



**GAUTENG PROVINCE**  
EDUCATION  
REPUBLIC OF SOUTH AFRICA

**GAUTENG DEPARTMENT OF EDUCATION  
PROVINCIAL EXAMINATION  
JUNE 2019  
GRADE 6**

**NATURAL SCIENCE AND  
TECHNOLOGY**

**MEMORANDUM**

**5 pages**

GAUTENG DEPARTMENT OF EDUCATION  
PROVINCIAL EXAMINATION

## NATURAL SCIENCE AND TECHNOLOGY

## MEMORANDUM

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<b>SECTION A</b>		
<b>QUESTION 1</b>		<b>MARKS</b>
1.1	B	1
1.2	A	1
1.3	D	1
1.4	A	1
1.5	C	1
1.6	B	1
1.7	A	1
1.8	C	1
1.9	D	1
1.10	A	1
		<b>10</b>
<b>QUESTION 2</b>		
2.1	E	1
2.2	D	1
2.3	A	1
2.4	G	1
2.5	B	1
		<b>5</b>

QUESTION 3	MARKS
3.1 Preserving	1
3.2 Immune system	1
3.3 Solubility	1
3.4 Purification	1
3.5 Crystallisation	1
	<b>5</b>

QUESTION 4	MARKS
4.1 4.1.1 Sunlight	1
4.1.2 Air (Oxygen and carbon dioxide)	1
4.1.3 Water and air	1
4.2 Plants / Reeds / Trees / flowering plants	1
4.3 Fish / Crocodiles / Frogs / Crabs, earthworms, etc. (Any animal that may found in river ecosystem)	1
	<b>5</b>
<b>SECTION A:</b>	<b>25</b>

SECTION B	MARKS
<b>QUESTION 5</b>	
5.1	
5.1.1 Suspension / Heterogeneous	1
5.1.2 Solution / Homogeneous	1
5.1.3 Cloudy	1
5.1.4 Uniform	1
5.1.5 Insoluble	1
5.1.6 Soluble	1
5.1.7 Filtration	1
5.1.8 Evaporation / Crystallisation	1
	<b>8</b>

5.2	
Step 1: E – Cut or slice the meat into thin strips.	1
Step 2: F – Mix up the salt and spices with vinegar to form a rubbing mixture.	1
Step 3: G – Rub the spice mixture into the strips of meat.	1
Step 4: A – Hang the meat in a cool, dry place.	1
Step 5: C – Cover it up with a net to keep the bugs and flies away.	1
Step 6: B – Taste after 4-5 days to determine if your biltong is dry or still moist.	1
Step 7: D – Pack it in containers for future use.	1
	7
5.3	
5.3.1 <b>Pickling:</b> Using vinegar to make foods last longer	1
5.3.2 <b>Drying / Dehydrated:</b> Removing all water / moisture from food to make it last longer	1
5.4 Chemicals like chlorine are added to the water to kill any surviving germs, so the water becomes <b>healthy</b> for drinking.	1
	3
<b>SECTION B:</b>	<b>18</b>

<b>SECTION C</b>	
<b>QUESTION 6</b>	<b>PUNTE</b>
6.1	
6.1.1 <b>Causes of anaemia:</b> Shortage of iron in the diet.	1
6.1.2 <b>Symptoms of anaemia:</b> Feel tired, pale skin and dry nails.	1
6.1.3 <b>Causes of rickets:</b> Lack of calcium or vitamin D in the body.	1
6.1.4 <b>Symptoms of rickets:</b> Weak and soft bones, skeleton does not grow properly.	1
6.2 Glucose is important for an athlete because it provides a lot of energy.	1
6.3 If you add more solvent to a saturated solution, the solution will be <b>diluted</b> and become unsaturated.	1
6.4 Water pollution can be caused by: <ul style="list-style-type: none"> <li>• Insoluble substances such as oil and plastic.</li> <li>• Soluble substances such as soaps and fertilisers.</li> <li>• Germs from toilet waste / human waste.</li> </ul>	1
<b>SECTION C:</b>	<b>7</b>
<b>TOTAL:</b>	<b>50</b>

## NATURAL SCIENCE AND TECHNOLOGY

## ASSESSMENT FRAMEWORK

GRADE 6

2019

JUNE EXAM

DURATION: 1 hour / 30 minutes

<b>SECTION A</b>	<b>MARKS</b>
QUESTION 1: MULTIPLE-CHOICE QUESTIONS	10
QUESTION 2: MATCHING ITEMS	5
QUESTION 3: ONE WORD ANSWERS	5
QUESTION 4: IDENTIFYING THINGS	5
<b>TOTAL:</b>	<b>25</b>
<b>SECTION B</b>	
<b>QUESTION 5</b>	
5.1: COMPARING	8
5.2 RE-ARRANGING	7
5.3 COMPARING	3
<b>TOTAL:</b>	<b>18</b>
<b>SECTION C</b>	
6.1 Causes of disease and symptoms	4
6.2 – 6.4 Reasons / Predictions	3
<b>TOTAL:</b>	<b>7</b>
<b>TOTAL:</b>	<b>50</b>