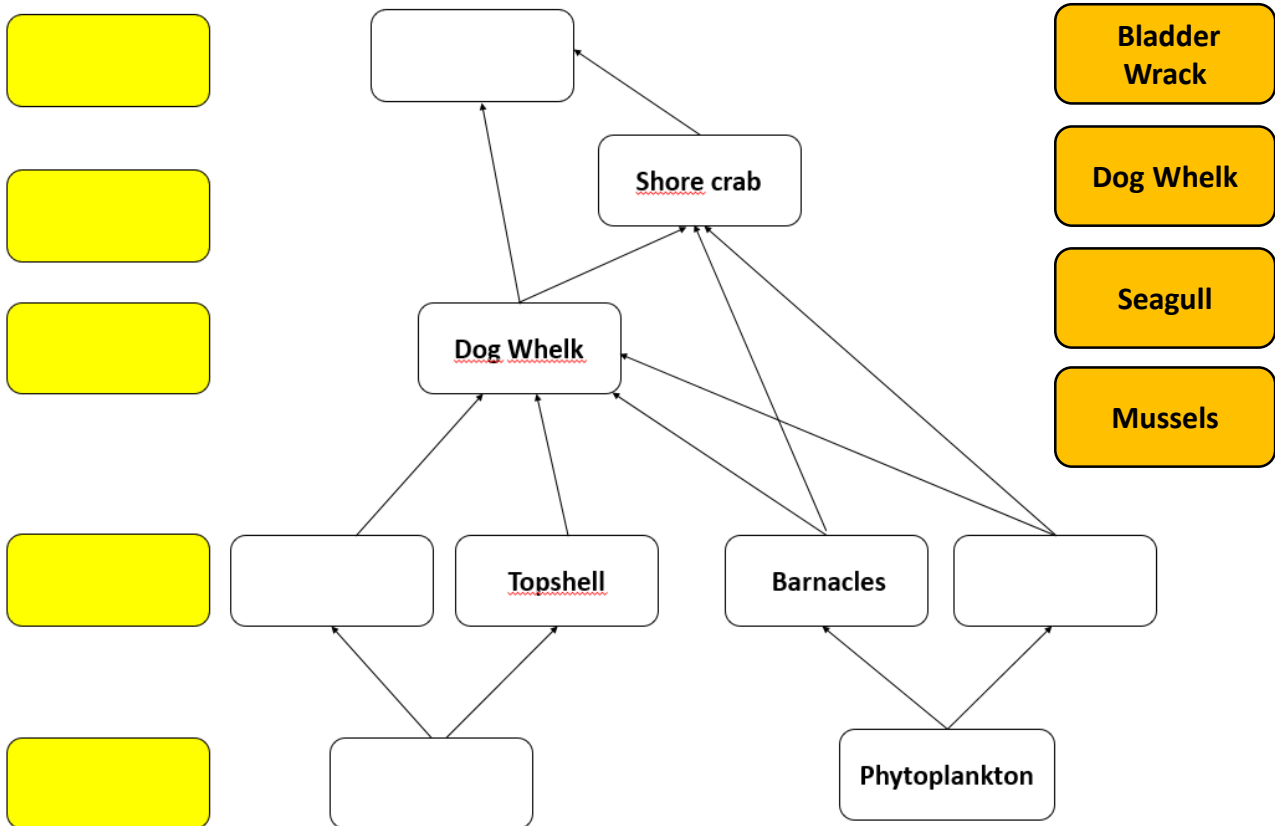


1. Food webs

Use your knowledge from the fieldtrip to complete the food web below:

- Label producers, first, second and third level consumers.
- Complete the food web with the organisms in orange on the right.
- Connect one of the first level consumers to the top predator.
- Circle one carnivore on the food web.

