

# Summer Work Year 11 into 12

**Name of Subject: Applied Science**

**Summary of the course:**

Exam Board: Pearson

Course Title: Applied Science

**Subject/unit lead teachers and their contact:**

Mrs Strachan (main teacher) [zea.strachan@plymptonacademy.tsat.uk](mailto:zea.strachan@plymptonacademy.tsat.uk)

Miss Doyle [chloe.doyle@plymptonacademy.tsat.uk](mailto:chloe.doyle@plymptonacademy.tsat.uk)

**What should I get in preparation for September?**

1 A4 lever arch folder (not a ring binder - they are too small)

File dividers

Plastic wallets (if you want to keep your work undamaged in folder)

Flash Cards

I would really recommend purchasing the Revision Guide. <https://www.amazon.co.uk/National-Applied-Science-Revision-Guide/dp/1292150041>

**How will this be assessed in September?**

Work that you have completed should be uploaded to Google Classroom.

Seneca assessments will give you a score immediately after completion.

You will complete an assessment within the first month of the course consisting of GCSE Higher Tier content and 'Cell Biology' content. Continuation on the course will require a pass mark on this assessment.

**Read it:**

**This is the content for the exam in January:**

<https://docs.google.com/document/d/1ysVJmD3PD2cY4ktxNmk-XXv3bhCwbidv5C3RJG5F63s/edit>

**Please read all of 1.3 and 1.4 on Seneca**

<https://app.senecalearning.com/classroom/course/83e90d6d-8d3e-4e59-a2df-b5a5e1957f6c>

**Watch it:**



**Watch video 1-5 please.**

[https://www.youtube.com/watch?v=NFVSWOaU0f0&list=PLLCQesGbl\\_kU0EfQ\\_m385bUjpDCb-zWVN](https://www.youtube.com/watch?v=NFVSWOaU0f0&list=PLLCQesGbl_kU0EfQ_m385bUjpDCb-zWVN)

# Summer Work Year 11 into 12



**Do it:**

## **PART 1**

Create 2 diagrams that include the following cell organelles. Each diagram should be accompanied by a separate document which explains both the structure and function of each of these organelles.

o eukaryotic cells (plant and animal cells) – plasma membrane, cytoplasm, nucleus, nucleolus, endoplasmic reticulum (smooth and rough), Golgi apparatus, vesicles, lysosomes, 80S ribosomes, mitochondria, centriole

o eukaryotic cells (plant-cell specific) – cell wall, chloroplasts, vacuole, tonoplast, amyloplasts, plasmodesmata, pits.

## **PART 2**

Create diagrams that include the following specialised cells. Each diagram should be accompanied by a separate document which explains both the structure and function of each of these cells.

- palisade mesophyll cells in a leaf
- sperm and egg cells in reproduction
- root hair cells in plants
- white blood cells
- red blood cells.



**(Optional) Stretch it:**

Make flash cards for all key terminology for Unit 1 biology content (key term on one side and definition on the other).