

Plant Cells

Plant Cells

- **WALT: Label an plant cell and prepare a slide for the microscope**
- I must be able to label the parts of an plant cell and know what the key parts are
- I should be able to correctly prepare an onion cell slide
- I should be able to compare and contrast an animal and plant cell

Last lesson we learnt that

Animal cells contain:

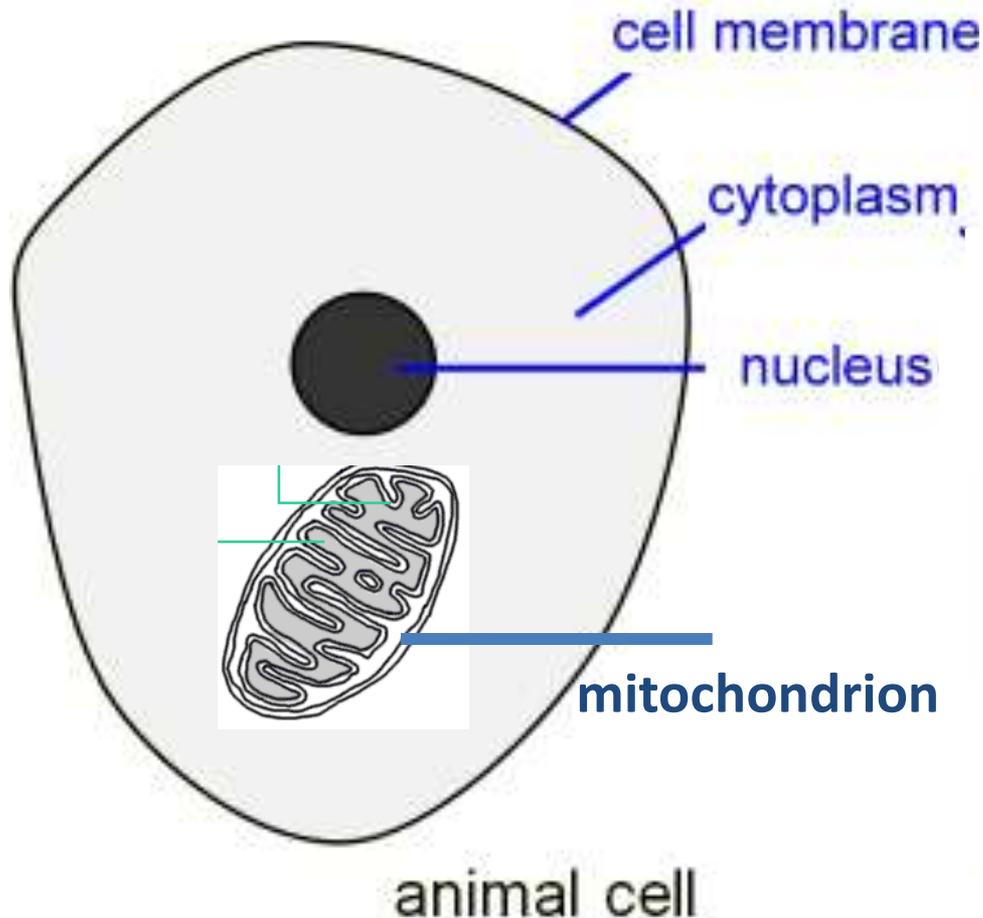
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Can you give an example of:

