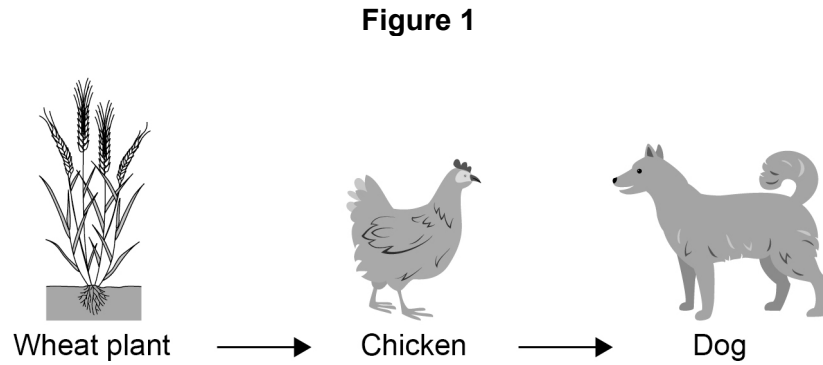


Answer **all** questions in the spaces provided.

0 1

A food for pet dogs contains meat from chickens.

Figure 1 shows the food chain.



0 1 . 1

What is the trophic level of the dog?

[1 mark]

Tick (✓) **one** box.

1

2

3

0 1 . 2

Draw **one** line from each organism to the description of the organism's position in the food chain.

[3 marks]

Organism	Description
Chicken	Herbivore
Dog	Producer
Wheat	Secondary consumer
	Tertiary consumer



0 1 . 3 Name the process wheat plants use to make glucose.

[1 mark]

0 1 . 4 Some of the chicken biomass does **not** become part of the dog's biomass.

What is **one** reason why?

[1 mark]

Tick (✓) **one** box.

Some of the chicken is used for the dog to grow

The dog produces waste in faeces

The wheat is eaten by the dog

Question 1 continues on the next page

Turn over ►



A new dog food has been developed.

The new dog food is made from insects.

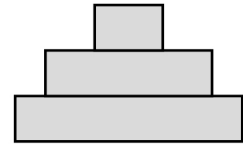
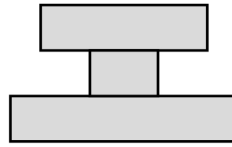
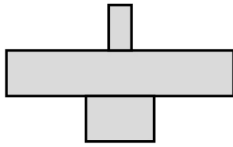
The insects in the dog food factory are fed on vegetables.

0 1 . 5

Which pyramid of biomass represents the vegetables, insects and dogs in this food chain?

[1 mark]

Tick (✓) **one** box.



0 1 . 6

Beef from cows is used to make some dog food.

Cows release methane.

The company that makes dog food from insects made the statement:

‘Dog food made from insects is more sustainable than dog food made from beef.’

Which are **two** reasons that support the company’s statement?

[2 marks]

Tick (✓) **two** boxes.

Dogs will eat more insects than cows

Farming cows needs more land than farming insects

Fewer cows being farmed will slow down global warming

Fewer insects than cows are needed to produce dog food

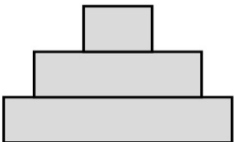
The food chain for dog food made from insects has more trophic levels

9

Turn over for the next question

Turn over ►



Question	Answers	Extra information	Mark	AO / Spec. Ref.										
01.1	3		1	AO2 4.7.4.1 4.7.4.2										
01.2	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Organism</th> <th style="width: 50%;">Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Chicken</td> <td style="text-align: center;">Herbivore</td> </tr> <tr> <td style="text-align: center;">Dog</td> <td style="text-align: center;">Producer</td> </tr> <tr> <td style="text-align: center;">Wheat</td> <td style="text-align: center;">Secondary consumer</td> </tr> <tr> <td></td> <td style="text-align: center;">Tertiary consumer</td> </tr> </tbody> </table> <p>additional line from a box on the left negates the mark for that box</p>	Organism	Description	Chicken	Herbivore	Dog	Producer	Wheat	Secondary consumer		Tertiary consumer		3	AO2 4.7.4.1
Organism	Description													
Chicken	Herbivore													
Dog	Producer													
Wheat	Secondary consumer													
	Tertiary consumer													
01.3	photosynthesis		1	AO1 4.7.2.1										
01.4	the dog produces waste in faeces		1	AO2 4.7.4.3										
01.5			1	AO2 4.7.4.2										
01.6	farming cows needs more land than farming insects		1	AO3 4.7.3.4										
	fewer cows being farmed will slow down global warming		1	AO3 4.7.3.5										
Total			9											