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PREVIEW

Here's an introduction to the vocabulary terms, skills, and concepts you will study in this unit. Answers are upside down on the bottom of the page.

Write **T** or **F** to show whether each statement is *true* or *false*.

1. ____ The words *molecule* and *atom* are **synonyms**.
2. ____ *Hexagon* is the **noun form** of *hexagonal*.
3. ____ *Cirrus* clouds are dark and dense.
4. ____ *Botanists* are scientists who study a type of food poisoning called *botulism*.
5. ____ The words *pollute* and *sterilize* are **antonyms**.
6. ____ The **prefix** *-al* turns the word *digit* into *digital*.
7. ____ The Greek root *therm* means "heat."
8. ____ *Dynamic* is the **adjective form** of the noun *dynamics*.
9. ____ The **plural form** of *bacterium* is *bacteriums*.
10. ____ The **suffix** *-ion* can be used to turn a verb into a noun.

SPELLING

Circle the correctly spelled word in each group.

1. vertabrate virtabrate vertebrate
2. professor proffessor perfesser
3. germanate germinate germenate

ANSWERS: 1. F 2. T 3. F 4. F 5. T 6. F 7. T 8. T 9. F 10. T SPELLING: 1. vertebrate 2. professor 3. germinate

GLOSSARY

A *glossary* is an alphabetical list of unusual or specialized words from a certain field of knowledge. Following are some important scientific and technical words that all educated people should know.

atmosphere the air (made of gases, fine dust, and water vapor) that surrounds the Earth

atoms tiny parts into which all things on Earth can be broken down

bacteria simple, one-celled organisms that are visible only through a microscope

bit the smallest unit of information used by a computer; represented by a 0 or a 1

byte a string of eight bits standing for a single character

carbohydrates sugars and starches in food that give people energy

chemistry the scientific study of what substances are made of and how they can change when combined with other substances

climate a region's average weather over many years

crust the outer layer of the Earth

diskettes disks made of magnetic material and used to store data entered into a computer

ecology the study of how all living things depend on one another

erosion the wearing away of soil by wind and water

evolution changes in a species over time

food chain a group of organisms, each of which is dependent on another for food

fossils the remains of organisms that lived long ago

organisms living things

WORDS IN CONTEXT

Complete each sentence with a word from the glossary. Use the other words in the sentence to help you decide which word to add. Check the dictionary definition if you're still not sure.

1. The devastating Dust Bowl of the 1930s was caused by the widespread _____ of America's farmland.

2. Life science is the study of all the _____ on Earth.
3. Fruits, vegetables, and grains are all good sources of _____.
4. Some _____ are useful for making foods such as cheese; other kinds can cause sickness and death.
5. There are two hydrogen _____ and one oxygen _____ in a water molecule.
6. Each _____ of information in a computer program stands for a letter, number, or symbol.

SCRAMBLED WORDS

First unscramble the words from the glossary. Then solve the crossword puzzle with words that complete the sentences.

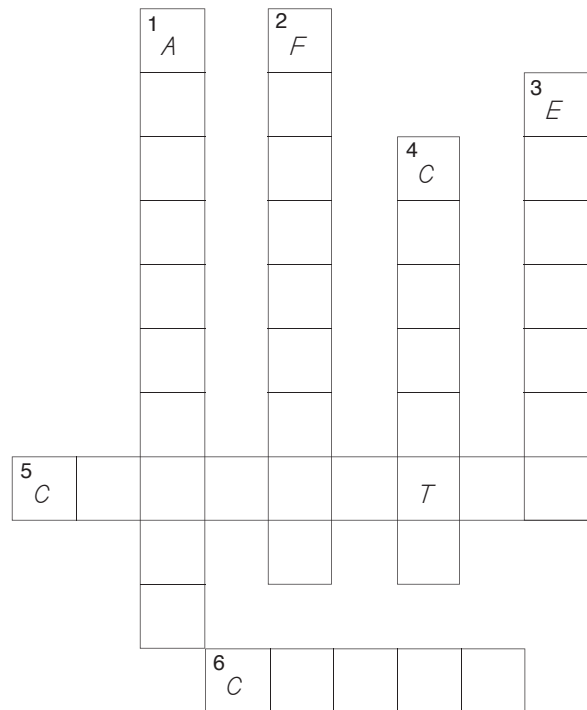
- ALCTIME** _____
- ODFO ACHIN** _____
- COYLOGE** _____
- MYSTERCHI** _____
- STRUC** _____
- HERPOSTMAE** _____

ACROSS

5. _____ is the study of what matter is made of and how it can change.
6. The continents and the ocean floor are part of the Earth's _____.

DOWN

1. The _____ extends more than 1,400 miles above the Earth's surface.
2. Each of the organisms in a _____ (two words) eats one of the other organisms.
3. The study of the relationship between different populations in a habitat is called _____.
4. A desert _____ is mostly hot and dry.



WORD FORMS

Add vowels (*a, e, i, o, u*) to complete a different form of a glossary word. Use context clues for help. The first one has been done for you.

1. A bacterial infection can usually be treated with an antibiotic.
2. As weather _r_d_s rocks, salt from the rocks enters the soil.
3. _t_m_c energy is used to power some submarines.
4. Ch_m_sts often conduct their experiments in laboratories.
5. Over time, organisms will f_sl_z if all the conditions are right.
6. All of today's plants and animals _v_lv_d from tiny one-celled creatures.
7. Scientists call lightning an “_tm_sph_r_c disturbance.”

EXAMPLES

Circle an example of each **boldface** glossary item.

1. **climate**

mountainous overpopulated humid prosperous

2. **carbohydrates**

lettuce butter proteins potatoes

3. **organisms**

fleas glaciers chemicals instruments