

Home Learning – January and February 2022 – Year 7,8,9, 10 and 11 - **Science**

Scenario 1 – first absence

2 weeks' worth of lessons

Subject			Activities, links and instructions
Year group	Topic	Group	
7	All classes – Atoms and Elements, Forces and Motion	All classes	<ul style="list-style-type: none"> • Log into Educake • Find the work that has been set for you, titled “Only complete if absent between January 5th and February 12th” • There will be 2 Educake tasks for all year 7 students • They should not be rushed, take your time. We have given you enough work to last for all of the hours of Science you would be missing in the time you are off. • All educakes contain Oak Academy lessons, (shown by hyperlinks) and Oak academy activities to complete. After all of them are completed finally attempt the Educake questions. •
8	All classes – Electricity and Electromagnetism, Genetics and Evolution	All classes	<ul style="list-style-type: none"> • Log into Educake • Find the work that has been set for you, titled “Only complete if absent between January 5th and February 12th” • There will be 2 Educake tasks for all year 8 students • They should not be rushed, take your time. We have given you enough work to last for all of the hours of Science you would be missing in the time you are off. • All educakes contain Oak Academy lessons, (shown by hyperlinks) and Oak academy activities to complete. After all of them are completed finally attempt the Educake questions. •
9	All classes – How living things get what they need, Explaining the properties of elements, energy resources	All classes	<ul style="list-style-type: none"> • Log into Educake • Find the work that has been set for you, titled “Only complete if absent between January 5th and February 12th” • There will be a minimum of one for Biology, one for Chemistry and one for Physics. All should be completed in your absence. • They should not be rushed, take your time. We have given you enough work to last for all of the hours of Science you would be missing in the time you are off.

			<ul style="list-style-type: none"> All educakes contain Oak Academy lessons, (shown by hyperlinks) and Oak academy activities to complete. After all of them are completed finally attempt the Educake questions.
10	<p>Separates – Adaptations and interdependence, Electrolysis, Electricity in the home</p> <p>Trilogy – Homeostasis, Chemical calculations, Electromagnetic waves</p>	<p>Separates all classes</p> <p>Trilogy – higher and foundation students</p>	<ul style="list-style-type: none"> Log into Educake Find the work that has been set for you, titled “Only complete if absent between January 5th and February 12th” There will be a minimum of one for Biology, one for Chemistry and one for Physics. All should be completed in your absence. They should not be rushed, take your time. We have given you enough work to last for all of the hours of Science you would be missing in the time you are off. All educakes contain Oak Academy lessons, (shown by hyperlinks) and Oak academy activities to complete. After all of them are completed finally attempt the Educake questions.
11	<p>Separates – Genetics and evolution, Crude oil and fuels (C9 reteach from lockdown), Forces and motion, Radioactivity (P7 reteach from lockdown)</p> <p>Separates 11A+4 – Genetics and evolution</p> <p>Trilogy – Variation and evolution, Rates and equilibrium, forces in motion</p>	<p>Separates 1 and 2</p> <p>Separates 11A+4</p> <p>Trilogy All classes</p>	<ul style="list-style-type: none"> Log into Educake Find the work that has been set for you, titled “Only complete if absent between January 5th and February 12th” There will be a minimum of one for Biology, one for Chemistry and one for Physics. All should be completed in your absence. They should not be rushed, take your time. We have given you enough work to last for all of the hours of Science you would be missing in the time you are off. All educakes contain Oak Academy lessons, (shown by hyperlinks) and Oak academy activities to complete. After all of them are completed finally attempt the Educake questions. Log into Microsoft teams when it is usually time for your lesson because you may be invited, live, to join in the lesson. You will be able to hear the teacher teaching as if you were in the classroom and will be and see all of the resources they are using too.