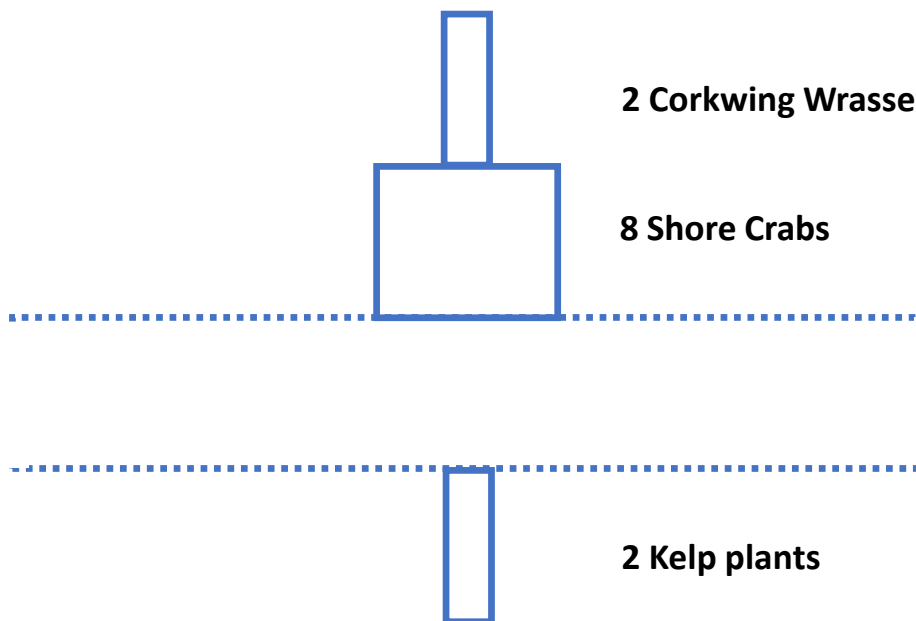


What chemical reaction can all producers do?

What do the arrows in a food web represent?

2. Pyramids of numbers

Complete the pyramid of numbers below to show 40 Topshells as first level consumers.



Why is this not a good way of showing the energy at different trophic levels in the food chain?

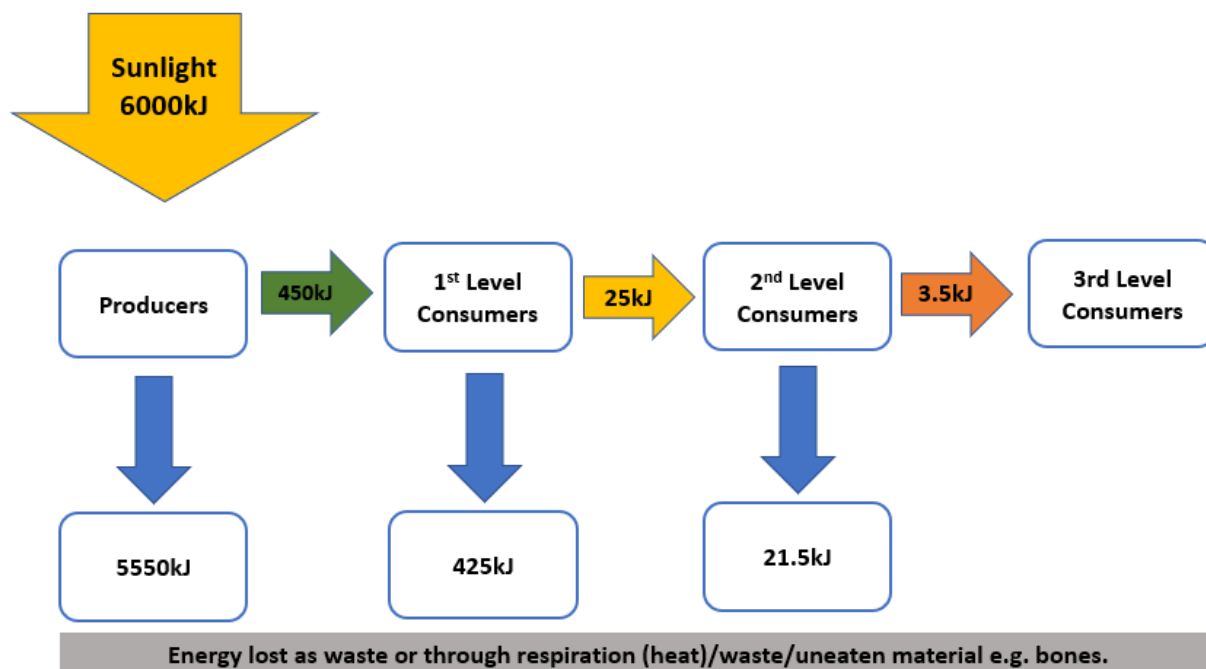
What would be a better way of representing this, that would create a true pyramid shape?

Why do the number of organisms get smaller as you move further up through a food chain?

Name two processes that use energy in an organism?

Which other ways are energy lost at each level in a food chain?

Energy efficiency in food chains.



Calculate the efficiency of producers at transferring energy from the sun:

Now calculate the efficiency of the second level consumers: