Important Concepts . . .

Preview Review

Science *Grade 7* *TEACHER KEY*

W1 - Quiz

V5-07

Important Concepts of Grade 7 Science

W1 - Lesson 1 ..... Interactions and Interdependencies
W1 - Lesson 2 ..... Nutrient Cycles, Energy Flows, and Changes in Ecosystems
W1 - Lesson 3A ..... Environmental Impacts of Human Activities
W1 - Lesson 3B ..... The Particle Model of Matter, Temperature, Heat, and Change of State
W1 - Lesson 4 ..... Heat Transfer
W1 - Lesson 5 ..... Understanding Heat and Temperature in Nature and Technology
W1- Quiz
W2 - Lesson 1 ..... Life Processes and Structure of Plants
W2 - Lesson 2 ..... Plant Propagation and Reproduction
W2 - Lesson 3 ..... Plant Needs and Growing Conditions
W2 - Lesson 4 ..... Role of Plants and Controlling Plant Growth
W2 - Lesson 5 ..... Review of Plant Management
W2 - Quiz
W3 - Lesson 1 ..... Forces on and within Structures
W3 - Lesson 2 ..... Structural Forms
W3 - Lesson 3A ..... Materials Used in Structures
W3 - Lesson 3B ..... Rocks, Weathering, and Erosion - The Rock Cycle
W3 - Lesson 4 ..... Plate Tectonics and Related Events
W3 - Lesson 5 ..... Fossils
W3 - Quiz.....

Materials Required.
Textbook:
Science in Action 7

Science Grade 7
Version 5
Preview/Review W1 - Quiz TEACHER KEY

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Preview/Review Concepts
for
Grade Seven Science

TEACHER KEY

W1 - Quiz

W1 - Quiz

Total __ / 38

1. List three characteristics of all living organisms. (3 marks)

   Any three of the following: grow, move, use food which it makes or eats, reproduce, respond to stimuli

2. Use words from the following list to finish the sentences correctly. (7 marks)

   herbivore parasitism producer
   abiotic mutualism species
   community

   a. An example of ***parasitism*** is a tapeworm living in the intestine of a wolf.

   b. A deer is classified as a ***herbivore***.

   c. All the organisms living and interrelating in an area make up a ***community***.

   d. A tree is called a ***producer***.

   e. ***Abiotic*** factors such as water and air are important to living organisms.

   f. The relationship of two organisms living in close contact with both organisms benefitting from the relationship, is called ***mutualism***.

   g. Robins and mallards are two separate ***species*** of birds.

3. Explain what a bioinvading organism is. Then explain some of the problems it can cause. (4 marks)

   An organism that moves into an area to which it is not native. It can "take over" an area and outcompete native species. Invading organisms usually don't have predators in the new area so they increase rapidly in number if conditions are ideal.

4. Draw a 4-member food chain. Include a decomposer. (4 marks)

Must include a producer and a decomposer. Members must be joined by arrows pointing in the direction energy flows.

For example,

grass ⟶ mouse ⟶ cat ⟶ bacteria

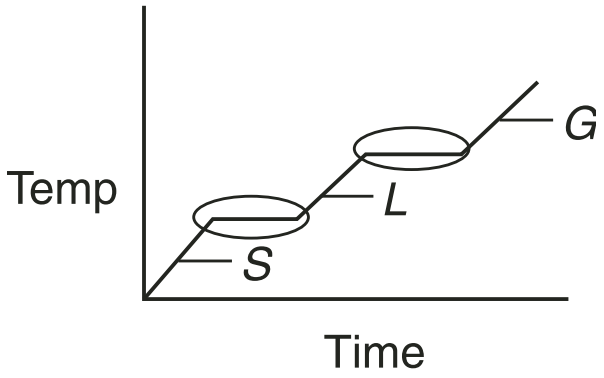
5. Name one pioneer species you might expect to see in a disturbed field. (1 mark)

Answers will vary but most common ones will probably be weeds and grasses

6. What are two characteristics of all liquids? (2 marks)

They have a definite volume but no definite shape. They take the shape of a container they are in and the molecules are loosely attached to each other.

7. On the following time-temperature graph, circle the phase changes. (2 marks)



The flat horizontal areas are the phase changes.

8. In which state of matter does conduction of heat work best ? (1 mark)

Solids

9. List two of the main points in the Particle Theory of Matter. (2 marks)

Any 2 of the following:

All matter is made up of extremely small particles.

The particles are always moving.

The particles have space between them.

Adding heat to matter makes the particles move around faster.

10. Use the following terms to complete the sentences. (6 marks)

condensation	temperature	heat
thermostat	evaporation	thermometer

a. A type of technology used to determine the temperature of a substance is a ***thermometer***.

b. ***Condensation*** is the change from a gas to a liquid.

c. Energy transferred from where there is more kinetic energy to where there is less is called ***heat***.

d. ***Temperature*** is a measure of how hot or cold something is.

e. The change from a liquid to a gas is called ***evaporation***.

f. A technological device used to control the temperature of something is a ***thermostat***.

11. What are four features you would include in an energy efficient solar home? (4 marks)

Answers will vary, but look for answers such as south exposure; large windows on south, small on north; an overhang to allow sun in during winter, keep it partly out in the summer; good insulation; an energy storage site; etc.

12. Imagine you have two types of insulation to choose from. They cost the same amount, but type A has an RSI value of 0.24; type B has an RSI value of 0.35. Which would you choose and why? (2 marks)

Type B has a higher RSI value. This means it insulates better.