



Education and Sport Development

Department of Education and Sport Development
Departement van Onderwys en Sportontwikkeling
Lefapha la Thuto le Tlhabololo ya Metshameko

NORTH WEST PROVINCE

NORTH WEST PROVINCIAL ASSESSMENT

GRADE 6

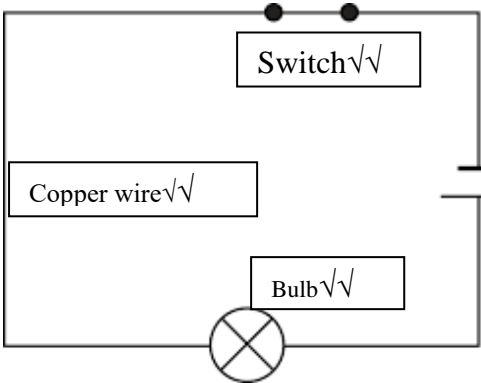
NATURAL SCIENCES AND TECHNOLOGY

MARKING GUIDELINES

NOVEMBER 2018

MARKS: 80

This marking guidelines consists of 4 pages.

SECTION A			
QUESTION	ANSWER		MARKS
1			
1	1.1		10
	1.1.1	B✓	
	1.1.2	D✓	
	1.1.3	B✓	
	1.1.4	D✓	
	1.1.5	A✓	
	1.1.6	D✓	
	1.1.7	D✓	
	1.1.8	A✓	
	1.1.9	C✓	
	1.1.1	C✓	
1.2		5	
1.2.1	Rotation✓		
1.2.2	Telescope✓		
1.2.3	Mercury✓		
1.2.4	Asteroid belt/Asteroids✓		
1.2.5	Pluto✓		
1.3		5	
1.3.1	F✓		
1.3.2	A✓		
1.3.3	D✓		
1.3.4	C✓		
1.3.5	B✓		
TOTAL SECTION A			20
SECTION B			
2	2.1	Decrease to zero✓✓	2
	2.2	No electricity will move through the circuit because wool material does not conduct electricity.✓✓	2
	2.3	<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">Copper wire✓✓</div>  <div style="border: 1px solid black; padding: 2px; margin-left: 10px;">Neat Circuit diagram✓</div> </div>	9

		A simple circuit		
		MARKING RUBRIC		
		CRITERIA	MARK ALLOCATION	
		Symbol/Labelling a cell	2 marks	
		Symbol/Labelling a bulb	2 mark	
		Copper wire symbol	2 mark	
		Closed switch	2 mark	
		Clear neat circuit diagram	1 Mark	
		TOTAL	9 MARKS	
3	3.1.1	Kilowatt√√		1
	3.1.2	Electric kettle√√		2
	3.1.3	Electric kettle√√		2
	3.1.4	Electric kettle uses 2KW of electricity over 2 hours, as compared to light bulb(old type) which uses only 100 W over 2 Hours. Electric kettle uses 1900 W more than what light bulb uses.√√		2
	3.1.5	Ways of preventing wastage of electricity. <ul style="list-style-type: none"> • Use light bulbs that save electricity. √√ • Unplug idle electronics. √√ • Turn off lights when not needed. • Shut down computers when not using them NB: Any relevant two suggestions should be credited.		4
	3.2			
	3.2.1	“Electricity theft is a huge problem”. √√		2
3.2.2	<ul style="list-style-type: none"> • Illegal connections results in the system being overloaded and causes electricity tripping. √√ • It also poses a danger of fires breaking out or people getting killed √√ • These connections are made in an unsafe manner and are dangerous. • Illegal connections are hazardous and can cause <u>electrocution</u>. Illegal connections may benefit those who steal electricity, but most of the time innocent children playing in the streets who fiddle with the wires end up paying the ultimate price. • The people who set up these illegal connections are also in danger of getting electrocuted, they are not qualified electricians. Their actions leave the whole community vulnerable NB: Any two relevant responses should be credited		4	

3.3	3.3.1	Renewable source of energy is energy that is collected from renewable resources, which are naturally replenished, such as sunlight, wind, rain, tides, waves and geothermal heat. √√	2
	3.3.2	6A: Solar panels. √√	
	3.3.3	Combustion of coal to generate electricity causes air pollution. √ Combustion of coal contributes to greenhouse effect. √ Combustion of coal contributes to global warming NB: Any relevant response should be credited.	2
TOTAL SECTION B			37
SECTION C			
4	4.1.1	Mercury, √ Venus, √ Earth√ and Mars√	4
	4.1.2	Gravity√√	2
	4.1.3	365¼ days√√	2
	4.1.4	1 Moon√√	2
	4.1.5	Moon√√	2
	4.1.6	Venus√√	2
	4.2.		
	4.2.1	August 2012	1
	4.2.2	<ul style="list-style-type: none"> • Scientists want to determine whether Mars ever had an environment capable of supporting life or not. √√ • Scientists are interested in Mars because they think that Mars might have once had liquid water on its surface√√ 	4
	4.3		
	4.3.1	Telescopes can be used to see and measure how far away objects in space are. √√	2
	4.3.2	Square Kilometre Array. √√	2
TOTAL SECTION C			21
GRAND TOTAL			80