

MEET THEM



Charlotte is a medical scientist currently working at a company providing education and advice to doctors and patients. Charlotte used to work as a scientific researcher at a hospital in London – here she spent 4 years researching how to transplant liver cells into children with damaged livers. Her job was to try and keep the cells alive and functioning for as long as possible. The patient's liver would then have time to recover and then function normally without needing a transplant

Watch Charlotte's video (18 MINS)

ACTIVITY: YUMMY CELLS

Resources: digestive biscuit, icing, chocolate button, strawberry laces, raisins, sprinkles, M&M's.

If you don't have access to these resources, then you can use coloured paper and scissors and cut out the shapes of each of the features of the cell. You should try and use different coloured paper for each feature so they can be easily identified.

TIP: This activity can get a bit messy, so make sure you have some tissues to hand and all your notes and valuables are out the way.

Be careful of allergies and dietary requirements, the sweets/chocolates mentioned in this activity can be substituted for items more suited to your requirements.

Part of biochemistry is looking at cells that make up living organisms. For this activity, you will be looking at the structures that make up an animal cell.

- 1 Take a digestive biscuit and cover it in icing, the icing will act as cytoplasm.

What is cytoplasm?

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- 2 Place a chocolate button in the centre of the biscuit, this will be the nucleus.

What is the role of the nucleus?

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ACTIVITY: YUMMY CELLS continued

- 3 Place a strawberry lace around the outside of their cell. This is the cell membrane.

What is the role of the cell membrane?

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- 4 Place raisins into the cell, these will be the mitochondria.

What is the function of mitochondria?

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- 5 Add small clusters of sprinkles, these will act as the ribosomes.

What are ribosomes?

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Finally, enjoy your yummy cells!



Extension: Add a couple of M&M's, these will be lysosomes.
What are lysosomes?

NEXT STEPS...

If you're aged 4-18 and you're inspired to create a **Scratch project** on the themes covered here, submit it to the About Us coding competition by 23:59 GMT on 19 December 2021 for a chance to win some amazing prizes. You can also enter the **poetry competition** on the same theme by submitting a poem. Find out more and enter online at aboutus.earth.

