

AQA, OCR, Edexcel

GCSE Science

GCSE Biology

Trophic Levels and Biomass
Answers

Name:

M M E

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Total Marks: /23

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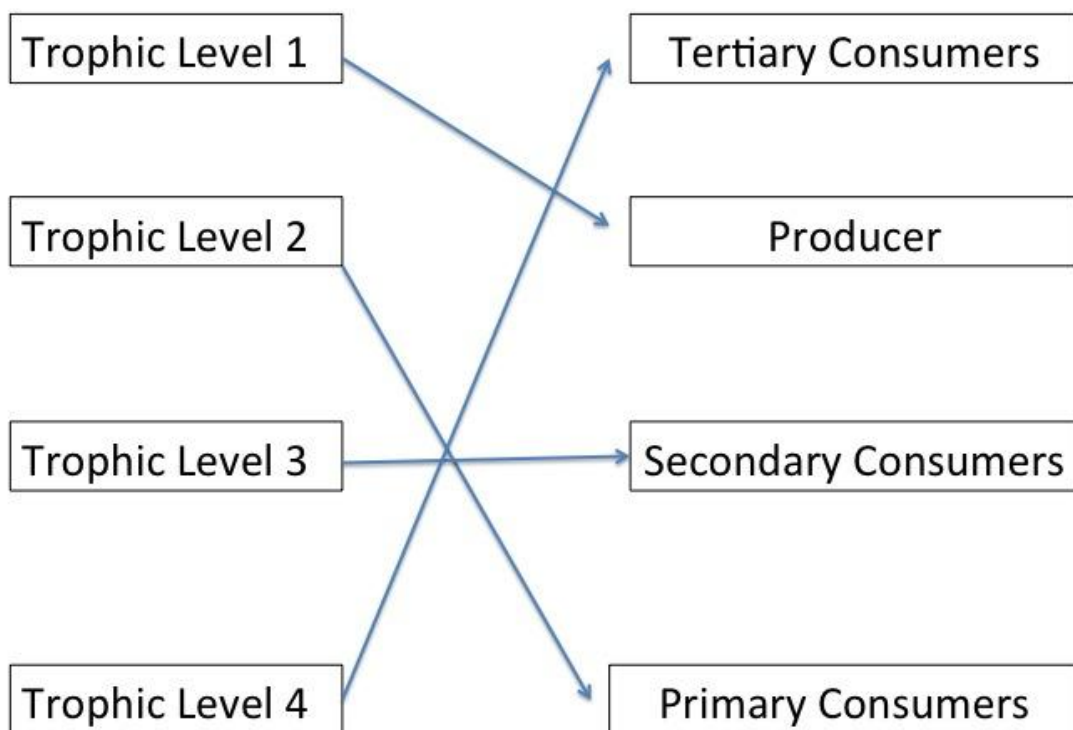
Q1: What are the different levels of organisms in a food chain known as?

A= Trophic Levels

(1 mark)

Q2: Connect up the food chain positions with their trophic levels.

A= 1 mark for each correct link.



(4 marks)

Q3: Give a definition of biomass.

A= Mass of material of living organisms

(1 mark)

Q4: What is the best method for measuring biomass and why?

A= 1 mark for each of the following points.

- Dry biomass – measurement
- Water content varies throughout the day

(2 marks)

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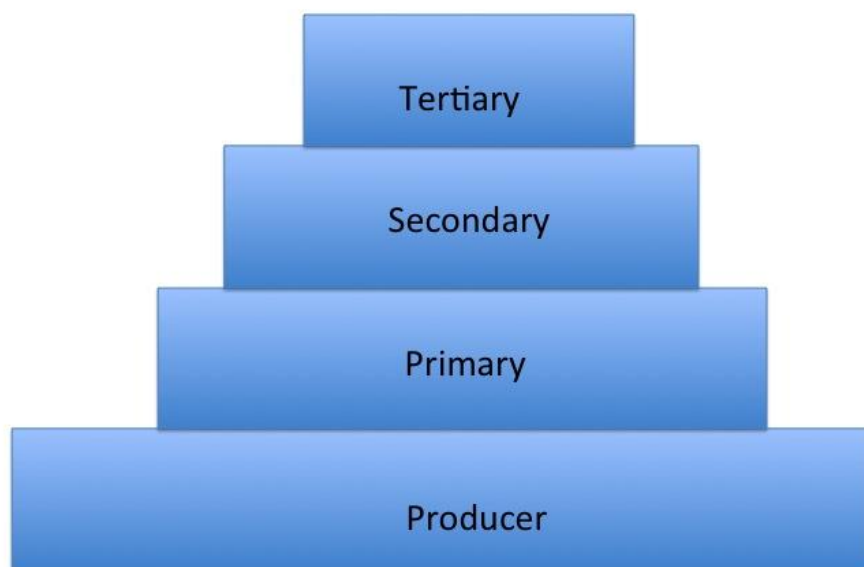
Q5: How can measuring biomass be useful?

A= Analyse feeding relationships between different organisms

(1 mark)

Q6: Pyramids can be used to show the amount of biomass at each stage of a food chain. Draw and label a pyramid of biomass.

A= 2 marks for the correct labels. 2 marks for the correct diagram.



(4 marks)

Q7: Explain how biomass is passed between the trophic levels.

A= 1 mark for each of the following points:

- Passed by eating
- Less available at each level

(2 marks)

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Q8: Draw 2 pyramids to show the differences between a pyramid of numbers and a pyramid of biomass using the following organisms.



Number Pyramid

Lady Bird

Aphid

Oak



Biomass Pyramid

A= 2 marks awarded for correct labels

2 marks awarded for correct lay out of the number pyramid

2 marks awarded for correct lay out of the biomass pyramid

(6 marks)

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Q9: Calculate the percentage of biomass passed on from the producer to the primary consumer. Show your working.

Organisms	Dry Biomass (g)
Grass	100000
Cow	5000
Tick	30

A= 1 mark for showing calculations and one mark for the correct answer.

$$5000 \div 100000 \times 100 = 5\%$$

(2 marks)