



ECO-DIVO THE WORKSHEET

ASSOCIATION FOR THE STUDY OF ANIMAL BEHAVIOUR

Producer

Consumer

Decomposer

Trophic
Level

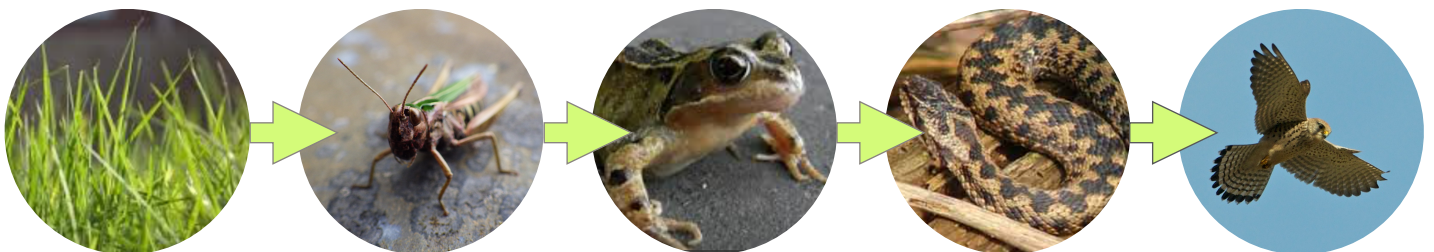
Organisms which need to eat - 'consume' other organisms in order to obtain their energy.

Green plants that synthesize organic matter through the process of photosynthesis. These autotrophic organisms then serve as a source of food for other organisms in a food chain.

The feeding position within a food chain. Eg Producer, primary consumer, secondary consumer etc

Living things that break down dead and decaying organisms into simpler substances, which then become organic nutrients available to the whole ecosystem.

1. Match the definitions above with the correct term.
2. Look at the food chain. The arrows show the direction of the flow of energy from the producers along the food chain. Calculate the percentage efficiency of the transfer of energy between the following trophic levels and fill in the table.



42000 kJ m⁻² year⁻¹

6 300 kJ m⁻² year⁻¹

1250 kJ m⁻² year⁻¹

250 kJ m⁻² year⁻¹

50 kJ m⁻² year⁻¹

Energy available at
each trophic level



Primary consumers and secondary consumers



Tertiary consumers and quaternary consumers



Producers and quaternary consumers



Why is such a small percentage of energy transferred at each trophic level? Where does it go?

