



Knowledge Organiser – GCSE Inheritance, Variation and Evolution

Year group:	Unit: Organisation		Resources	
Week beginning:	Big question / concept:	Learning intentions:	Resources	
			Offline:	Online including links on how to access these:
Lesson 1	Sexual vs asexual: What is the difference?	<p><u>You should be able to:</u></p> <p>Describe the differences between sexual and asexual reproduction.</p> <p>Describe the process of meiosis and explain how it is different from mitosis.</p>	<p>Make notes from page 4, attempt exam question on page 5 and mark answer on page 6</p> <p>Make notes on pages 8-11, attempt mark exam questions on page 12-15</p>	<p>Complete the lesson videos and the tasks given throughout:</p> <p>Lesson on asexual vs sexual reproduction https://classroom.thenational.academy/lessons/sexual-vs-aseexual-reproduction-ccr64t</p> <p>Lesson on meiosis and fertilisation https://classroom.thenational.academy/lessons/meiosis-and-fertilisation-60u3ed</p>
Lesson 2	Sexual vs asexual: Advantages	<p><u>You should be able to:</u></p> <p>Describe and explain (with appropriate information) the advantages of sexual and asexual reproduction</p>	<p>Make notes on pages 17-18</p> <p>Answer exam Q on pages 19-29</p> <p>Mark answers on pages 21-23</p>	<p>Complete the lesson videos and the tasks given throughout:</p> <p>Lesson on advantages of sexual and asexual reproduction https://classroom.thenational.academy/lessons/advantages-and-disadvantages-of-sexual-and-aseexual-reproduction-60w6ce</p>

Lesson 3	<p>What determines our characteristics?</p>	<p><u>You should be able to:</u></p> <p>Describe the structure of DNA</p> <p>Understand and discuss the importance of the human genome</p>	<p>Make notes on pages 25-27</p> <p>Answer exam Q on page 28</p> <p>Mark answer on page 29</p>	<p>Lesson on DNA https://classroom.thenational.academy/lessons/genes-dna-and-chromosomes-71gk6d</p> <p>Lesson on the human genome https://classroom.thenational.academy/lessons/nancy-chang-chj30t?activity=video&step=1</p>
Lesson 4-5	<p>What is protein synthesis?</p>	<p><u>You should be able to:</u></p> <p>Describe protein synthesis</p> <p>Explain how the structure of DNA affects the proteins made</p> <p>Describe how genetic variations may influence a phenotype</p>	<p>Read carefully and make notes on pages 32-38</p> <p>Answer exam questions on pages 39-41</p> <p>Make answers on page 42</p>	<p>Lesson on protein synthesis https://classroom.thenational.academy/lessons/protein-synthesis-68w62c</p>