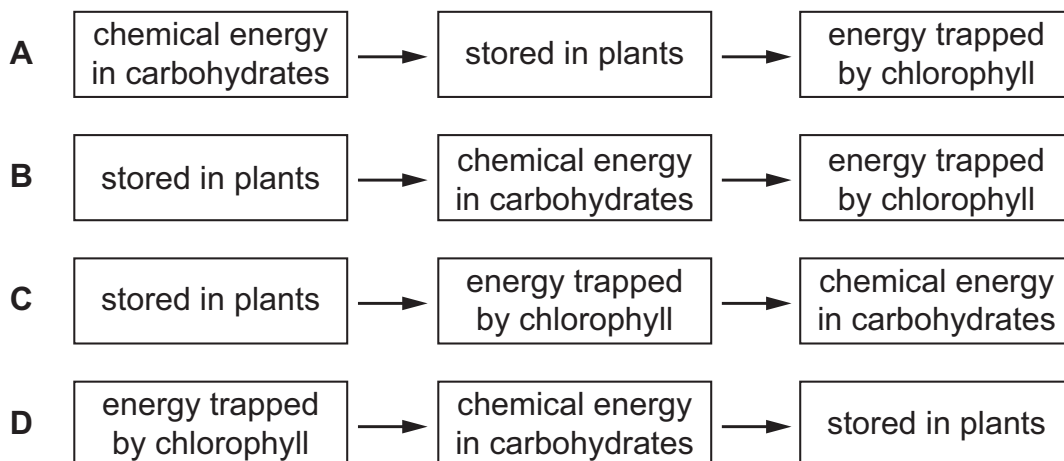


32 Which flowchart shows how energy is transferred from the Sun to an organism?



33 Which statements about a food chain are correct?

- 1 Between trophic level 1 and trophic level 2, energy is passed from a herbivore to a carnivore.
- 2 Between trophic level 2 and trophic level 3, energy is passed from a primary consumer to a secondary consumer.
- 3 Between trophic level 3 and trophic level 4, energy is passed from a secondary consumer to a tertiary consumer.

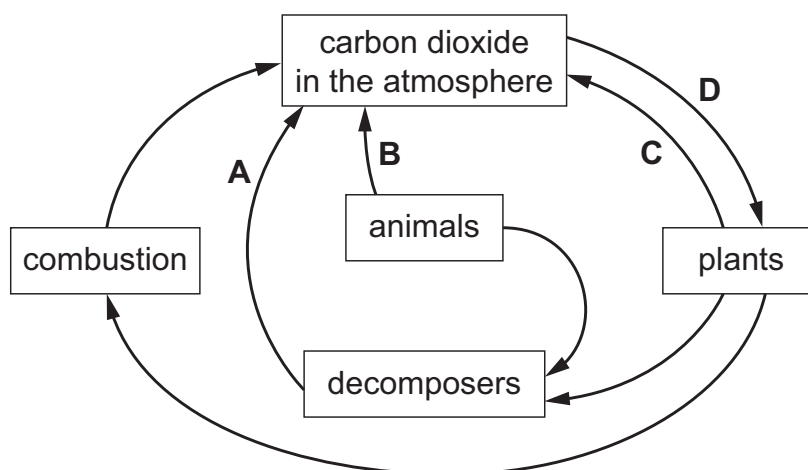
A 1 and 3 **B** 1 only **C** 2 and 3 **D** 2 only

34 Which process in the nitrogen cycle is involved in the breakdown of amino acids in living organisms?

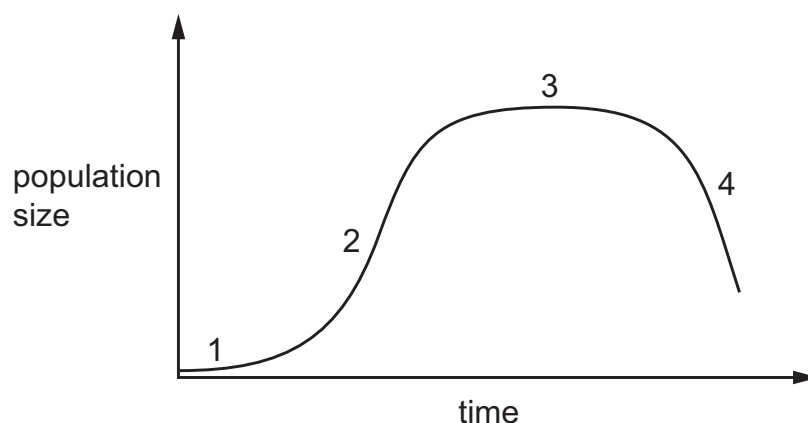
- A** deamination
- B** decomposition
- C** denitrification
- D** digestion

35 The diagram shows part of the carbon cycle.

Which arrow represents photosynthesis?



36 The graph shows how the size of a population changes over time.



Which row identifies the phases of population growth?

	death phase	exponential phase	lag phase
A	3	1	4
B	3	2	1
C	4	1	3
D	4	2	1

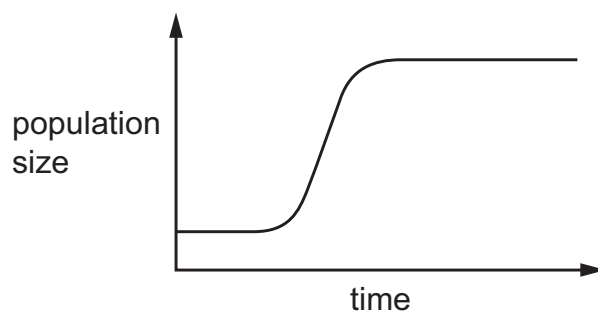
35 Which unit could be used for the measurements needed to construct a pyramid of energy?

- A** kJ per g per m²
- B** kJ per kg per year
- C** kJ per m² per year
- D** kJ per kg

36 Which process needs microorganisms to break down protein to produce ammonium ions?

- A** decomposition
- B** denitrification
- C** nitrification
- D** nitrogen fixation

37 The graph shows part of a growth curve for a bacterial population.



What is **not** shown in the graph?

- A** the death phase
- B** the exponential phase
- C** the lag phase
- D** the stationary phase

35 Which process removes carbon dioxide from the atmosphere?

- A** combustion
- B** decomposition
- C** photosynthesis
- D** respiration

38 In which trophic level are herbivores found?

- A** primary consumers
- B** quaternary consumers
- C** secondary consumers
- D** tertiary consumers