education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

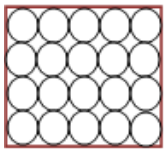
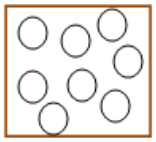
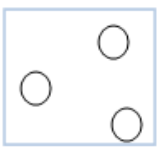
PROVINCIAL ASSESSMENT

GRADE 6

NATURAL SCIENCES AND TECHNOLOGY
JUNE 2024
MARKING GUIDELINES

MARKS: 60

These marking guides consist of 4 pages.

QUESTION 1			
		ANSWER	
1.1	1.1.1. 1.1.2. 1.1.3. 1.1.4.	B ✓ B ✓ C ✓ D ✓	4
1.2	1.2.1 1.2.2 1.2.3 1.2.4 1.2.5	Solution ✓ Wetland ✓ Filtering ✓ Solvent ✓ Pollution✓	5
1.3	1.3.1 1.3.2 1.3.3	Both A & B✓✓ A Only✓✓ A Only✓✓	**6**
			[15]
QUESTION 2			
2.1	2.1.1	**A**  Solid ✓✓ **B**  Liquid ✓✓ **C**  Gas ✓✓	**6**

***2 Marks✓ for a correct drawing with particles correctly arranged.**
***No marks for word description of arrangement.**
***No 1 mark allocation**

2.2 2.2.1

Mixture		Method of separation
1.	Peanuts and beans	a) Hand sorting✓
2.	Water and oil	b) Decanting ✓
3.	Salt and water	c) evaporation/crystallization✓

3

2.2.2

Salt and water.✓When heating the solution of saltwater the water will evaporate and leave the crystals of salt behind. ✓

2

2.2.3

Insoluble✓

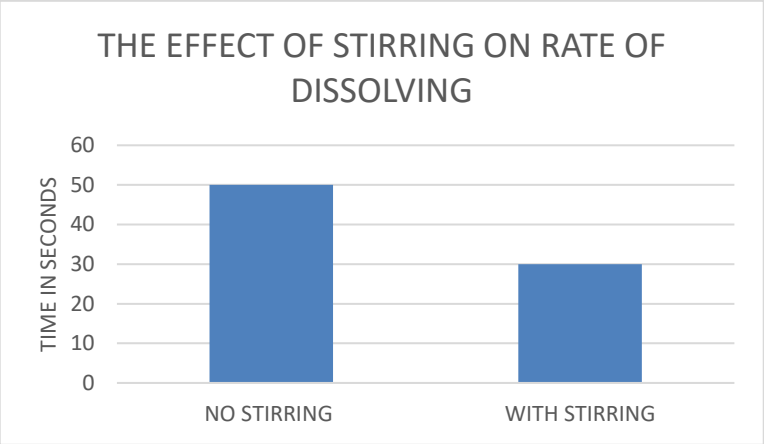
1

[12]

QUESTION 3

3.1 3.1.1

Rubric
Heading with two variables(stirring and dissolving)✓
y-axis & x-axis ✓
Drawing correct bar-graph, correct plotting of (no stirring and stirring) ✓✓
*1 mark if correct bar graph is drawn but incorrect plotting



4

3.1.2

a) Temperature✓
b) Amount and grain size of sugar✓

2

[6]

QUESTION 4			
4.1	4.1.1	To supply water to farms near the town of Brits✓	1
	4.1.2	a) Water from mines✓	1
		b) Waste from factories✓	1
		c) Fertilisers✓	1
		d) Human waste (plastics, sewers, cans, bottles) ✓ (any 3 relevant answers)	
	4.1.3	From the farms nearby✓	1
	4.1.4	The growth of algae plant contaminates the water so fish and frogs die.✓✓	2
4.2	4.2.1		
		a) They hold back water and release it slowly throughout the year. ✓✓	2
		b) They are a habitat for plants and animals and provide them with food and a place to breed. ✓✓	
		c) They filter water and ensure that its clean. ✓✓	2
	4.2.2	(any 2 relevant answer)	
		a) Frogs ✓ b) Fish✓ c) Crocodile✓ d) birds✓ (any 2 relevant answers)	2 **[13]**
QUESTION 5			
5.1	5.1.1	To alert or warn people that the area has water that is not safe for human to consume. ✓✓	2
	5.1.2	a) Cholera✓ b) Diarrhea✓ c) Typhoid✓ d) Polio✓ (any 2 relevant answers)	2
	5.2.1	b) Filtering removes very tiny particles from the water	2
		c) Chlorination kills any germs left in the water	2
5.2	5.2.2	The process of sieving only removes large materials, it does not kill germs. Water can still be contaminated even after sieving. ✓✓	2
5.3	5.3.1	a) Put a funnel with a filter paper or cloth in an empty clean container✓	
		b) Pour the water in the funnel to filter smaller bits and twigs✓	
		c) Take the filtered water in the container and boil it for 15 minutes✓	
		d) Allow the water to cool before use. ✓ (any 4 relevant answers)	4 **[14]**
		TOTAL SECTION:	**45**
		GRAND TOTAL:	**60**