

Name: _____
Block: _____

Date: _____
Integrated Science 7

Introducing Science-- "What is Science" and the "The Unifying Principles of Science"

DIRECTIONS: Read pages xxix-xxxv in the Science textbook. Then, complete the outline by filling in important details from the text. TAKE SPECIAL NOTE OF THE ITALICIZED VOCABULARY WORDS!

I. What is Science?

- 1.
- 2.
- 3.

II. Unifying Principles of Life Science

A. All Living Things Share Common Characteristics

1. *cell--*
2. *organism--*
- 3.
- 4.

B. All Living Things Share Common Needs

- 1.
- 2.
- 3.

C. Living things meet their needs through interactions with the environment

1. *environment--*
2. *interaction--*
- 3.

D. The types and numbers of living things change over time

1. *species--*
2. *biodiversity--*
3. *adaptations--*
4. *extinction--*
- 5.

III. Unifying Principles of Earth Science

A. Heat energy inside Earth and radiation from the Sun provide energy for Earth's processes

1. *energy--*
2. *radiation--*
- 3.

B. Physical forces, such as gravity, affect the movement of all matter on Earth and throughout the universe

1. *matter--*
2. *force--*
- 3.

C. Matter and Energy move among Earth's rocks and soil, atmosphere, waters, and living things

1. *atmosphere--*
2. *geosphere--*
3. *hydrosphere--*
4. *biosphere--*
- 5.

D. Earth has changed over time and continues to change

- 1.

IV. Unifying Principles of Physical Science

A. Matter is made of particles too small to see

1. *atoms--*
2. *elements--*
- 3.

B. Matter changes form and moves from place to place

- 1.

C. Energy changes from one form to another, but it cannot be created or destroyed

1. *Law of conservation of energy--*
- 2.

D. Physical forces affect the movement of all matter on Earth and throughout the universe

1. *Force--*
2. *Gravity--*
3. *Friction--*
- 4.