



Name: \_\_\_\_\_ Date: \_\_\_\_\_ Group: \_\_\_\_\_

## Transfer of Energy in Ecosystems

Draw arrows in the correct direction to complete this food chain.



Fill out the following paragraphs using the terms found in the word bank. Words can be used more than once, and some not at all.

Believe it or not, \_\_\_\_\_ within an ecosystem is NOT transferred back and forth between all levels. In fact, only about \_\_\_\_\_ of available energy is transferred to the next level. Energy begins with the \_\_\_\_\_ and flows in \_\_\_\_\_ direction to \_\_\_\_\_, to \_\_\_\_\_, and finally to \_\_\_\_\_. Just like energy, only a portion of \_\_\_\_\_ is transferred when one organism consumes another. \_\_\_\_\_ is the amount of living or organic matter present in an organism.

A \_\_\_\_\_ represents all of the possible paths for energy to flow within an ecosystem, whereas a \_\_\_\_\_ represents just one path. When drawing a diagram of a food web, you always draw the arrow in the direction of \_\_\_\_\_. For example, an arrow from a \_\_\_\_\_ to a \_\_\_\_\_. If energy is lost along the way through the chain, then the top-level consumers have the \_\_\_\_\_ amount of transferred energy.

Even at this top-level, the energy cycle is not over. Organisms at all levels of the pyramid eventually die. \_\_\_\_\_, such as bacteria and fungi, and \_\_\_\_\_, such as earthworms, process the stored energy in dead plants and animals and transfer part of it to the soil that plant \_\_\_\_\_ will use as nutrient, and the energy cycle continues.

### Word Bank:

Producers	10%	Highest
Consumers	One	Food Web
Decomposers	Food Chain	Sun
Energy	Energy Flow	Biomass
Two	Lowest	Detritivores
Stars	Bacteria	21%