

A young owl with brown and white mottled feathers and bright yellow eyes is perched on a dark, textured branch. The owl is looking directly at the camera. A semi-transparent circular frame is centered over the owl, and the word "BIOMASS" is written in large, white, bold, sans-serif capital letters with a black outline across the center of the circle. The background is a soft-focus green and brown bokeh.

BIOMASS

BIOMASS

- **Biomass** is a measure of the total mass of living organisms within an ecosystem.

Example:

- A plant absorbs energy from the Sun.
- Energy transfers to a herbivore that eats the plant.
- A carnivore receives the energy after eating the herbivore.




BIOMASS PYRAMIDS



- A biomass pyramid is used to graph the energy transfer between organisms.
 - The graph shows how larger species depend on smaller organisms for their survival.
- A biomass pyramid is present in every ecosystem.

BIOMASS PYRAMIDS

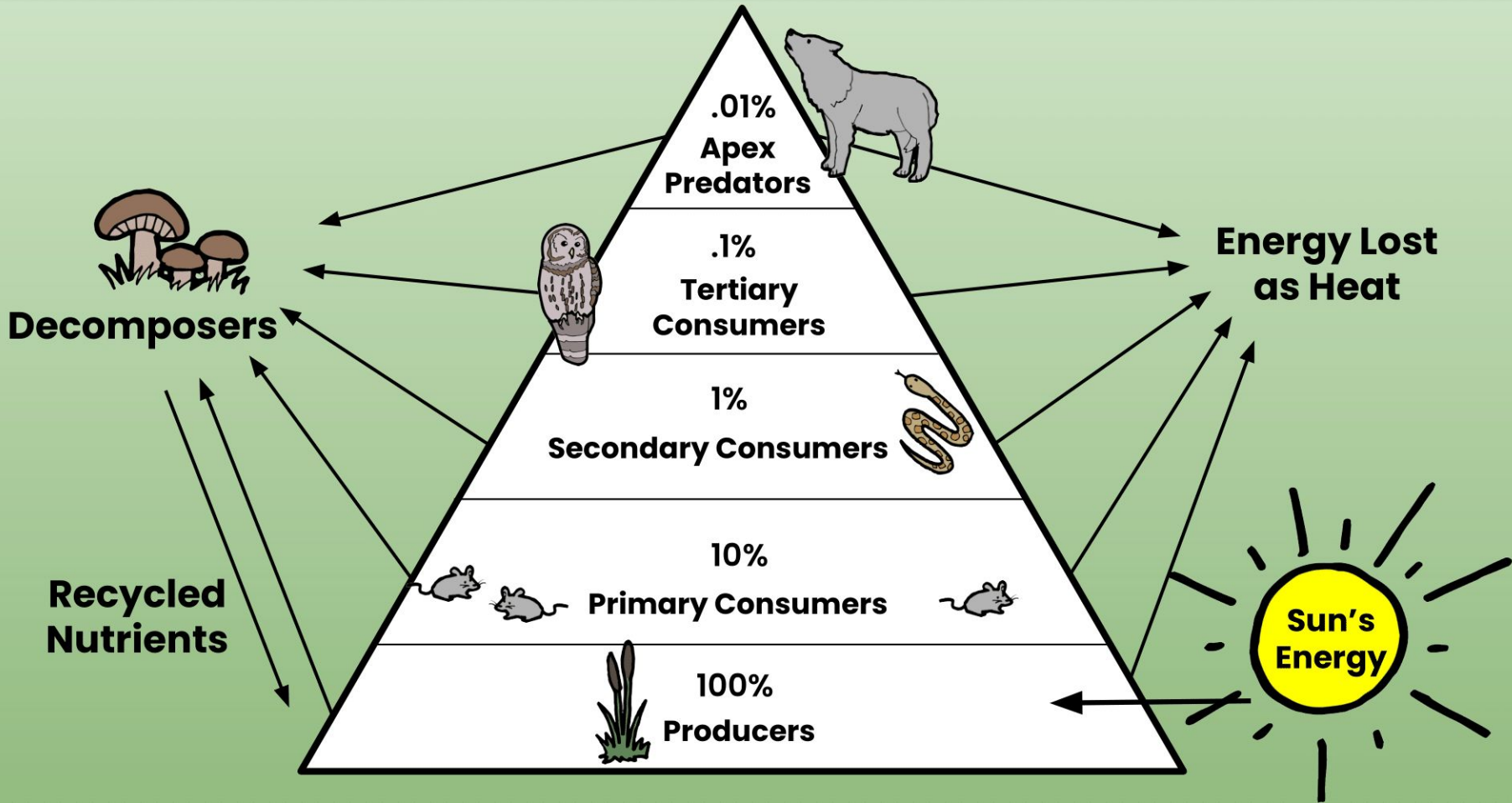
- The top of the biomass pyramid shows the species that are at the top of the food chain.



What animals are at the top of the pyramid?

What do you think is at the bottom?

BIOMASS PYRAMIDS



BIOMASS PYRAMIDS



- Only 10% of the energy is retained during each transfer.
 - This explains why a pyramid shape is used.
- 100% of the energy is located at the bottom of the pyramid.
- Each level after that point will reduce the energy to 10% of what it previously was.

BIOMASS PYRAMIDS



- Removing one layer of the pyramid can cause a species to be eliminated from an ecosystem.
 - Interconnected relationships

Use an example to describe how other species are affected if one is eliminated from an ecosystem.



Which trophic level would have the most energy in the biomass pyramid?

