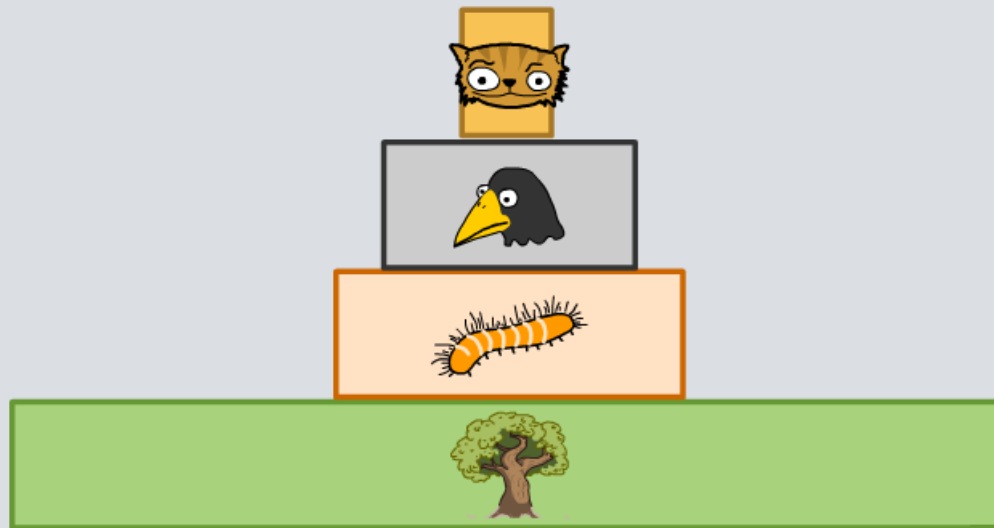


# Energy Transfer in Food Chains

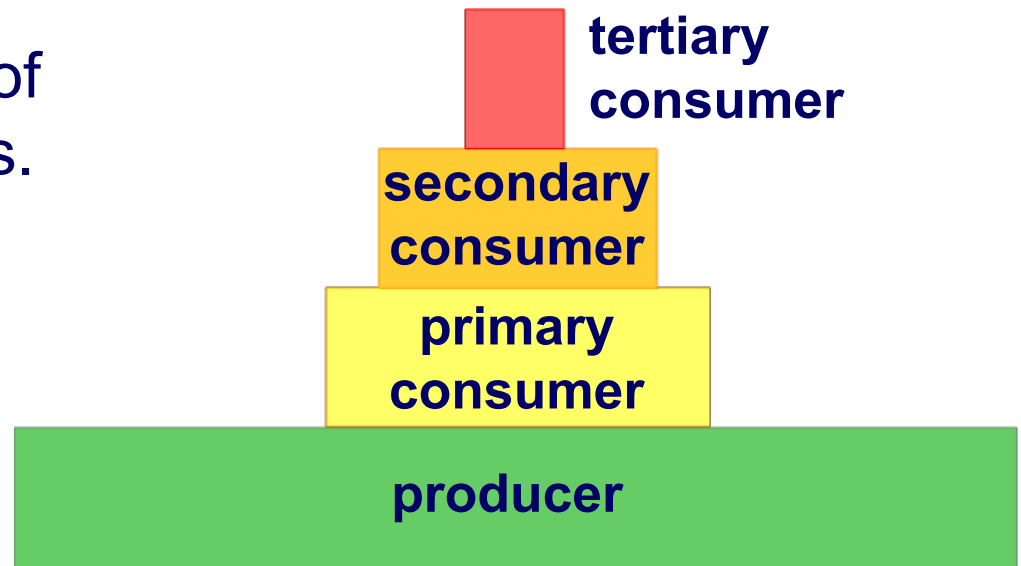


# What are pyramids of numbers?

## Pyramids of numbers

are a **quantitative** way of representing food chains.

They record the number of organisms at each trophic level in a specified area.



What are the problems of representing food chains in pyramids of numbers?

