# 6<sup>th</sup> Form Preparation work for **A Level Biology**

## Week 1 and 2

Make a mind map to show the different

topics (titles in purple) from page 11 to

Extension: Start to add subject detail

**AQA Biology Specification** 

under the areas using knowledge from

35.

GCSE.

Time: 1 hour

**Complete** a Thinking Hard

specification for topics in

the first year of Biology.

Task to summarise the

Complete a mind map on aerobic and anaerobic respiration. You must include the equations, the organelle where it takes place and the importance of respiration in living organisms. Use the link below to BBC Bitesize to help you. Ensure you complete this task before moving onto task 2.

### Respiration - BBC Bitesize

Time: 1 hour

Think about how this discovery could impact the treatment of a disease which was previously thought to be incurable. Write a list of the words in the article that you do not understand. Research their meaning and create a key word glossary of these terms.

**Read** the article on curing HIV.

## Second patient cured of HIV

Time: 30 minutes

Watch the Crash Course video on Biological Molecules. Produce a bubble map for each of the 3 biological molecules discussed. Write a list of the words in the video that you do not understand. Research their meaning and create a key word glossary of these

**Biological Molecules** 

Time: 30 minutes

terms.

Read the article on protein. Proteins are large biological molecules found in all living organisms. Consider the diversity of proteins and their wide variety of functions in living things.

Protein Time: 1 hour

report of its findings. Your report should include the following: What is Henneguya salminicola and what is unusual about it? Link to aerobic respiration. What was found when scientists sequenced and analysed its genome? Why is this discovery significant for evolutionary research? Henneguya salminicola

Read the article and write a

Time: 1 hour

Watch the BBC documentary 'Corona Virus – Part 1'. The documentary investigates the scientific facts and figures behind the biggest public health crisis in living memory.

Corona Virus - Part 1

Time: 1 hour

Watch the Crash Course video on DNA Structure and Replication. Write down 10 facts from the video. Write a list of the words in the video that you do not understand. Research their meaning and create a key word glossary of these terms.

**DNA Structure and Replication** 

Time: 30 minutes



Listen to the podcast "The frozen zoo". Create a table stating some advantages and disadvantages of the frozen zoo and its role in conservation.

#### The Frozen Zoo

Time: 40 minutes



**Complete** an instruction manual on unit conversion. You must explain how to convert between:

- km/m/cm/mm/µm/nm
- kg/g/mg/ug
- h/min/s/ms
- $m^2/cm^2$
- dm<sup>3</sup>/cm<sup>3</sup>/ µl

Ensure you include what each abbreviation stands for e.g. cm = centimetres

Time: 1 hour



