Name: Date: Period:

Homework: Test Review

Use your notes and your knowledge of IPC to fill in the blanks and answer the questions:

The Law of Conservation of Mass: Mass cannot be _____ or _____.

Algebra Review:

4 + x = 7.5
x = _____

3.3 + 2.2 = x
x = _____

x + 5.1 = 13.2
x = _____

3.2 + 27.1 = x
x = _____

5.2 + x = 7.3 + 6.5
x = _____

2.1 + 5.8 = x + 1.3
x = _____

3.7 + x = 6.8 + 1.7
x = _____

calcium carbonate ⟶ **calcium oxide** + **carbon dioxide**
200.2 g **? g** **88.0 g**

1. If 200.2 grams of calcium carbonate reacts to produce 88 grams of carbon dioxide, how much calcium oxide will be produced? _____

2. When a 1-kilogram log was burned, 0.05 kilogram of ash was produced. The mass of the ash is less than the mass of the log because —
A wind carried away some matter before it burned
B some matter was converted to gases that were released
C combustion changed some matter into energy
D some matter was decomposed by organisms in the soil

3. When 50 mL of isopropyl alcohol (39.5 g) is added to 50 mL of water (50 g), the mixture will have a volume of 98 mL. What is the mass in grams of this mixture? Record your answer to the nearest tenth on the answer document.

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_____ IS THE ABILITY TO CAUSE CHANGE.

The Law of Conservation of Energy: Energy cannot be _____ or _____.

Energy can be _____, _____, or _____.

IMPORTANT FACT: All living things store their energy as _____ energy!

Know your vocabulary: Endergonic vs. Exergonic

- A reaction where energy is absorbed is called an _____ reaction.
- A reaction where energy is released is called an _____ reaction.

Is digestion energonic or exergonic? _____
Is photosynthesis endergonic or exergonic? _____

What are the three ways to stop a fire listed on your notes?

1 _____

2 _____

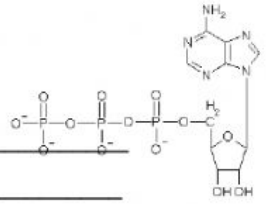
3 _____

WHAT ARE THE FOLLOWING NUTRIENTS MORE COMMONLY KNOWN AS?

LIPIDS	AMINO ACIDS	CARBOHYDRATES
_____	_____	_____

Nutrients from digested food move from the digestive system directly into the -

A circulatory system
B integumentary system
C excretory system
D endocrine system



What molecule is made in the cells to be used as an energy source? _____

What organelle (part of the cell) is this molecule produced in? _____

HERE ARE THE SIMPLE FACTS THAT YOU SHOULD KNOW ABOUT PLANTS:

Plants produce sugars, so plants are _____.

Plants get their energy from the _____.

Plants absorb their energy from the sun in their _____.

(This means that the broader their leaves are, the more sunlight they will absorb!)

Plants convert the _____energy of the sun into _____ energy that can be stored in sugars.

Important Plant Parts to Know:

1. Waxy covering on leaves = _____
This helps to conserve _____.

2. Holes in leaves = _____
These let _____ in and out of the leaves.

1. Some mesquite trees have deeper roots than any other plant in the desert. How are deep roots an adaptation for survival in the desert?

F Deep roots can protect the tree from predators.
G Roots encounter cooler conditions far below the desert surface.
H Roots can extend great distances to reach water.
J Deep roots interact with beneficial bacteria below the surface.

2. Energy used by producers in a grassland food web is provided by -

A sunlight
B photosynthesis
C oxygen
D carbon dioxide

3. Plant leaves have a waxy covering called a cuticle. When some plants are stressed by lack of water, their cuticle increases in thickness. What does this action demonstrate?

A Alternation of generations in plants
B Structural response to the environment
C Differentiation of vascular tissue in plants
D Genetic mutation induced by the environment

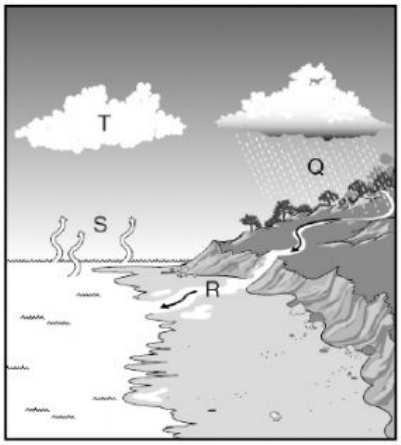
4. Which of these characteristics might help a plant species survive in an area of limited sunlight?

A Bright flowers
B Large leaves
C Short stems
D Thick cuticles

It was a **PHYSICAL CHANGE** if all it did was

- change _____ and _____
- _____
- or change between _____, _____ and _____

It was a **CHEMICAL CHANGE** if a new _____ was formed.



Which step in the water cycle is best described as evaporation? _____

Which step in the water cycle is best described as condensation? _____

1. In the rock cycle, which of these is a chemical change involved with the formation of igneous rocks?

A Compression of sediments
B Heat loss from lava
C Subduction of plates
D Formation of minerals

2. Which of the following processes is an example of a physical change associated with an oak tree?

A Decomposition of bark by bracket fungi
B Starches and sugars being broken down during energy production
C Water and carbon dioxide being converted to glucose
D Evaporation of water from the surfaces of leaves