

## Unit of Work – Science Unit 8B Plants and their Reproduction– Year 8

Year /Group	Unit or Activity	Focus – skills and knowledge development	(Subject) Programme of Study Reference	Curriculum, learning opportunities	PLTS	Number of lessons
8	8B Plants and their reproduction	<p>Knowledge: This unit covers reproduction in plants, both sexual and asexual, although the former is of chief importance. Classification and biodiversity are also covered. The theme that is threaded through the unit is the various uses that we have for plants.</p> <p>Skills: Fair –testing-identifying variables, designing method, evaluate method</p>	<p>Term 1-8A/8B This unit covers reproduction in plants, both sexual and asexual, although the former is of chief importance. Classification and biodiversity are also covered. The theme that is threaded through the unit is the various uses that we have for plants.</p>	<p><b>Pupils will have 7 lessons per unit as part of a 2 unit block. Students will cover 3 blocks of 2 units per term</b></p> <p><b>Cross curricular</b> 8Bc – Physics 8Je – visible spectrum, UV light and nectar guides 8Bd – Physics 8le – air resistance 8Be – Physics 8Ja – energy transfer by light</p>	<p><u>Independent enquiry</u>-plan and carry out practical and investigative activities, both individually and group. <u>Self-management</u>-assess risk and work safely in the laboratory.</p>	<p><b>7 -8B</b> (7-8A.1 test I intervention 16 in total)</p>
<b>(Subject) Learning Intentions</b>					<b>Cross Curricular Objectives</b>	
<p>8Ba-Classification and Biodiversity- LI – How is classification useful?</p> <ul style="list-style-type: none"> <li>• Interpret scientific organisms names</li> <li>• Describe how organisms are classified</li> <li>• Explain the importance of biodiversity</li> </ul> <p>8Ba-Accuracy and Estimates- LI-How do you use a sample to estimate a size?</p> <ul style="list-style-type: none"> <li>• Use samples to calculate estimates</li> <li>• Use accuracy as a criterion for the evaluation</li> <li>• Evaluate your method</li> </ul> <p>8Bb- Types of Reproduction-LI – What are sexual and asexual reproduction?</p> <ul style="list-style-type: none"> <li>• Recall the difference between sexual and asexual reproduction</li> <li>• Recall examples of asexual reproduction in plants</li> <li>• Explain characteristics of offspring of sexual asexual reproduction</li> </ul> <p>8Be-Germination LI- How does germination occur?</p> <ul style="list-style-type: none"> <li>• Describe what happens in germination</li> <li>• Explain why organisms are interdependent</li> <li>• Explain why seeds and plants need certain resources</li> </ul>					<p><b>Literacy: summarising texts.</b> Information can be presented in different ways to communicate scientific ideas clearly. This includes understanding paragraph construction (using ideas of unity, cohesion and order) to develop logical and fluid text that communicates information clearly</p> <p><b>Numeracy:</b></p> <ul style="list-style-type: none"> <li>• use appropriate units for area measurements</li> <li>• calculate areas for squares and rectangles</li> <li>• use a sample to calculate an estimate of population size.</li> </ul> <p><b>Thinking Skills:</b></p> <p><b>ICT:</b></p> <p><b>Communication:</b></p>	

