

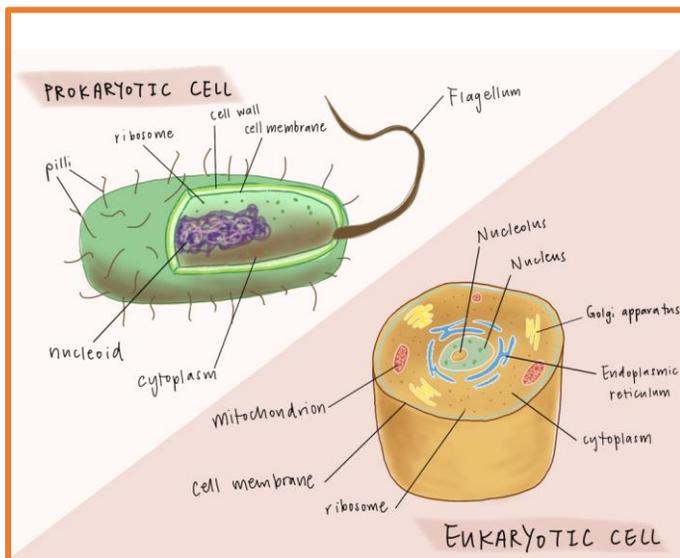
Centre of the Cell's 'CELLebration' Challenge



Make a cell out of household items

Whenever schools and families come to visit us at Centre of the Cell, we always start their visit by talking about our favourite thing...**cells!** Cells are the building blocks of life. All living things are built up out lots and lots of tiny cells. Do you know how many cells make up the average human?

70,000,000,000,000, aka seventy trillion!



Cells may be very small, but when you study them under the microscope, you see that cells are made up of different parts called **organelles**.

Organelles found in animal cells:

Cell Membrane: surrounds the cell, allowing nutrients to enter and waste to exit

Nucleus: contains DNA – the instructions that control what happens inside the cell

Ribosomes: the site of protein synthesis

Mitochondria: generates energy to power all cellular processes

Endoplasmic reticulum: involved in the synthesis/assembly of proteins and other cellular products. There are two types, rough and smooth

Golgi apparatus: involved in the storage and transportation of proteins and other cellular products

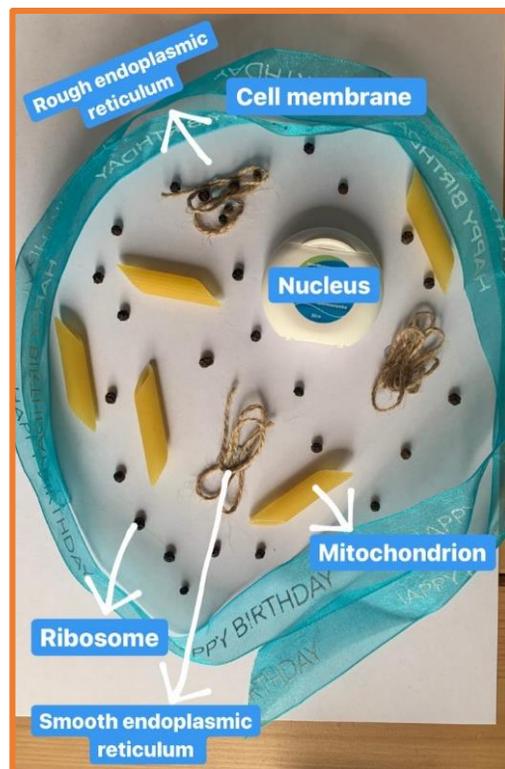
Cytoplasm: a jelly-like substance where chemical reactions take place

Challenge: Construct a cell using items from around the house.

See our example below using ribbon, string, pasta, peppercorns and dental floss!

Instructions:

1. Gather small items to represent at least 5 cellular components.
2. Assemble your cell on a plain background so it's easy to see.
3. Label the different parts of your cell. You can do this by hand-writing your labels, or by taking a picture and adding them using an app on your phone, like we did here using Instagram stories.
4. Share your home-made cells with us! Tag us on social media @CentreoftheCell, or email your cells to info@centreofthecell.org and we'll share them on our Twitter feed!



Let us know how your challenge goes on social media @CentreoftheCell!