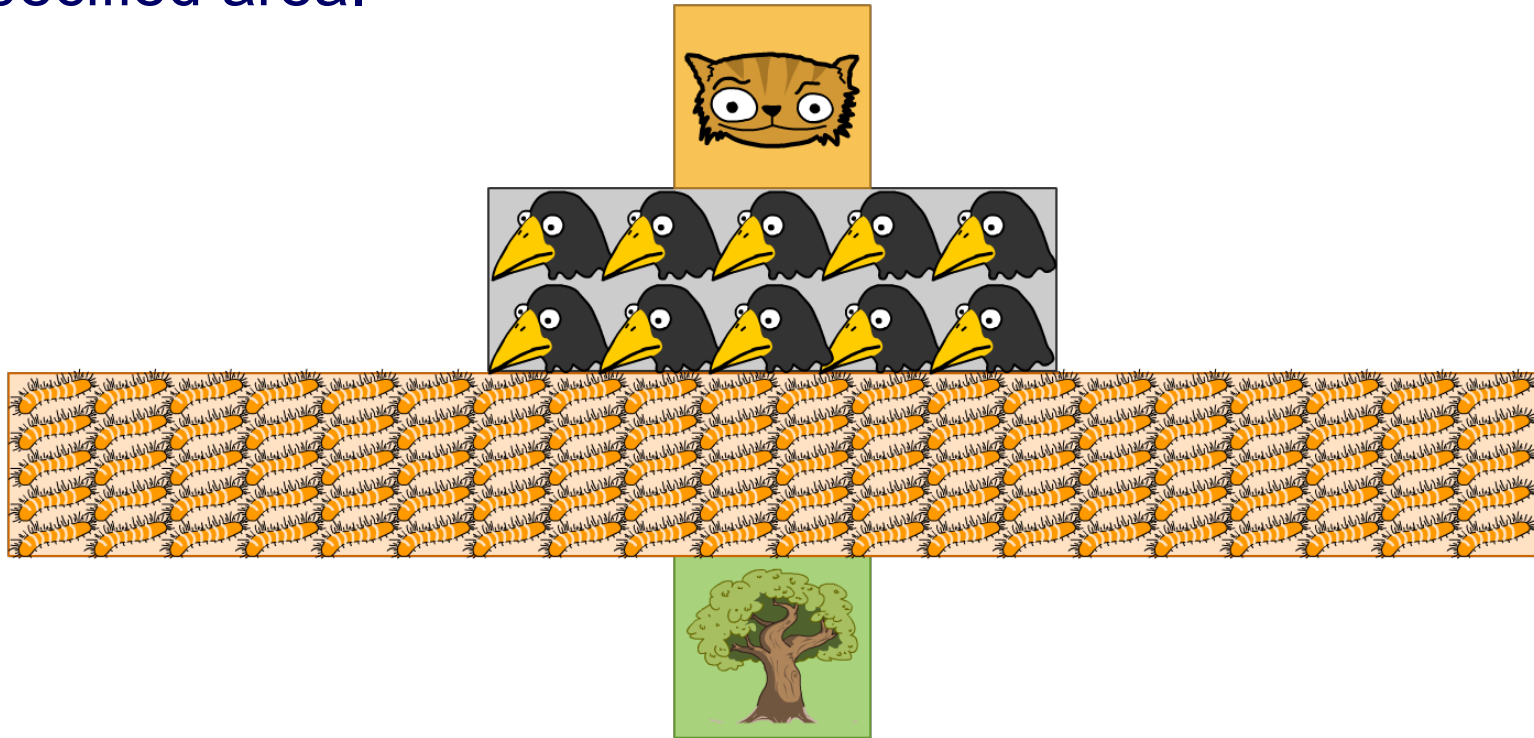
Pyramids of numbers only give an accurate impression of the flow of energy in a food chain if the organisms are of similar size. Measuring the **biomass** at each trophic level can give a more accurate picture.

