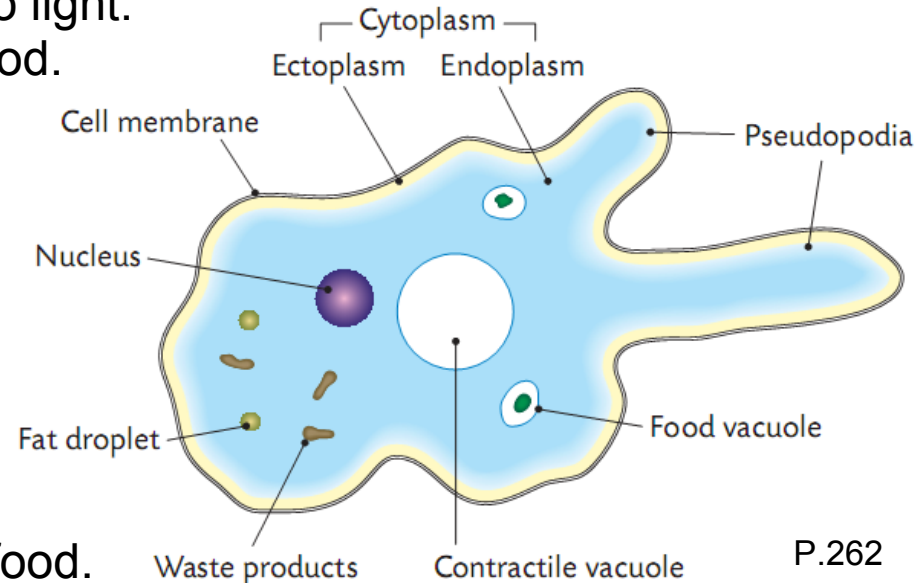


22 - Protista (Amoeba)

An **Amoeba** is an animal that belongs to the kingdom called **Protista**. It is a single-celled animal that lives in ponds and streams. They can respond to touch and to light. They move around hunting for food.



Feeding

It is a **heterotroph** as it takes in food. It eats smaller single celled animals and plants. When it touches something it moves towards it. It then tries to eat whatever it touches. It does this by surrounding them with its false feet (**pseudopodia**). It then **engulfs** them and food vacuoles secrete enzymes that can digest the food.

Movement

The amoeba can move by **cytoplasmic streaming**.

It has two types of cytoplasm.

The outer type (**ectoplasm**) is stiff and keeps the shape well.

The inner type (**endoplasm**) is runny and helps the amoeba move around.

The amoeba moves its cytoplasm and forms lumps called **pseudopodia**.

It moves rather slowly but when a video is sped up you can see that it is actually searching for food.



Osmoregulation

Osmosis can be seen in the Amoeba.

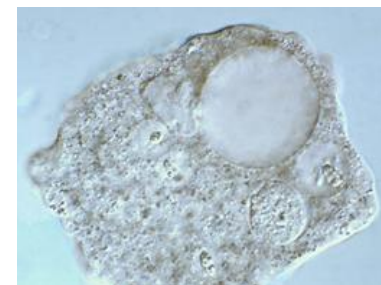
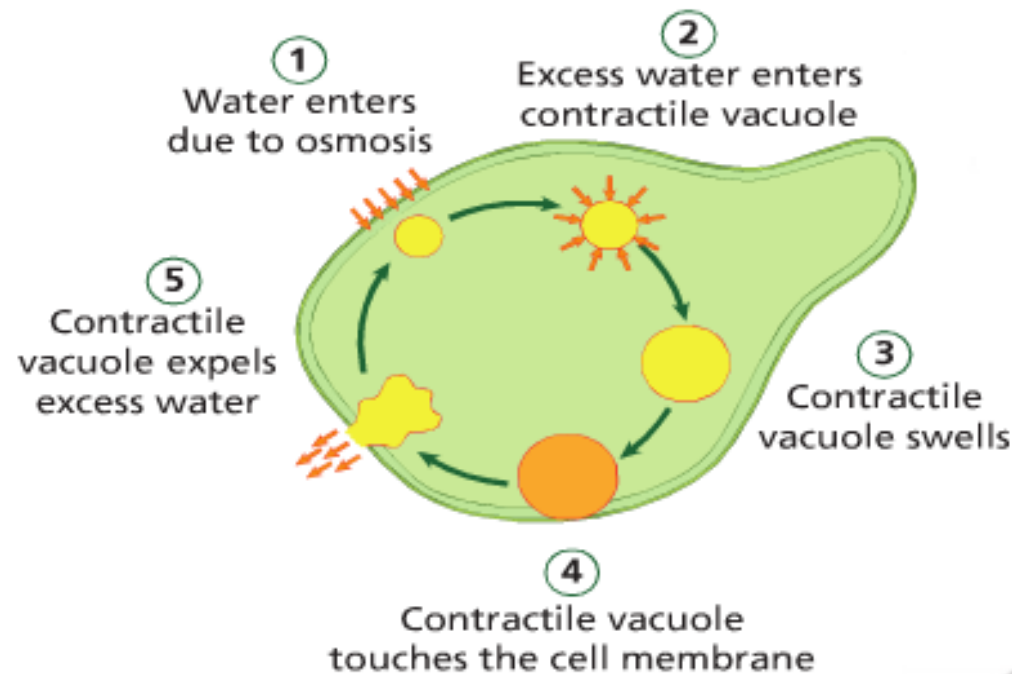
It has salts and sugars inside its cell and usually lives in freshwater.

This means that water will enter the amoeba constantly (to dilute its salts)

The amoeba catches the water in a special **contractile vacuole**.

It moves the vacuole to the edge of the cell and empties it outside.

This is called **osmoregulation** and it does this for all of its life.



Reproduction

Amoeba reproduce by **Mitosis**.

The DNA in the nucleus copies itself.

Prophase, Metaphase, Anaphase and Telophase occur.

The nucleus divides in two and the cell then splits.

This forms a clone (exact copy) of the original animal.

This is often called **binary fission** (split in two).

