

Let's eat!

Name: _____

Cows, sheep and goats are 'ruminants', which means they have four stomachs and chew cud! Read through the information about ruminants and then complete the tasks.

All about ruminants

A ruminant is an animal that chews the cud which is regurgitated from its rumen. Both cows and sheep are ruminants. So what does this mean exactly?

Let's find out by looking at how cows digest their food.

Adult cows eat very quickly. They chew their food lightly to mix it with saliva and then swallow it.

The food goes into the rumen (the first stomach) where digestive juices and microbes begin to break it down. About an hour after eating, the stomach muscles push the plant material back up into the mouth to be chewed again. This material is called 'cud'. When the cow brings up the cud, they emit methane from their rumen.

The cow chews the cud 40-60 times to break down the food even more. This is when most of the energy is extracted.

The ground-up food is swallowed and passes into the reticulum (the second stomach) which stores liquid. The food is mixed with this liquid.

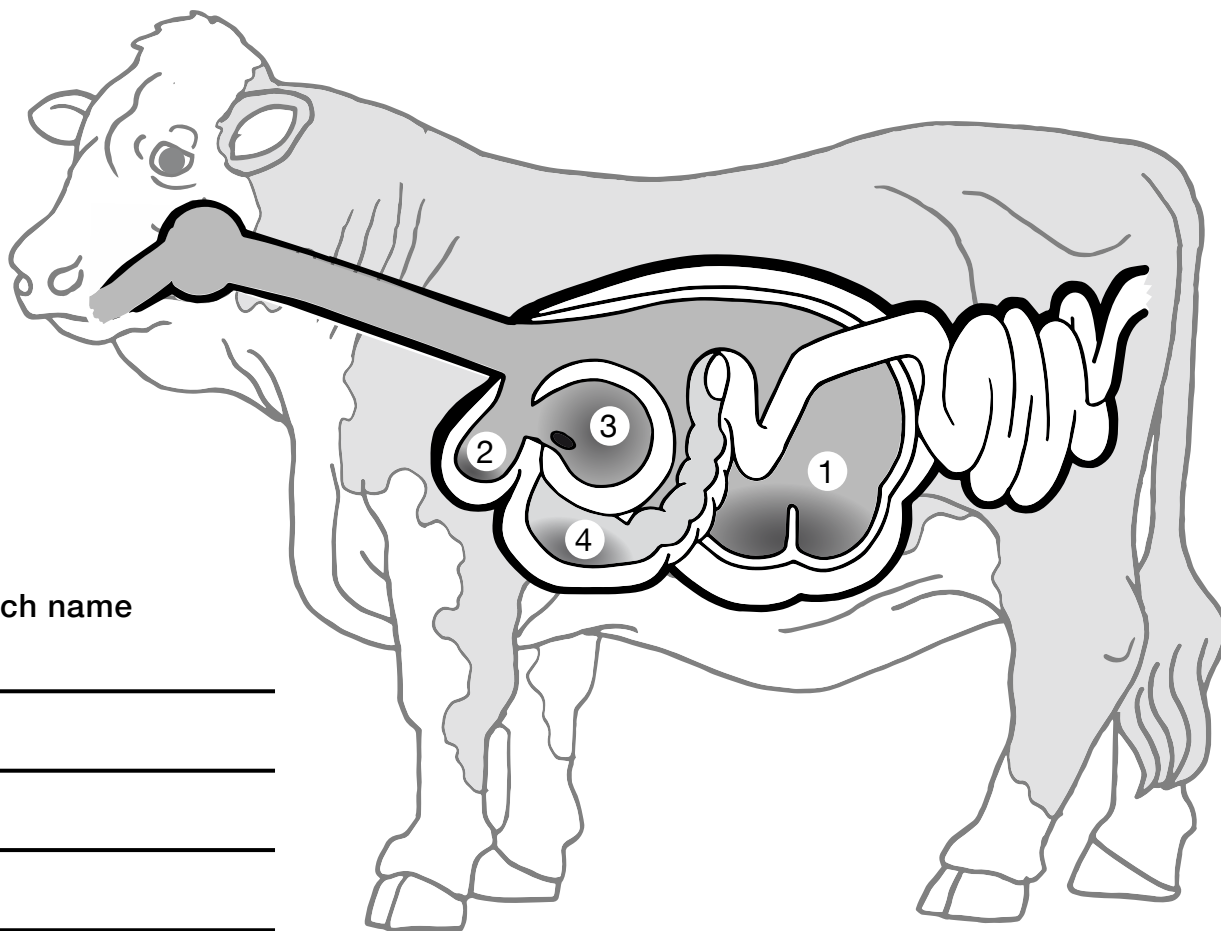
Then the food moves into the omasum (the third stomach), where folds of muscle catch the food and squeeze it to remove the liquid.

Finally, the food goes into the abomasum (the fourth stomach) and is mixed and churned before going into the intestine where the nutrients are absorbed into bloodstream and transported around the body to help the animal grow.

Tasks

Record the following information on the diagram on page 2.

1. Label each of the stomachs (in the spaces provided).
2. Draw a line that shows the path of the plant material the cow is eating.
3. Write a brief explanation of what happens in each stomach on the lines provided.



Stomach name

- ① _____
- ② _____
- ③ _____
- ④ _____

- 1. _____

- 2. _____

- 3. _____

- 4. _____
