



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

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

**NATURAL SCIENCES AND
TECHNOLOGY**

MEMORANDUM

6 pages

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MEMORANDUM

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