

## What is a Food Pyramid?

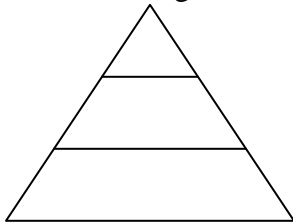
### Background:

Biologists in the year 2014 observe a food chain which is part of an ecosystem on a distant planet. They find that it has many characteristics of food chains on earth. On a particular area of land, a small, plant-like organism capable of photosynthesis, called a vortek, serves as the food source for an animal called a snive. The snive, in turn, is preyed upon by the kluke. There are 100 vorteks, 50 snives and 25 klukes.

### Building a Food Pyramid:

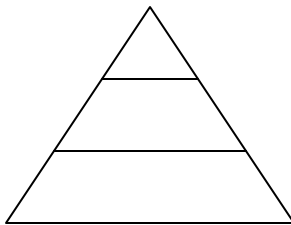
1. In the space provided, **build a food pyramid** based on the information above with the producers on the bottom, building up from there. **Label the animal that belongs in each layer, include how many organisms exist and label the role or job of each organism (producer, primary consumer, secondary consumer).**
2. *How would the numbers change of **each** of the organisms - snives, klukes and vorteks – if these different situations arose. In each of the pyramids, **shade in the levels that are affected** and **indicate an arrow as to which way the population will be affected, growing or dying.***

- a. A biologist visiting the planet consumed all the vorteks.

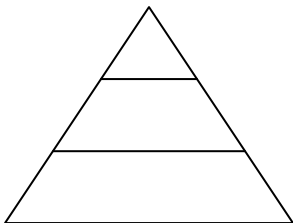


Example:  
Vorteks  
Snives  
Klukes

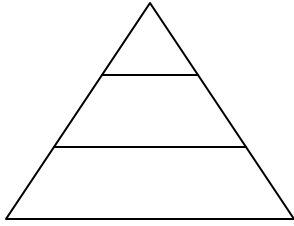
- b. A deadly disease wipes out all the klukes.



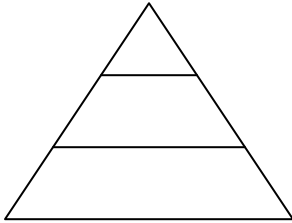
- c. Animals called skunkolas travel to the area and prey upon the vorteks. The klukes dislike the taste of the skunkolas and refuse to eat them.



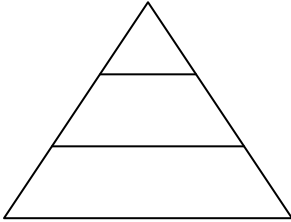
d. Biologist remove all the snives for a study.



e. More vorteks are planted.



f. A tertiary consumer called the Joon is introduced.



Application:

Here are three food webs. *Please make a food pyramid* for all three. **Indicate which are primary, secondary, tertiary consumers and producers, etc.**

1. Grass, grasshopper, bird, eagle
2. Flower, Bunny, Fox
3. Plant, Bee, Bird, Cat, Coyote, Bear

This table shows a food chain. Indicate with arrows what happens to each of the populations as certain populations are killed. XXXX indicates death of population.

	Algae	Guppy	Fish	Bear
Algae	xxxxxxx			
Guppy		xxxxx		
Fish			xxxxxxx	
Bear				xxxxx