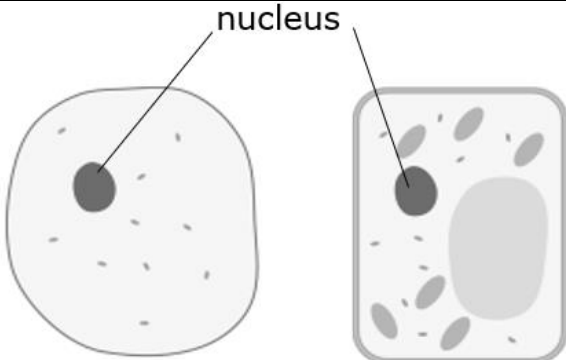
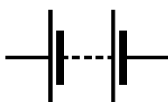
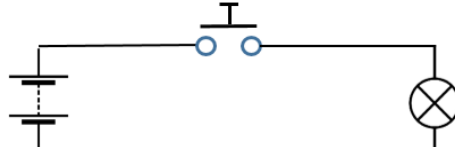
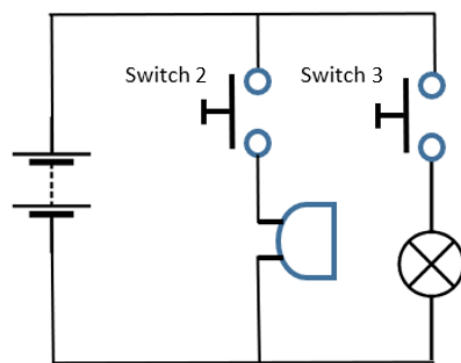


Annual Examinations for Secondary Schools 2022

YEAR 10 SCIENCE AND TECHNOLOGY MARKING SCHEME

Item	Award marks for:	Mark
1	Good practices Avoiding second-hand smoke. Washing one's hands regularly.	$\frac{1}{2}$ $\frac{1}{2}$
	Bad practices Wearing a heavy shoulder school bag. Staying in a closed room with many friends for a long time.	$\frac{1}{2}$ $\frac{1}{2}$
	Total 2 marks	
2a	Blood vessels/arteries/veins/capillaries <i>Any one</i>	1
b		1
	Total 2 marks	
3a	A- lungs B-Stomach	1, 1
b	• <u>protects organs and allows movement.</u>	1
ci	Organs are groups of tissues that perform a specific function .	1
cii	Tissues are groups of cells with similar structure and function.	1
	Total 5 marks	
4.		$\frac{1}{2}$ $\frac{1}{2}$
	Total 1 mark	

5a	When the suitcase is dragged along the ground, rolling reduces the force of friction between the ground and the suitcase.	1 1						
5b	Unwanted wear and tear of moving parts such as the suitcase rollers will occur, and this is caused by friction.	1 1						
Total 4 marks								
6a	easily allow heat transfer.	1						
6bi	sawdust	1						
6bii	Bags same size to keep this variable constant for fair testing.	1 1						
6biii	Air is a good insulator when it gets trapped in small areas, which is why it increases the insulation ability of leaves and sawdust.	1 1						
Total 6 marks								
7a		1						
7b		2						
7c	 <p>Award 1 mark for each component in the correct position and wiring (2 marks) and ½ mark for each correct labelling of both switches (1 mark).</p>	3						
Total 6 marks								
8a	<table><tr><th>Renewable</th><th>Non renewable</th></tr><tr><td>Solar energy</td><td>Fossil fuels</td></tr><tr><td>Wind energy</td><td>Gas</td></tr></table>	Renewable	Non renewable	Solar energy	Fossil fuels	Wind energy	Gas	2
Renewable	Non renewable							
Solar energy	Fossil fuels							
Wind energy	Gas							
8b	Accept answers that show simple diagram sketches of a renewable energy device like small wind turbine, solar panels, solar water heater or similar suitable answers. Award 1 mark for relevant drawing and 1 mark for details and labelling.	2						
Total 4 marks								