1. A cell
2. A tissue
3. An organ

Today we are going to learn about
plant cells

We've learnt about the structure of an animal cell



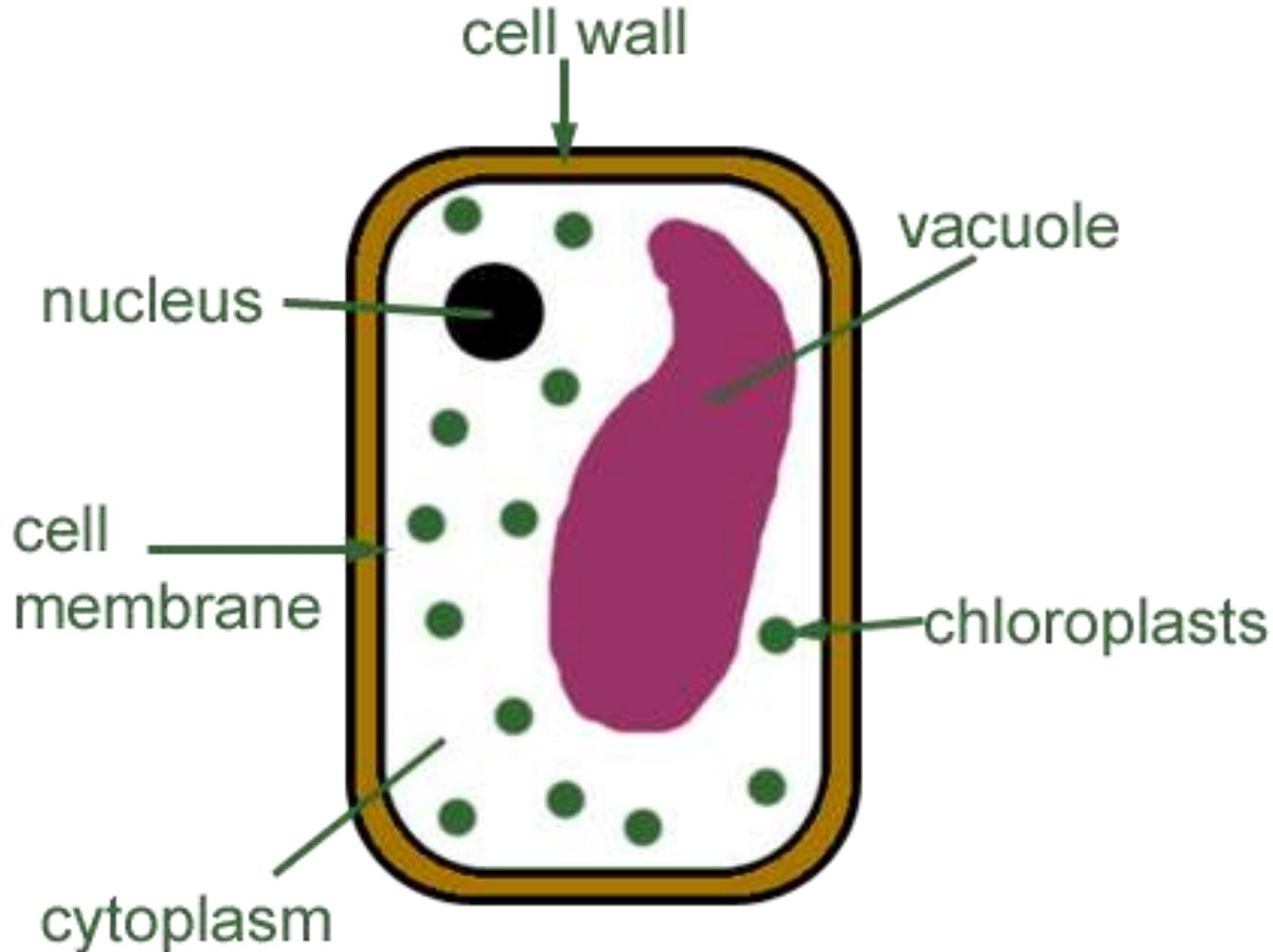
Structure	Function
Nucleus	<ul style="list-style-type: none">- Contains genes- Genes control proteins that control all our characteristics (e.g. eye colour etc)
Cell membrane	<ul style="list-style-type: none">- Controls movement of substances in and out of cell
Cytoplasm	<ul style="list-style-type: none">- Where cell activities take place
Mitochondria	<ul style="list-style-type: none">- Where energy is made

Plant cells have some features that animal cells don't have

In pairs, can you list some differences between animals and plants?

