Name: Class:

Student worksheet

7.3 The digestive system varies between animals

Pages 120–121

The digestive systems of various animals

1 What is the function of the each of the different types of teeth?

2 How would a palaeontologist be able to tell if an animal was a carnivore, herbivore or omnivore?

3 Are humans categorised as carnivores, herbivores or omnivores? How can you tell?

4 What is the function of the caecum?

5 Why would animals have a caecum?

6 What is the problem with the position of the caecum on the digestive tract? How do some animals overcome this problem?

Oxford Science 8 Western Australian Curriculum Teacher obook assess ISBN 9780190307172

Name: Class:

7 What is the major difference between a cow's and a human's digestive system?

8 What is a ruminant?

9 What other animals are ruminants?

10 Using the information on page 121 of your student book and your knowledge of the function of digestive organs, match the organ involved in a cow's digestive system with its function.

ORGAN	FUNCTION
1 Omasum	A Absorption of chemicals into the blood stream
2 Rumen	B Chewed grass moves through this pathway to the next organ
3 Small intestine	C Second compartment of the stomach: grass is softened and clumps together to form cud
4 Oesophagus	D Contains the milk in cows that have given birth to a calf
5 Udder	E First compartment of the stomach: grass is softened by fluids
6 Abomasum	F Absorbs, re-circulates and conserves water and minerals
7 Large intestine	G Fourth compartment of the stomach: breaks food down into biomolecules (protein, vitamins, simple carbohydrates, fats and amino acids)
8 Reticulum	H Third compartment of the stomach: cud is pressed and reduced in size

Oxford Science 8 Western Australian Curriculum Teacher obook assess ISBN 9780190307172

Name: Class:

Extend your understanding

The udder contains the milk in cows that have given birth to a calf. It takes up to 70 hours for a cow to turn grass into milk. For every litre of milk a cow makes, more than 400 litres of blood must travel around her udder to deliver the nutrients from the grass. Australian dairy cows produce about 15 litres of milk a day.

11 If a cow produces 15 litres of milk per day, how much blood must travel around their udder each day?

12 How much milk is a female cow capable of producing in one year?

13 How much milk are 100 female cows capable of producing in one year?

14 A farmer has 100 cows on a farm. If she wants to produce 684 375 litres of milk each year, how many more cows will she need to purchase?

Oxford Science 8 Western Australian Curriculum Teacher obook assess ISBN 9780190307172