

UNIT 1 BIOLOGY

1.1 What are the characteristics of living things?						
	CREATE a title page in your journal for unit 1. Be sure to include the whole title of the unit. Make the title page colourful and relevant to the topic.					
	<p>Online Activity: 'What is Life?'</p> <p>Look at the gallery of pictures on the website and respond in your journal.</p> <p>Which of these pictures is living and which is non-living?</p> <p>How did you decide which was living and which was non-living?</p> <p>Compile a list of characteristics that you think define something as living or non-living</p>					
	<p>While you WATCH the following VIDEOS continue to add to your list of characteristics of life in your journal</p> <p>Video: 'What is Life?'</p> <p>Video: 'What is Biology?'</p>					
	Textbook: Read pages 6-11					
	Workbook: Complete pages 2-6					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td>Workbook: pages 7-9</td> </tr> <tr> <td rowspan="2" style="vertical-align: middle;">Choose ONE:</td> <td>Textbook: Read 'AT Issue' on page 12, select one of the 'Dig Deeper' questions to answer. Your answer should be written in proper paragraph form and should be at least 150-200 words.</td> </tr> <tr> <td>Textbook: Complete question 7 on textbook page 13. Your answer should be written in proper paragraph form and should be at least 150-200 words.</td> </tr> </table>		Workbook: pages 7-9	Choose ONE:	Textbook: Read 'AT Issue' on page 12, select one of the 'Dig Deeper' questions to answer. Your answer should be written in proper paragraph form and should be at least 150-200 words.	Textbook: Complete question 7 on textbook page 13. Your answer should be written in proper paragraph form and should be at least 150-200 words.
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	Textbook: Complete question 7 on textbook page 13. Your answer should be written in proper paragraph form and should be at least 150-200 words.					
1.2 Where do living things come from?						
	Textbook: Read pages 14-17					
	Video: 'Cell Theory'					
	Video: 'Wacky history of cell theory'					
	Video: 'Cell theory rap'					
	Workbook: complete page 11					
	Textbook: Read pages 18-19					
	<p>Video: 'Are viruses alive?'</p> <p>Journal: What did the team at Tuft's University say about viruses being alive?</p>					
	<p>Video: You may choose to watch this video 'ADVANCED: What is life?'</p> <p>Journal: In your journal answer the following questions with your own opinion. Are viruses on their own alive? Are viruses, which have infected a cell, alive?</p>					
	Workbook: complete page 10, 12-13					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td>Workbook: complete pages 14-16</td> </tr> <tr> <td rowspan="2" style="vertical-align: middle;">Choose ONE:</td> <td>Textbook: Read 'AT Issue' on page 20, select one of the 'Dig Deeper' questions to answer. Your answer should be written in proper paragraph form and should be at least 150-200 words.</td> </tr> <tr> <td>Textbook: Complete question 3 on textbook page 21. Your answer should be written in proper paragraph form and should be at least 150-200 words.</td> </tr> </table>		Workbook: complete pages 14-16	Choose ONE:	Textbook: Read 'AT Issue' on page 20, select one of the 'Dig Deeper' questions to answer. Your answer should be written in proper paragraph form and should be at least 150-200 words.	Textbook: Complete question 3 on textbook page 21. Your answer should be written in proper paragraph form and should be at least 150-200 words.
	Workbook: complete pages 14-16					
Choose ONE:	Textbook: Read 'AT Issue' on page 20, select one of the 'Dig Deeper' questions to answer. Your answer should be written in proper paragraph form and should be at least 150-200 words.					
	Textbook: Complete question 3 on textbook page 21. Your answer should be written in proper paragraph form and should be at least 150-200 words.					
	<p>Classroom:</p> <ol style="list-style-type: none"> 1) Read 'Investigation 1-A' on textbook pages 22-23 2) Read 'Care and Use of the Microscope' on textbook page 364 3) Contact your teacher to set up a time to complete the activity in the classroom 4) Come to the classroom to complete the 'Investigation 1-A' on textbook page 22-23 5) In your journal complete the section 'Analyze and Interpret' and 'Conclude and Communicate' (textbook page 22-23) 					
1.3 How are cells different from one another?						
	Textbook: Read pages 24-28					
	<p>Handout: before you watch the video, download and print the assignment, complete the handout while you watch the video</p> <p>Video: 'Prokaryotic vs Eukaryotic cells'</p>					
	Online: There are two GIFs by the Amoeba Sisters comparing Eukaryotes and Prokaryotes. In your journal make a similar visual note which compares Eukaryotes and Prokaryotes.					