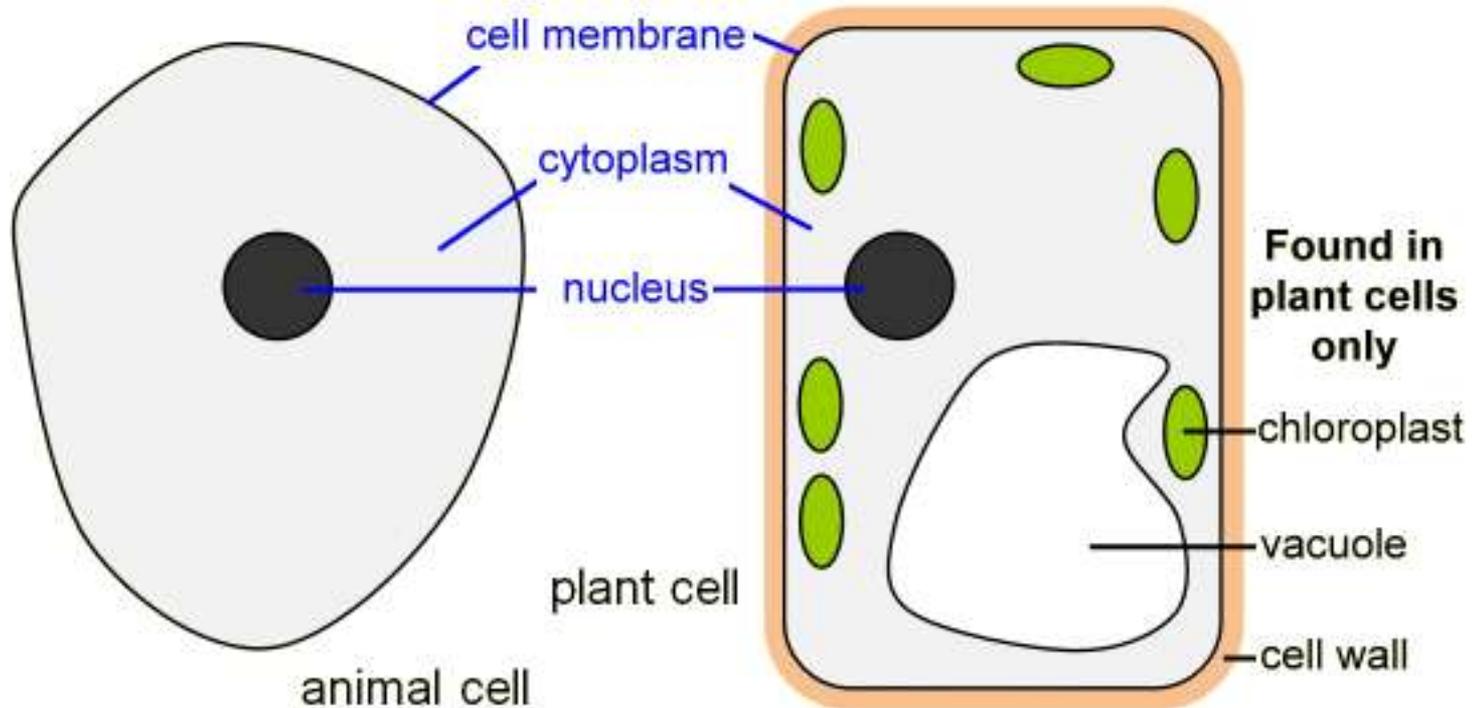
Could you suggest some parts of the cell that plants might need that animals won't?

What do you notice that is different about this cell from the animal cell?



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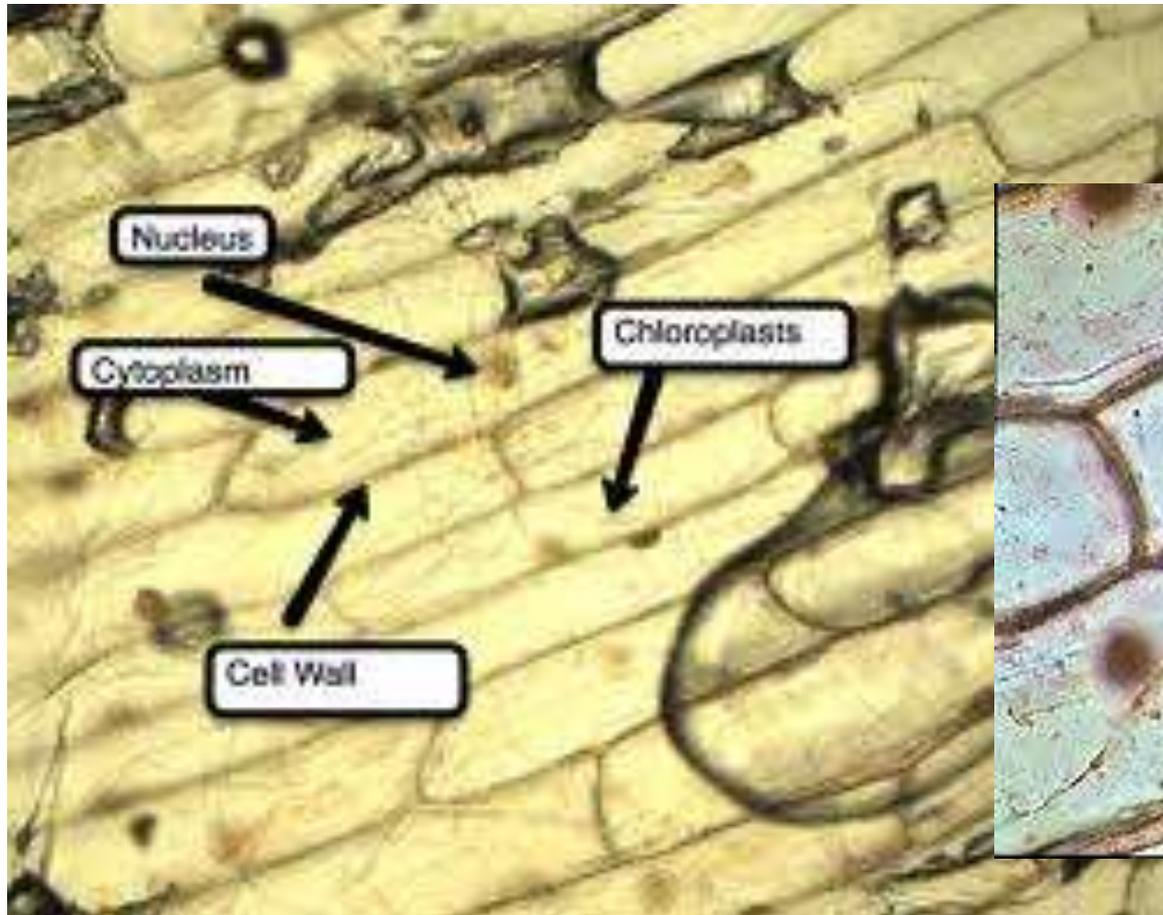
- Plant cells contain chloroplasts which contain chlorophyll
- They also have a cell wall and vacuole (see if you can find out what these things do – p.9) which animal cells don't have



