Science work – Year 10 – Triple Biology – Full website version.

The tasks to work through each week from your CGP guide and workbook from June 15th until the end of the summer term are given below. You will also have a short Educake test and additional online resources to help you with your work will be given. The additional resources will be updated frequently and links to these will be available on the school website.

Groups: Triple Biology - ALL

<table>
<tr><th>Week</th><th>Topic</th><th>CGP Guide pages</th><th>Workbook pages</th><th>Educake task</th><th>Additional resources</th></tr>
<tr><td rowspan="2">15/6/20</td><td>Decay</td><td>114-115</td><td>123-124</td><td>Decay Lesson Test</td><td>Lesson 2 video 1
https://www.youtube.com/watch?v=6utMftGxuaI
lesson 2 video 2
https://www.youtube.com/watch?v=c0En-_BVbGc</td></tr>
<tr><td colspan="5">Lesson 1 Instructions:
1) Read through and bullet point the rate of decay factors and how biogas is made.
2) Complete workbook questions
Lesson 2 Instructions:
1) Watch the free science lessons video
2) Watch the rotting fruit video, pick a fruit and see which one decays first. Explain why the potato plant can grow afterwards?
Lesson 3 Instructions:
1) Read the investigating decay practical on page 115 and list: the independent variable, dependent variable and 3 control variables for this practical. Attempt the rate of decay question at the bottom.</td></tr>
<tr><td rowspan="2">22/6/20</td><td>Biodiversity and waste management. Global warming</td><td>116-117</td><td>125-126</td><td>Biodiversity lesson Test</td><td></td></tr>
<tr><td colspan="5">Lesson 1 instructions:
1. Read guide and explain why biodiversity is important as a paragraph.
2. List the ways in which the demands on the environment are increasing, such as waste and human population.
3. Complete the question 1 at the bottom of the page
Lesson 2 Instructions:
1. Draw a diagram of the Earth and label. Bullet point or annotate the diagram explaining how energy is trapped on Earth
2. Complete workbook questions page 117
Lesson 3 Instructions:
1. Produce a mini poster (A5 size) to explain the consequences of global warming to a year 7 student. It should be short, concise and include an image of your favourite animal and why that animal should be protected.</td></tr>
<tr><td rowspan="2">29/6/20</td><td>Deforestation, land use and maintaining ecosystems and biodiversity</td><td>118-119</td><td>127-128</td><td>Deforestation and ecosystems lesson Test</td><td>Lesson 1 video
https://vimeo.com/14575736
https://www.zsl.org/education/how-breeding-programmes-work</td></tr>
<tr><td colspan="5">Lesson 1 instructions:
1. Go to https://vimeo.com/14575736 and watch this video on peat bogs
2. Read through the notes on page 118 and explain what is a peat bog and which should it be preserved
3. Produce 4 flash cards (fold a piece of paper into 4 and cut/tear it) on deforestation and the problems. Hand them to someone in your house and get them to quiz you 3 times.</td></tr>
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<tr><td></td><td colspan="5">Lesson 2 Instructions:
1. Read through page 119 and explain an example of a breeding programme and why it is useful. Use https://www.zsl.org/education/how-breeding-programmes-work to help give an example.
Lesson 3 Instructions:
1. Complete the workbook questions on page 119
2. Make a 3 bullet point summary of your weaknesses of the lessons so far. Review and re-read the sections if needed.</td></tr>
<tr><td rowspan="2">6/7/20</td><td>Trophic levels and pyramids of biomass</td><td>120-121</td><td>129-130</td><td>Trophic levels and biomass lesson test</td><td>Pyramids of biomass FIT task word worksheet – uploaded to website</td></tr>
<tr><td colspan="5">Lesson 1 Instructions:
1. Define the words: trophic level, consumer, producer, decomposer
2. Draw 1 food chain – use page 120 examples to help.
3. Explain why the arrows go from the producer towards the next consumer and not the other way around (it’s to do with energy transfer)
Lesson 2 Instructions:
1. Draw 1 pyramid of biomass using page 121.
2. Explain the rules of drawing them – think about the size of the blocks
3. Complete the workbook questions page 120
Lesson 3 Instructions:
1. Complete workbook questions page 121
2. List the ways in which energy is lost from each trophic level of the pyramid
3. Go to page 122 and write down the efficiency equation, we will use this next lesson.</td></tr>
<tr><td rowspan="2">13/7/20</td><td>Biomass transfer, food security and biotechnology</td><td>122-124</td><td>130-133</td><td>Biomass and biotechnology lesson and educake test</td><td></td></tr>
<tr><td colspan="5">Lesson 1 Instructions:
1. Create 4 question flash cards to self quiz on the ways biomass is lost at each trophic level
2. Practice the example with a calculator on page 122 at the bottom
3. Do the two questions at the bottom of page 122
Lesson 2 Instructions:
1. Explain the reasons fish stocks are reducing
2. Decide and list or order of best to worst, they ways we can help reduce fish stocks reducing
3. Write 1 exam question asking how food production can be more efficient with the mark scheme answer
Lesson 3 Instructions:
1. Draw the diagram of how bacteria are engineered to produce insulin on page 124
2. Decide whether genetic engineering is a good or bad thing and explain your answer (do an evaluation if you can)
3. Create a short 1 paragraph speech explaining what mycoprotein trying to sell it to a food shop like Tesco / Asda to sell more of it.</td></tr>
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