		<p>Information can be presented in different ways to communicate scientific ideas clearly. This includes understanding paragraph construction (using ideas of unity, cohesion and order) to develop logical and fluid text that communicates information clearly.</p> <p><b>SMSC:</b></p>
<b>Assessment Criteria / Expectations – including formative and feedback</b> <b>(How: 8B End of unit test. When : lesson 8 By whom : class teacher )</b>	<b>Resources</b> Active Learn Web site. Google Drive- Folder 8B	<b>Continuity and Progression</b> (link/development of previous learning objectives/units/achievements)
<p>Summative unit test: 8A/B (Taken at end of 2 unit block as part of a 2 unit test, teacher assessed.)</p> <p>Skills task: Specify prac write up/planning task from your unit. (Completed during unit, teacher assessed.)</p> <p>Formative assessment -6 mark Q</p>	<p>Resources from 8B Exploring Science.</p> <p>Located on Drive:            Science Department 2016-17 /KS3/Y8/8B</p>	<p>From KS2 most students will be able to:</p> <ul style="list-style-type: none"> <li>• describe the life process of reproduction in some plants and animals (Year 5).</li> </ul> <p>From previous units, most students will have covered:</p> <ul style="list-style-type: none"> <li>• plant cells, tissues, organs and organ systems (7A)</li> <li>• photosynthesis (7A)</li> <li>• sexual reproduction in humans (7B)</li> <li>• respiration (7C)</li> <li>• inherited variation (7D)</li> <li>• interdependence (7D)</li> <li>• food as a store of energy (7I).</li> </ul>

# Week by Week SCHEME OF WORK & ASSESSMENT for (Science–Unit 8B / Year 8)

Date/Week	Subject content/Topic	Knowledge base – link to previous learning	Skills in focus	Students' programme of study and activities	Assessment: method, feedback and improvement – shared with all	Resources: hyperlink or physical location for all	Homework
Week (1)  Number of lessons: 3  Unit: 8A  Dates:	Lesson 1-3 Classification, Biodiversity, sampling populations Types of reproduction	describe the life process of reproduction in some plants and animals (Year 5). sexual reproduction in humans (7B)	Fieldwork Estimating populations Calculations- mathematical skills. Note taking, recall information. Applying knowledge.	3 powerpoint lessons. Associated worksheets/activities.	In-built activities to summarise learning. Opportunities for Peer/Self assessment within each lesson.	Active learn website <a href="http://www.activeteachonline.com">www.activeteachonline.com</a>  Drive: <a href="https://drive.google.com/drive">https://drive.google.com/drive</a>	Core homework on Science Drive. Self contained worksheets can also be used for homework
Resources and general notes All lessons/activities are on powerpoint slides- with suggestions for extension activities and the folder includes ALL the worksheets (plus extra) for the lessons.							
Date/Week	Subject content/Topic	Knowledge base – link to previous learning	Skills in focus	Students' programme of study and activities	Assessment: method, feedback and improvement – shared with all	Resources: hyperlink or physical location for all	Homework
Week (2)  Number of lessons: 3  Unit: 8A  Dates:	Lesson 4-6 Pollination, fertilisation and seed dispersal	food as a store of energy (7I). plant cells, tissues, organs and organ systems (7A), photosynthesis (7A) respiration (7C) inherited variation (7D) interdependence (7D) food as a store of energy (7I)	Practical skills-investigating factors on seed dispersal Note taking, recall information. Applying knowledge.	3 powerpoint lessons. Associated worksheets/activities.	In-built activities to summarise learning. Opportunities for Peer/Self assessment within each lesson.	Active learn website <a href="http://www.activeteachonline.com">www.activeteachonline.com</a>  Drive: <a href="https://drive.google.com/drive">https://drive.google.com/drive</a>	Core homework on Science Drive. Self contained worksheets can also be used for homework
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Week (3)  Number of lessons: 3  Unit: 8A  Dates:	Lesson 7 Germination/ life cycle   Test  Intervention lessons based on test results.	photosynthesis (7A) respiration (7C) food as a store of energy (7I)	Practical skills Note taking, recall information. Applying knowledge.  Extracting information to answer questions.  Revision	1 powerpoint lesson. Associated worksheets/activities.  Quick Quiz to assess learning from unit.  Test: formative assessment.	In-built activities to summarise learning. Opportunities for Peer/Self assessment within the lesson.	Active learn website <a href="http://www.activeteachonline.com">www.activeteachonline.com</a>  Drive: <a href="https://drive.google.com/drive">https://drive.google.com/drive</a>	Core homework on Science Drive. Self contained worksheets can also be used for homework
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(Plan in intervention time to each unit)