\*\*\*CLASS COPY\*\*\*

**Food Chain/Web/Pyramid and Organic Compounds Test Review \*KEY\***

**From your Energy Flow Through Living System Student Journal**

1. Each food chain or food web will always start with what?

Sun provides energy to plants

Plants provide energy to all other organisms

1. Create or copy a 5 step food chain from your Student Journal.

Sun grass mouse snake hawk

1. What do the arrows represent in a food chain or food web?

The flow of energy from one organism to another

1. Name a producer for the marine, grassland, and desert ecosystems.

Marine – phytoplankton; grassland – grass, twigs, leaves; desert – cacti, plants

1. What is the difference between a food chain and food web?

A food chain represents a specific relationship of energy flow, while a food web shows many relationships. Food webs also have multiple producers and consumers.

1. How does energy get from one level to the next?

It is consumed (an organism eats another organism)

1. What is the difference between producers and consumers?

Producers make chemical energy from radiant energy and consumers get their energy by consuming (eating) other organisms.

1. What is a decomposer?

Decomposers break down plant and animal remains and waste, which allows nutrients to be absorbs into the soil.

1. What trophic level has the most energy? Least energy?

Level with the most energy – producers (all energy starts here after photosynthesis)

Level with the least energy – tertiary consumers (they are only getting .1% of the 100 %)

1. What trophic level has the most number of organisms? Least number of organisms?

Level with most # of organisms – producers (they have to give energy to all other living things)

Level with least # of organism – tertiary consumers

1. What are 3 reasons that all of the energy in one level doesn’t go to the next level?
2. Some energy is let off as heat
3. Some energy is used for body function
4. Some energy is store in indigestible body parts; such as: beaks, bones, etc.
5. How much energy is transferred to the next level?

10% of the energy at the current level is transferred to the level right above it.

1. If the tertiary consumer has 6.8 calories, how much energy did the producers have? Draw a pyramid with labels for the trophic levels and calories.

Tertiary Consumer- 6.8 cal

X10

6,800 calories

X10

Secondary Consumer- \_\_\_\_\_\_

X10

Primary Consumer- \_\_\_\_\_\_\_\_\_\_

Producer - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**From your Organic Compound Student Journal and Notes**

1. What element determines if a compound is organic or inorganic?

Carbon

1. What elements are typically present in organic compounds?

Sulfur

Phosphorous

Oxygen

Nitrogen

Carbon

Hydrogen

Hydrogen, oxygen, sulfur, phosphorous, and nitrogen

1. Where do organic compounds typically come from?

Organic compounds come from living or once living matter

1. Write a chemical formula that would be an organic compound.

(Use one from your Student Journal)

C6H12O6 – Glucose, C16H18N2O4S – Penicillin

1. Write a chemical formula that would be an inorganic compound. (Use one from your Student Journal)

H2O – Water, O2 – Oxygen gas

1. What three types of organic compounds do living organisms get from their food?

Carbohydrates, Proteins, and Lipids

1. Using your answers from the previous question, what do each do for a person?

Carbohydrates – used and stored for energy

Proteins – build organelles, body parts, and used in body defense

Lipids (fats) – stored for long term energy

**Review your vocabulary for each unit.**