

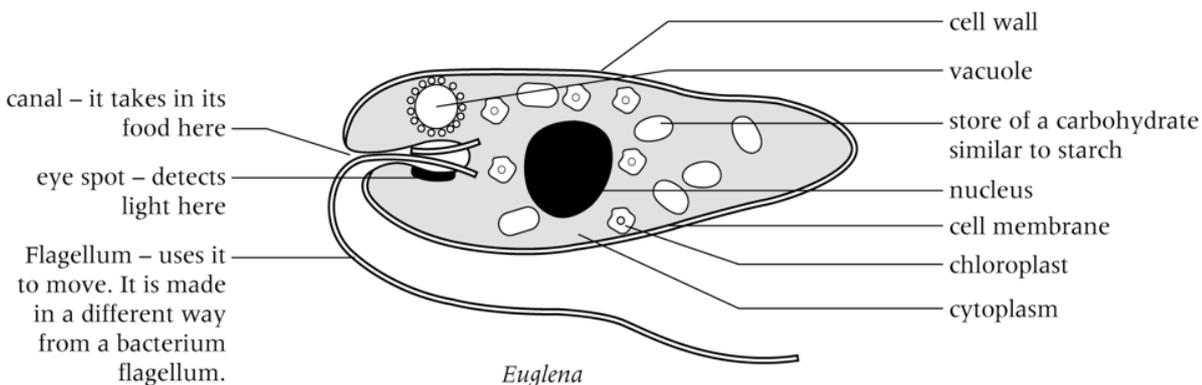
Protists - literacy task

A five kingdom classification is used by Biologists to group organisms.

The first person to describe protists was a Dutch cloth salesman called Antoni van Leeuwenhoek (1632–1723). He became very good at making lenses which he used to inspect the fibres in the cloth he bought and sold. He also made microscopes and in 1674 he discovered tiny one-celled moving organisms in water which he called animacules (tiny animals).

Today we consider these ‘animacules’ as part of the **protist kingdom**. This kingdom contains many very different organisms – everything from the smallest algae (0.01 mm long) to huge giant kelp seaweeds (up to 65 m long). These organisms are classified as protists because they do not fit very well into any other group. Like plants, fungi and animals, protists have nuclei in their cells, but unlike these other groups, their cells do not group together to form different tissues (all their cells are very much the same).

Many protists are one-celled or **unicellular**. One is called Euglena which has some features that you would expect to find in an animal cell and others which you would expect to find in a plant cell.



Questions

- ① a) Who first discovered small protists?
b) Why do you think he called them ‘animacules’ and not ‘planticules’?
- ② a) Name one unicellular protist.
b) What do you think the word multicellular means?
c) Name one multicellular protist.
- ③ a) Write down one difference between a unicellular protist and a bacterium.
b) Write down one difference between any protist and a plant or an animal.
- ④ List the features of Euglena:
 - a) that are the same as both animal and plant cells
 - b) that are the same as plant cells
 - c) that are the same as a whole animal (e.g. a rabbit).
- ⑤ Until 1862 all organisms were classified as either plants or animals. A German biologist called Ernst Haeckel (1834–1919) first divided protists into a different kingdom. Why do you think he did this?