Scenario 2 – second absence in the same half term

Second 2 weeks' worth of lesson

Subject	Science		
Year group	Class	Key topic areas	Activities, links and instructions
7	All classes –	Atoms and Elements Forces and Motion	Go to BBC bitesize KS3 and research the following topics. Take notes on your learning and attempt the quizzes they offer. You might later present your learning as a poster, or make up your own simple questions to assess your own learning the next day. Topics; <ul style="list-style-type: none">• Atoms and their structure• Different types of Forces Eg Friction• Speed
8	All classes –	Electricity and Electromagnets Genetics and Evolution	Go to BBC bitesize KS3 and research the following topics. Take notes on your learning and attempt the quizzes they offer. You might later present your learning as a poster, or make up your own simple questions to assess your own learning the next day. Topics; <ul style="list-style-type: none">• Use of electromagnets and electrical safety• Variation in Populations
9	All classes –	Biology - How living things get what they need Chemistry - Explaining the properties of elements Physics - Energy resources	Go to BBC bitesize KS3 and research the following topics. Take notes on your learning and attempt the quizzes they offer. You might later present your learning as a poster, or make up your own simple questions to assess your own learning the next day. Topics; <ul style="list-style-type: none">• The lungs and gas exchange• Transpiration• Covalent bonding and the periodic table

			<ul style="list-style-type: none"> Energy resources (Wind power, solar power, can you find any more?)
10	Science – all classes	See individual topics for each class below	Completion of the knowledge retriever after studying the knowledge organiser. See page numbers for different classes below.
10	Biology separates	Biodiversity	Study the organiser pages 46-53 Complete the retriever pages 117-125
10	Biology trilogy	Photosynthesis and respiration	Foundation <ul style="list-style-type: none"> Study the organiser pages 22-24 Complete the retriever pages 57-63 Higher <ul style="list-style-type: none"> Study the organiser pages 21-23 Complete the retriever pages 53-59
10	Chemistry separates	Electrolysis	Study the organiser pages 27-28 Complete the retriever pages
10	Chemistry trilogy	Metals and acids, electrolysis	Foundation <ul style="list-style-type: none"> Study the organiser pages 57-59 Complete the retriever pages 143-149 Higher <ul style="list-style-type: none"> Study the organiser pages 57-61 Complete the retriever pages 143-153
10	Physics separates	Electricity in the home	Study the organiser pages 16-17 Complete the retriever pages 37-39
10	Physics trilogy	Electromagnetic waves	Foundation <ul style="list-style-type: none"> Study the organiser pages 103-105 Complete the retriever pages 261-267 Higher <ul style="list-style-type: none"> Study the organiser pages 105-107 Complete the retriever pages 267-273
11	Science – all classes		Completion of the knowledge retriever after studying the knowledge organiser. See page numbers for different classes below.
11	Biology separates – Classes 1 and 2 only	Genetics and evolution	Study the organiser pages 36-41 Complete the retriever pages 91-101
11	Biology separates – Class 11A+4 only	Genetics and evolution	Study the organiser pages 36-41 Complete the retriever pages 91-101
11	Biology trilogy	DNA, Reproduction and genetics	Foundation

			<ul style="list-style-type: none"> - Study the organiser pages 29-34 - Complete the retriever pages 75-87 <p>Higher</p> <ul style="list-style-type: none"> - Study the organiser pages 29-34 - Complete the retriever pages 75-87
11	Chemistry separates	Polymers	<p>Study the organiser pages</p> <p>Complete the retriever pages 93-101</p>
11	Chemistry trilogy	Crude oil and fuels	<p>Foundation</p> <ul style="list-style-type: none"> - Study the organiser pages - Complete the retriever pages 85-91 <p>Higher</p> <ul style="list-style-type: none"> - Study the organiser pages 66-67 - Complete the retriever pages 165-169
11	Physics separates	Force and motion	<p>Study the organiser pages 34-37</p> <p>Complete the retriever pages 83-93</p>
11	Physics trilogy	Forces in balance	<p>Foundation</p> <ul style="list-style-type: none"> - Study the organiser pages - Complete the retriever pages <p>Higher</p> <ul style="list-style-type: none"> - Study the organiser pages 94-96 - Complete the retriever pages 239-245