# Numbers or biomass?



# Understanding pyramids of numbers

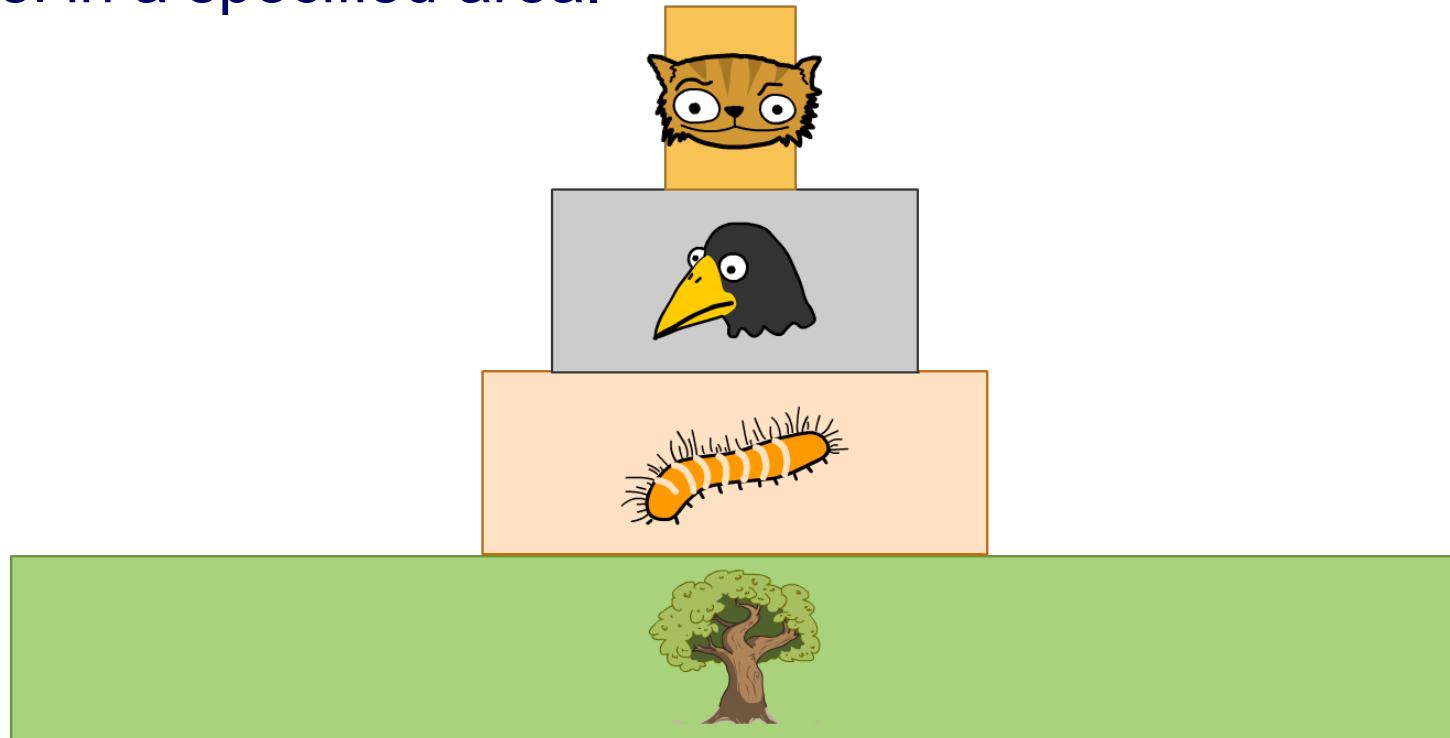
In a pyramid of numbers, the length of each bar represents the **number of organisms** at each trophic level in a specified area.



As a single tree can support many organisms, this food chain produces an unbalanced pyramid.

# Understanding pyramids of biomass

In a pyramid of biomass, the length of each bar represents the **amount of organic matter** – **biomass** – at each trophic level in a specified area.



At each trophic level, the amount of biomass and energy available is reduced, giving a pyramid shape.

## What are the missing words about food chains and pyramids?

1. Biomass is the living material that makes up  .
2. Plants are called primary   because they make their own food by photosynthesis.
3. Biomass and energy are transferred from one organism to another along food  .
4. A pyramid of   is a scale drawing that represents the amount of organisms at each trophic



solve

