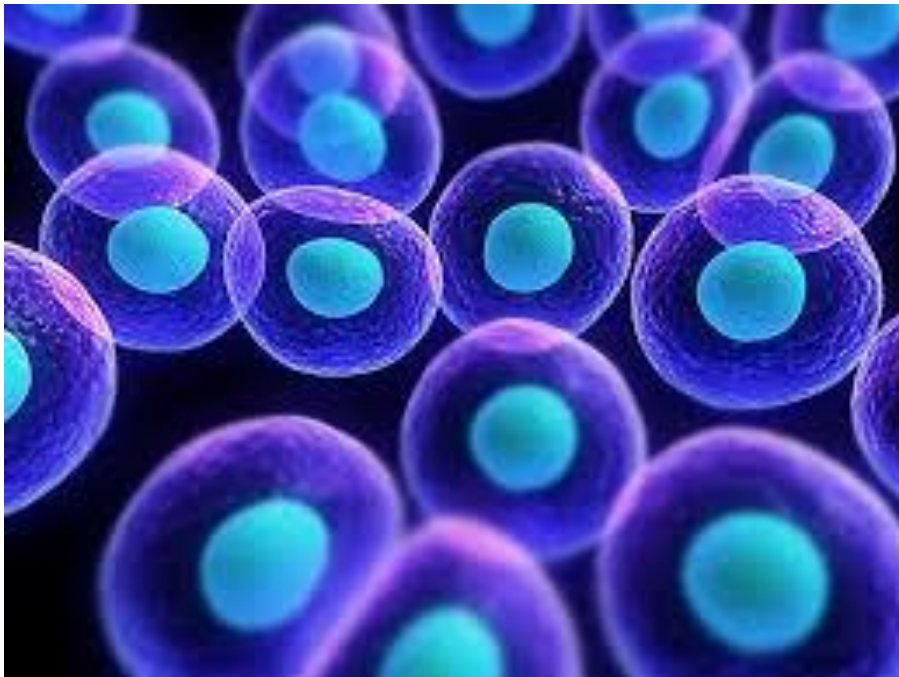




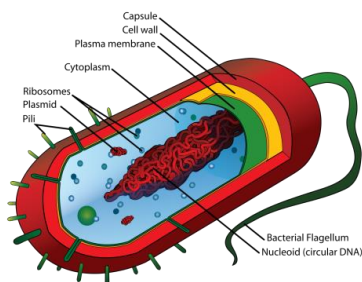
BTEC Applied Science

Summer Work



Hand in – First applied science lesson in September

Name:



BTEC Applied Science

Summer Work



All living things are made up from cells. The structures of different types of cells are related to their functions. Animal cells and plant cells have common features (organelles), such as a nucleus, cell membrane, cytoplasm, ribosomes and mitochondria.

The study of these cells is crucial for us to work out certain processes that take place in the body, and how these cells interlink with each other.

Task

Create an **article for a biology magazine** informing readers of the differences between different types of cells (prokaryotic and eukaryotic). There are templates available in Word to help with your layout (type "article" into the new document search box) if you complete this on a computer. You may also choose to complete this task on paper.

In your article include the following information:

1. Describe the two types of cells (prokaryotic and eukaryotic). Include labelled diagrams of their structures.
2. Describe what an organelle is and then list all the different types of organelle that you can find in prokaryotic and eukaryotic cells.
3. For each of the organelle explain what the function (what its job) is.
4. Describe the differences between prokaryotic and eukaryotic cells, comparing the types of organelles present in each.
5. Cells become specialised to perform specific functions. There are four types of tissue type in the human body. For each of the following tissues, complete the table.

Tissue types:

<i>Tissue type</i>	<i>Where is it found</i>	<i>How is it used?</i>	<i>Image / diagram of tissue</i>
<i>epithelial</i>			
<i>muscular</i>			
<i>nervous</i>			
<i>connective</i>			

The following links might help you explain some of the points above:

http://www.bbc.co.uk/schools/gcsebitesize/science/add_aqa/cells/cellsrev1.shtml

<https://www.thoughtco.com/organelles-meaning-373368>

<http://www.news-medical.net/life-sciences/What-Are-Organelles.aspx>

<https://www.sciencedaily.com/terms/organelle.htm>