Year 12 Transition

Welcome to The Island VI Form

KS5 Subject:	**Biology**

Objectives for Transition Tasks:

- Refresh your science skills and Biology knowledge to strengthen your neural pathways!
- Start to develop wider reading and an understanding of the applications of Biology.

Watch:

Activity: Take part in a citizen science project such as The big seaweed search and help monitor the big seaweed search and help monitor the effects of environmental change on sea life.
Big Seaweed Search | Natural History Museum

Watch:
Cell theory:
https://www.youtube.com/watch?v=4OpBylwH9DU

Biological molecules:
https://www.youtube.com/watch?v=H8WJ2KENlK0

Other suggestions:
Rock pool science - have a look when you next go to the beach.
Rock pool science with marine biologist Helen Scales | New Scientist

BBC iplayer has a range of programmes to watch. Pick something the more examples you can see for changes in habitat, behaviour, adaptations the better.
Science & Nature - Featured - BBC iPlayer

Topical and links to biodiversity and nutrient cycles.
https://www.bbc.co.uk/iplayer/episodes/m001jw74/paul-whitehouse-our-troubled-rivers

Examples of behaviour, threats to biodiversity and habitats.
https://www.bbc.co.uk/iplayer/episodes/p0f0t5dp/wild-isles
https://www.bbc.co.uk/iplayer/episodes/m0023h9c/asia
Scientists developing techniques in order to solve problems.
https://www.bbc.co.uk/iplayer/episode/m0025xx9/

Independent Task (to be submitted):

Review basic Biology knowledge of cell and organisation: GCSE Biology (Single Science) - AQA - BBC Bitesize
Follow these links and list the structures and functions of the organelles that are not in the GCSE animal cell. Secrets of Cells *suitable for home teaching
Cells and cell organelles

Collect a biological specimen i.e. shell, plant, leaf, fruit, flower, insect and produce a scientific drawing. Key focus is observation and accurate recording of shapes/structures to scale. Add as many labels/annotations that you can, you may need to do some research into your organism/specimen. If you have a magnifying glass this might be useful.
Information of how to do complete a scientific drawing can be found on the following links:
Drawing Biological Diagrams
Biological Drawing - OCR
Extension: Use a ruler to draw a line across the bottom of the page and use this to draw to scale.

hunt-for-the-oldest-dna	
Read:	**Staff Contact**
Keep an eye on BBC news for interesting articles, here is one to get you started. 'Dragon prince' dinosaur discovery 'rewrites' T.rex family tree - BBC News Or New scientist for articles and videos. News – latest in science and technology | New Scientist Science of cooking news, articles and features | New Scientist Or listen to a podcast on BBC Sounds - Categories - Science Podcasts Such as BBC Radio 4 - The Infinite Monkey Cage - Downloads Or BBC Sounds - A Thorough Examination with Drs Chris and Xand - Available Episodes	clare.oshaughnessy@theislandviform.org.uk Here is the link to the course: AQA A-Level Biology (7402) The AQA website has lots of information about the course. AQA | Subjects | Biology

Aim Higher Task:	
Read and summarise (you could produce a mind map, infographic, written paragraph). Investigating the sleeping state in bacteria - Catalyst Magazine	
DEADLINE FOR TRANSITION TASK: Please bring to your first lesson in September.	