**Food Chains and Energy Active Reading Practice**
Source: <http://www.ftexploring.com/me/me2.html>

**Part 1: Active Reading**

Directions: Practice your active reading skills while you read the article below. (6 points)

Remember to:

a) Underline important information (something in each paragraph)
b) Circle words you don’t know
c) Pay attention to the bolded words
d) Write at least 1 question and write at least 1 thought as you read.

 (1) The flow of **energy** through life is not an endless cycle.  The energy doesn't go round and round getting used over and over again and never wearing out.  Its passage through the **food chain** can better be described as in and out.

 (2) As energy moves up the food chain there is less and less of it to go around.  That's the main reason there aren't very many big fierce predators compared to the herbivores. Not enough energy for them!   We'll talk about this in detail in another section, but a brief explanation goes something like the following:

 (3) Most of the **solar energy** that falls on the earth is not used by plants. It bounces back to space or heats the air, oceans, and ground, and makes weather, among other things.

    So….

     The **producers** only get a little bit of the solar energy that hits the earth.

     And....

     The **herbivores** only get a little bit of the energy that hits the plants.

     And....

     The **carnivores** and **decomposers** only get a little bit of the energy that was eaten by the herbivores.

     *(Most of the plant energy that is consumed by a herbivore is used by that herbivore to keep itself eating, breathing, walking, and staying warm. Only a little bit is left over for the carnivore or decomposer that eats the herbivore.)*

     So….at the end of the chain there isn't much of that original solar energy left.

 (4) Therefore.... we need fresh sunshine everyday and new plants have to keep growing.  Otherwise the whole amazing system would quickly run out of energy and everything alive would come to a "dead" stop.

**Part 2: Checking Your Understanding**

Directions: Describe the important words below. (14 points)

|  |  |  |
| --- | --- | --- |
| Vocabulary word | Picture/Example | Definition |
| Energy |  |  |
| Food Chain |  |  |
| Solar Energy |  |  |
| Producers |  |  |
| Herbivores |  |  |
| Carnivores |  |  |
| Decomposers |  |  |

**Part 3: Visualization Practice** (10 points)

Directions: Reread paragraph 3 and draw a picture that summarizes the paragraph. Label the **solar energy, producers, herbivores, carnivores, and decomposers**.