## DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION Department of Curriculum Management

**Educational Assessment Unit** 

Core Curriculum Programme

**Annual Examinations for Secondary Schools 2015** 

## FORM 4 SCIENCE / DESIGN & TECHNOLOGY MARKING SCHEME

THE NATU	THE NATURAL WORLD 10 MARKS				
Question	Answer	Mark	Additional Guidelines		
1	lung	2	Award ½ mark for each correct term.		
2	Fatty foods and lack of exercise cause fatness.  A cigarette a day increases the risk of heart disease.  I cannot walk in a straight line.	3	Award 1 mark for each correct match.		

3	a.	Ribs. Accept: rib cage	1	
	b.	Protection of the lungs; Ventilation. <i>Accept</i> : to take air in/breathing	1	
4	a.	Cell membrane	1	
	b.	Controls the activity of the cell	1	
5			1	Award 1 mark if correct image is selected.

THE I	THE PHYSICAL WORLD 10 MARKS				
6	a.		1	Award ½ mark for friction between shaft and wheels and ½ mark for friction between wheels and the ground.	
	b.	Applying oil ✓ Smoothing surfaces ✓	1	Award ½ mark for each correct statement.	
	c.	distance moved; time taken	1	Award ½ mark for each correct quantity.	
7		wind, electrical; light, electrical	2	Award ½ mark for each correct input or output energy.	
8	a.	thermometer	1/2		
	b.	less	1/2		
9	a.	switch	1		
	b.	True False True	1 1 1		

THE WORLD OF TECHNOLOGY				10 MARKS		
10	a.	Switch; on/off switch, or SPST switch are all acceptable answers.	1			
	b.	C A	2	Award 2 marks if circuit wires are drawn clearly connecting the components together.  Deduct 1 mark if only 1 side of the circuit is connected.		
	c.	Battery/Cell	1			
11		Image 1: Battery or Cell Image 2: Solar powered photo-Voltaic panels Image 3: Power Station Plant Image 4: Electronic circuit	2	Award ½ mark for each correct match.		
12	a.	Answer should be ticked as above	1	Award ½ mark for each correct tick.		
	<b>b.</b>	fridge	1			
13	a.	Soldering Iron	1/2			
	b.	Accept answers mentioning any of the following or similar relevant answers: safety goggles, ventilation, avoiding touching hot tip.	1/2			
14		Input: Switch; Output : Bulb	1	Award ½ mark for each correct answer.		