Aggi and the Mystic Boots



Build a Protist

After reading about the protist friends that Aggi makes on her adventure, why not think about what sort of protist you might like to meet on your own adventure! Grab a pencil and some paper, or even some coloured pens or paint and have a think what your protist might look like.

Before you start drawing, there are a few important things to know. Firstly, all living things, even tiny organisms like protists, are made from cells. Think of a house made of bricks where the whole house needs thousands of bricks. Big organisms, like you, are made from lots of cells, trillions of them. But protists are so small they are only one single cell. Like a single brick instead of thousands. When you draw your protist, make sure the main part is only made up of one cell.

Time to get drawing!

- 1. Start by drawing the main cell of your protist, this is their one cell. Whilst a protist is only made of one cell, that cell can be almost any shape you can think of. Aggi met protists that were all sorts of different shapes and sizes, and your protist can be too. And whilst there is only one cell to your protist, there are lots of other features you can add on too!
- 2. How will your protist move?

Will it be covered in lots of hair-like cilia like you saw on Cilla Ciliate. These little tiny hairs, or cilia, beat very quickly like tiny paddles to help the protist swim. Maybe it's a flagellate like Ceratium or Flagella Awesome? Flagellates can have any number of flagella which are long hairs that push or pull the protist along. Maybe it doesn't have hairs and moves like the amoeba which Aggi met on her adventure. They move by pushing out parts of their cell in the direction they want to go - like walking but using parts of the cell called false feet. Or can you think of another way for your protist to move? Maybe it doesn't move at all like the green algae Aggi met. Remember it can't have any cells added to it or it won't be a protist any more!

- 3. Where will your protist live?
 - Protists are found almost everywhere on Earth in lakes, oceans, the soil anywhere there is water, even in frozen water! Have you ever seen pictures of pink snow? The pink is a protist. Will it be dark like in the soil or inside a person or maybe it will be frozen like on a glacier, or salty like the ocean? And will it be at the surface of the ocean or a lake, or deep down where the sun doesn't reach. Might it live in a fast-moving stream or a cosy little tree-hole?
- 4. What does your protist eat or how does it get its energy?

 Will your protist use energy from the sun like the green algae in the book? If it does, then it must live where there is lots of sun so not inside your body! Does it eat other organisms, like the amoeba? Will it do a mixture of things, like Ceratium who eat little creatures and also get energy from the sun? If it does use sunlight, the way plants do, will it be green like the green algae, or brown like Ceratium and Gon. Protists can even be red, golden coloured or blue!
- 5. The finishing touches.
 - What other things might your protist do? Maybe it glows in the dark like Gon? Or lives in a shell like a snail, some protists can do this too. It could have spines there is a type of protist, related to the amoeba, that has spines all around so it looks like a bike wheel!

When you have decided what protist you want to meet, we'd love to see them so do share them with us if you can. You can find us on Facebook - @ParameciumPress or Twitter - @ParameciumP