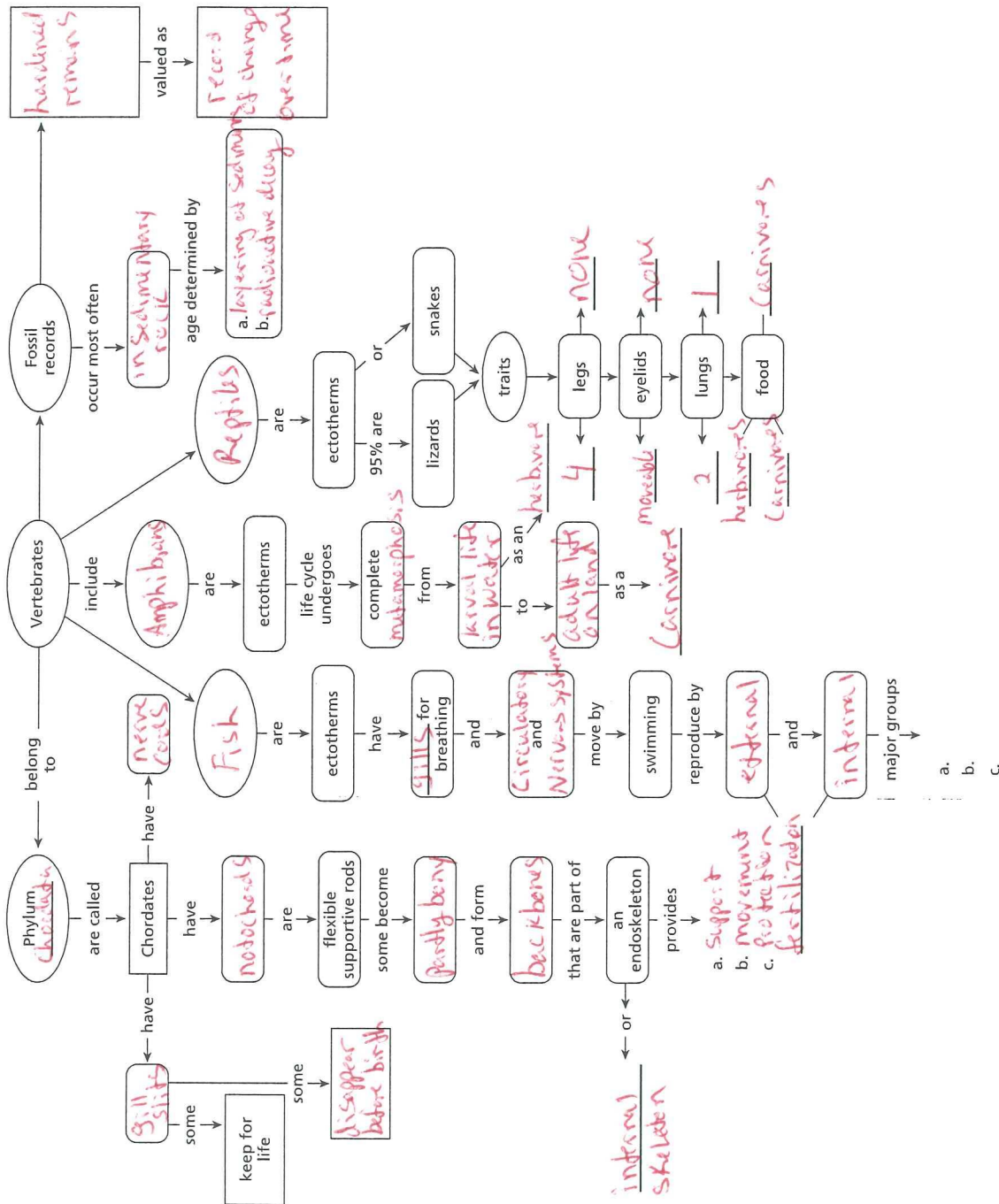
Write the term that best completes each sentence.

5. A paleontologist is a scientist who studies the remains or other evidence of things that lived in the past.
6. A fossil is the hardened remains or other evidence of an organism that died long ago.
7. Over many, many years, layers of clay, sand, mud, or silt may harden into sedimentary rock.

Fishes, Amphibians, and Reptiles ▪ Connecting Concepts

Connecting Concepts

Develop a concept map that uses the Key Concepts and Key Terms from this chapter. Keep in mind the big idea of this chapter. The concept map shown is one way to organize how the information in this chapter is related. You may use an extra sheet of paper.



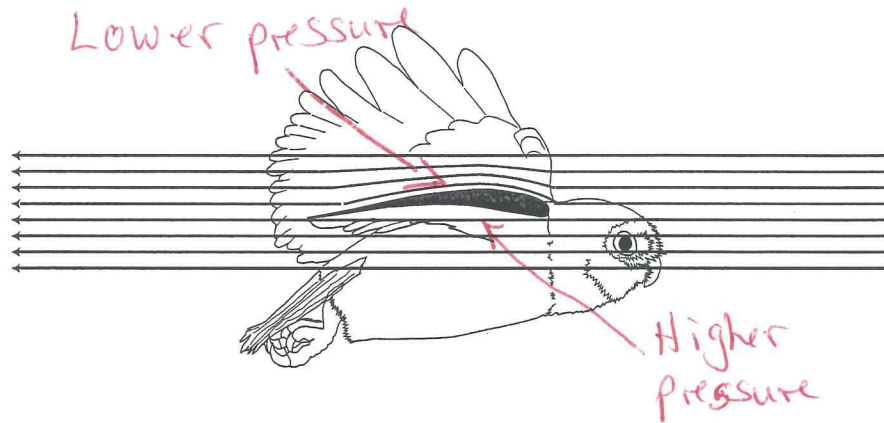
Fishes, Amphibians, and Reptiles

Birds and Mammals ▪ *Review and Reinforce*

The Physics of Bird Flight

Understanding Main Ideas

1. The diagram below shows the wing on a bird that is moving from left to right. Indicate on the diagram the area of lower air pressure and the area of higher air pressure.



Answer the following questions.

2. What in air causes air pressure? *Air molecules pushing*
3. How is the speed of moving air related to its air pressure? *faster = less pressure*
4. Which do you think would experience more lift, the wing of a slow-flying bird or the wing of a fast-flying bird? Explain your reasoning.
Fast-flying
5. Classify the three types of flying—flapping, soaring and gliding, and diving—as using either a lot of energy or not much energy.
Flapping - more energy
Soaring - less energy

Building Vocabulary

Write a definition for the following term.

6. lift
upward force that causes the bird to rise

Birds and Mammals ▪ *Key Terms*

Key Terms

Solve the clues by filling in the blanks with Key Terms from the chapter. Then write the numbered letters in the correct order to find the hidden word.

Clues

Key Terms

Endothermic vertebrate with a four-chambered heart and skin covered with fur or hair

m a m m a l
1

An internal storage tank in a bird

c r o p
2

Helps birds balance and fly

c o n t o u r f e a t h e r
3 4

Upward force on a bird's wing

l i f t
5

Large muscle that helps mammals breathe

d i a p h r a g m
6

Organ that passes materials between mother and developing embryo

p l a c e n t a
7

Koalas, kangaroos, and opossums

m a r s u p i a l s
8

The length of time between fertilization and birth

g e s t a t i o n p e r i o d
9 10

Hidden Word:

m o n o t r e m e s
1 2 3 4 5 6 7 8 9 10