



**GAUTENG PROVINCE**  
EDUCATION  
REPUBLIC OF SOUTH AFRICA

**GAUTENG DEPARTMENT OF EDUCATION  
PROVINCIAL EXAMINATION  
JUNE 2018  
GRADE 6**

**NATURAL SCIENCES AND  
TECHNOLOGY**

**MEMORANDUM**

**6 pages**

## GAUTENG DEPARTMENT OF EDUCATION

## PROVINCIAL EXAMINATION

## NATURAL SCIENCES AND TECHNOLOGY

## MEMORANDUM

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**SECTION A****QUESTION 1**

- 1.1 D (1)
- 1.2 B (1)
- 1.3 C (1)
- 1.4 A (1)
- 1.5 B (1)
- (5)**

**QUESTION 2**

- 2.1 D (1)
- 2.2 F (1)
- 2.3 E (1)
- 2.4 A (1)
- 2.5 C (1)
- (5)**

**QUESTION 3**

- 3.1 Iodine solution (1)
- 3.2 Preserving (1)
- 3.3 Wetlands (1)
- 3.4 Food Web (1)
- 3.5 Mixture (1)
- (5)**

**QUESTION 4**

4.1 Protein (1)

4.2 Carbohydrates (1)

4.3 Fruits ( $\frac{1}{2}$ ) and vegetables ( $\frac{1}{2}$ ) = (1)

4.4 Fats (1)

4.5 Dairy products (1)

**(5)****QUESTION 5**

5.1 Producers

(1)

5.2 Carnivores

(1)

5.3 Grasshopper, Rabbit and Caterpillar

(1)

5.4 Any food chain from below

(2)

**(5)**

PRODUCER	PRIMARY CONSUMER	SECONDARY CONSUMER	TETIARY CONSUMER
Grass	Caterpillar	Snake	Hawk
Leaves	Caterpillar	Snake	Hawk
Grass	Caterpillar	Snake	Owl
Grass	Grasshopper	Blue jay	Owl
Leaves	Caterpillar	Snake	Owl

**(5)**

## SECTION B

## QUESTION 6

- 6.1 **Soluble:** Substance that can dissolve in water. (1)
- Insoluble:** Substance that cannot dissolve in a liquid. (1)
- 6.2 Change eating habits. Eat more fibre. Eat five portions of vegetables and fruits each day. Eat less fat. Drink a lot of water and exercise every day. (1)
- 6.3 **Sieving-** Allows small object to pass through but larger objects will remain behind. Can be used to separate both solids and solid objects or solids and liquids. (1)
- Filtering-** Separates solids from liquid / only liquids can pass through. (1)
- (8)
- 6.4 Steps on how you will conduct Natural Sciences processing skills. (9)

Steps in the right order	LETTERS ONLY
<b>Investigate-</b> Ask questions of what you need to investigate / aim of the experiment.	STEP 1: H
<b>Prediction-</b> Statements about what you guess the results will be.	STEP 2: E
<b>Plan your investigation-</b> Decide on the materials, equipment as well as the method you will use.	STEP 3: B
<b>Conduct your investigation-</b> Follow the steps in your plan / method or instructions.	STEP 4: G
<b>Record your findings-</b> Record your observations or results.	STEP 5: F
<b>Interpret data-</b> Say what your findings means.	STEP 6: I
<b>Draw conclusions-</b> Determine whether your predictions were correct or incorrect.	STEP 7: A
<b>Evaluate your investigation-</b> Ask questions (What did I do well? What was not done well? How can I improve?)	STEP 8: D
<b>Communicate your findings-</b> Share your findings with others.	STEP 9: C

**QUESTION 7**

- 7.1 7.1.1 Heated- Liquid to gas (1)
- 7.1.2 Heated- Solid to liquid (1)
- 7.1.3 Cooling- Liquid to solid (1)
- 7.1.4 Cooling- Gas to liquid (1)
- (4)**

**[18]**

**SECTION C****QUESTION 8****EVALUATING AND ANALYSING**

- 8.1 **Water**- For digestion / reduces constipation. (1)
- 8.2 **Salt**- For taste and balances water in the body. (1)
- 8.3 **Potato**- Contains carbohydrates, provides energy. (1)
- 8.4 **Carrots**- Vitamin A- good for eyesight. (1)
- 8.5 **Onions**- To change flavour and taste, contains iron. (1)
- 8.6 8.6.1 To make them edible. (1)
- 8.6.2 To preserve them so they last longer. / To improve their nutritional value. (1)
- (7)**

**TOTAL: 50**