You are going to prepare a piece of
onion skin and view it under the
microscope

Take a look at the video clip of how you are
going to do this...<http://www.youtube.com/watch?v=zXAgbSzEADQ>

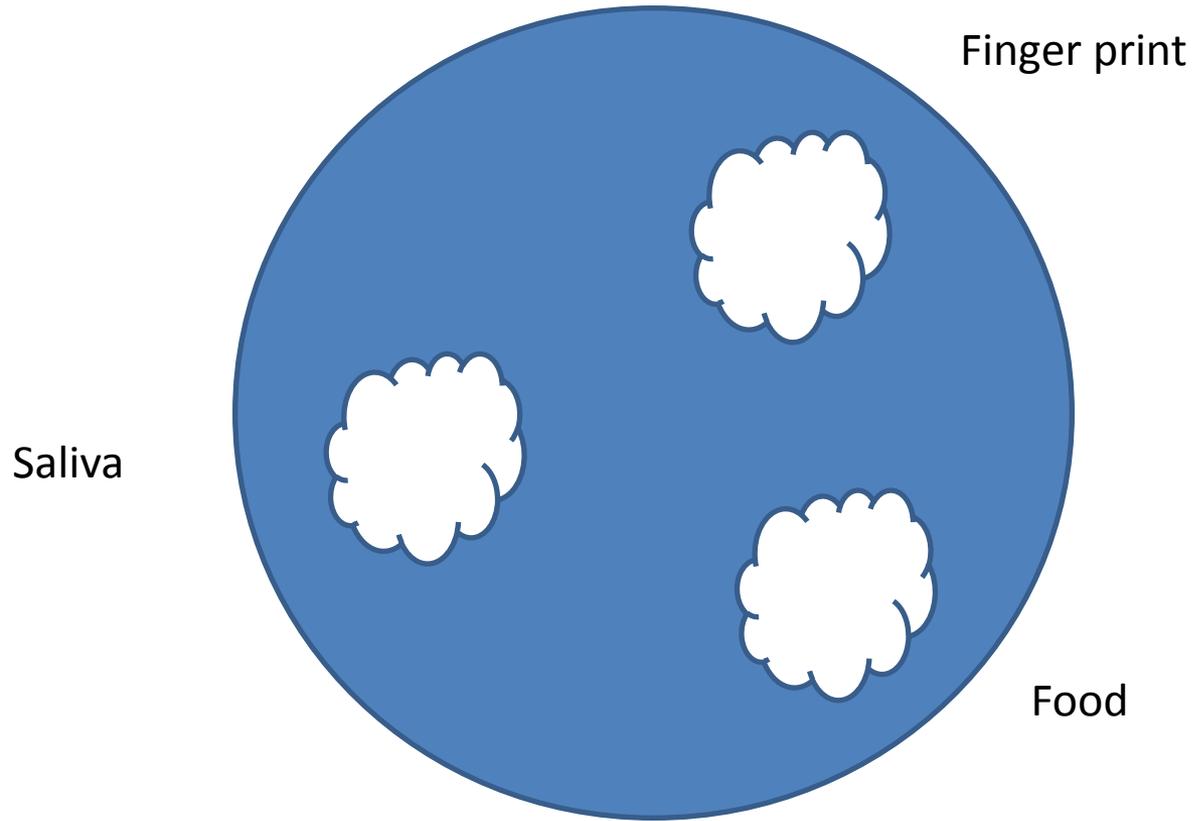
See if your slide looks anything like this..



When you are finished

1. Draw and label your onion cells
2. **GROW SOME BACTERIA** for next lesson.
 - Scrape some saliva onto a small area of the agar plate using the cheek swabs
 - Use a dirty finger to make a print on another corner
 - Take some old food (provided) and wipe a small piece on
 - We will then leave the bacteria to grow for a few days
3. Pick out some of the other plant cell slides from the box. Identify the parts and draw them.

Lay your agar plate on a piece of paper and label the areas



Plenary

Discuss in pairs, the parts of a plant cell that are different from an animal cell:

1. What are they?
2. What do these parts do?
3. Why do plants need them and animals don't?