	Workbook: complete pages 19-20	
	Video: 'The cell as a factory'	
	Workbook complete page 21	
	Textbook: Read pages 29-31	
	Handout: before you watch the video, download and print the assignment, complete the handout while you watch the video Video: 'Plants vs Animal Cells'	
	Online Activity: Cell Explorer	
	Video: 'Photosynthesis'	
	Online Activity: 'Photosynthesis'	
	Online Article: 'Photosynthesis Education'	
	Video: Cellular Respiration	
	Handout: before you watch the following videos, download and print the assignment, complete the handout while you watch the videos Video: 'Cellular Respiration VIDEO' Video: 'Photosynthesis VIDEO'	
	Photosynthesis and Cellular Respiration are related. View the GIF by the Amoeba Sisters which outlines the chemical formulas for both photosynthesis and cellular respiration. In your journal complete a similar visual note.	
	Workbook: complete pages 22-23	
	Video: You may wish to watch 'EXTRA: Photosynthesis and Respiration'. This is a good summary video.	
Choose ONE:	Workbook: complete pages 24-26	
	Textbook: Read 'AT Issue' on page 32, select one of the 'Dig Deeper' questions to answer. Your answer should be written in proper paragraph form and should be at least 150-200 words.	
	Textbook: Complete question 6 on textbook page 33 'Write a script for a skit in which four people act out the processes of photosynthesis and cellular respiration'	
1.4 What interactions occur between humans and micro-organisms?		
	Video: 'What are micro-organisms?'	
	Textbook: Read pages 28-43	
	Workbook: Complete pages 27-33	
	Video: 'Bacteria vs Viruses'	
	Video: 'Flu Attack'	
	Video: 'Symbiosis'	
	Online Article: 'Are all viruses bad?'	
	Video: 'Gut microbes'	
	Video: 'Probiotics and Prebiotics'	
	Video: 'Know your gut'	
	Video: '25 bacteria facts that might make you feel dirty'	
	Video: 'Microbes use in industry'	
	Online: There is a GIFs by the Amoeba Sisters summarizing the usefulness of bacteria called 'Misunderstood Bacteria'. In your journal make a similar visual note which summarizes all that you have learned about bacteria.	
Choose ONE:	Workbook: complete pages 34-36	
	Textbook: complete questions on page 44 'Science at Work'. For question 2, create a single page advertisement that outlines the career you have chosen. Include a job description and try to answer the following questions the best you can (be sure to cite all of your sources). What education is needed for this career? What wage does this career earn? What is the typical day in the life of someone in this career? Include at least two pictures relevant to the career (include source information). Make the advertisement colourful and creative.	
	Textbook: complete questions 4, 5, 7,8, 9 on page 45	

1.5 How does the body protect us from pathogens?		
	Textbook: Read pages 46-49	
	Video: The immune system	
	Workbook: complete pages 38-41	
	Textbook: Read pages 50-52	
	Video: 'Epidemics and Pandemics'	
	Video: 'How Pandemics Spread'	
	Video: 'Ebola Virus'	
	Video: 'Measles Virus'	
	Video: 'Smallpox'	
	Video: 'How a virus changes the world'	
	Workbook: complete pages 42	
	Textbook: complete question 1 on page 55. Write your answer in your journal.	
Choose ONE:	Workbook: complete pages 43-45	
	Textbook:	
	Textbook: Read 'AT Issue' on page 53, select question 1 or 2 from the 'Dig Deeper' section. Your answer should be written in proper paragraph form and should be at least 150-200 words.	
	Textbook: Read 'AT Issue' on page 54, select question 1 or 2 from the 'Dig Deeper' section. Your answer should be written in proper paragraph form and should be at least 150-200 words	
1.6 What medicines help protect us from microbes that make us sick?		
	Textbook: read pages 64-66 and 68-69	
	Video: 'Vaccines'	
	Textbook: read pages 70-71	
	Video: 'Antibiotics'	
	Workbook: complete pages 47-51	
Choose ONE:	Textbook: complete 'Make a Difference' activity on pages 72-73 in your textbook	
	Textbook: complete 'Make a Difference' activity on page 74 in your textbook	
	Textbook: complete 'Structured Inquiry' activity on page 76-77 in your textbook	
	Textbook: complete 'Structured Inquiry' activity on page 78 in your textbook	
UNIT 1 ASSESSMENT		
	Download 'Key Terms' complete worksheet	
	Textbook: Read pages 343-348 Complete the 'Instant Practice' questions on pages 343, 345, 346, 347 and 348	
	Download: 'Marking Rubric' this is how you will be assessed for the following assignment.	
	Download 'What's going on at Newo high school?' complete worksheet. NOTE: you will not be watching the video that goes along with this.	