

GRADE: 6 SUBJECT: NATURAL SCIENCES AND TECHNOLOGY

TERM ONE FORMAL ASSESSMENT TASK (FAT) 2

Name:)
Class:	Date:	
School:	Teacher:	
)

FAT	Activity/Form	Learner's mark	Learner's %
2.	Test		
TOTAL		35	

"Name of School"

Term 1 March

Natural Sciences and Technology Test



Grade: 6 Time: 50 minutes Marks: 35

Knowledge Strands: _____Life and living and Processing____

Write your name here: _____Class:_____Class:_____

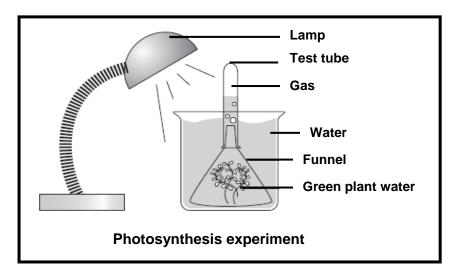


- 1. Answer all the questions on the question paper in the space provided.
- 2. Use a pen for writing.
- 3. All drawings must be done in pencil.

Question 1

Read each question and make a circle around the letter A, B, C or D that is the correct answer.

- 1.1 The following is an example of a process to preserve food.
 - A. Mixing
 - B. Rolling
 - C. Colouring
 - D. Pickling.
- 1.2 Study the diagram below and answer the question that follows.



Which gas will be formed in the test tube during the process shown above?

- A. Carbon Dioxide
- B. Hydrogen
- C. Oxygen
- D. Nitrogen.

(1)

(1)

- 1.3 What is the best reason for including fruits and leafy vegetables in a healthy diet?
 - A. They have a high water content.
 - B. They are the best source of protein.
 - C. They are rich in minerals and vitamins.
 - D. They are best source of carbohydrates.

(1)

(3)

Question 2

Match the plant part in column A with the correct food example in column B. Write down the corresponding letter in the middle column next to the question number that matches.

2.	COLUMN A	Answer	COLUMN B
	The part of plant where food is stored		Example of food
	2.1 Fruit		A. Peanuts
	2.2 Seeds		B. Apple
			C. Carrot
			D. Cabbage

(2)

Question 3

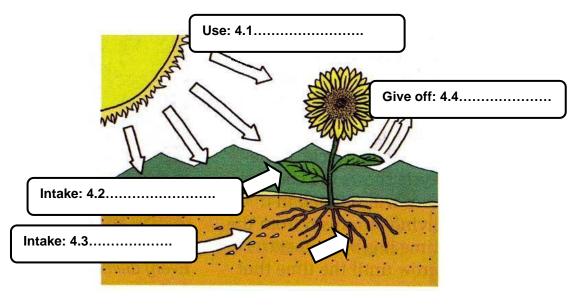
Give the correct scientific term for each of the following descriptions:

- 3.1 The food group that is important for growth and repairing damaged skin and (1) muscles.
- 3.2 A disease caused by eating a diet rich in carbohydrates without proteins. (1)
- 3.3 Micro-organisms that break down dead plant and animal matter and return nutrients (1) to the soil.

(3)

Study the illustration of the process of photosynthesis below.

Complete the labels 1-4 that illustrate the process of photosynthesis.



Question 5

John designs an experiment using an iodine solution and different food products. The results of the investigation are shown in the table below.

Name of food product	The colour changed to:	
Potato	Blue black	
Cucumber	Brown	
Leaves	Blue Black	

5.1 What is John investigating in the experiment?

5.2 State why the colour of the cucumber changes to brown.

(1)

(1)

(2)

Thembi is a ten year old girl. She made a list of her diet for one day. Study the list of food Thembi ate in one day. Use the information to answer the questions that follow.

Breakfast:	Afternoon Snack
1 cup <i>cereal</i>	One apple
Half a cup of milk	One bread roll
	One large slice cheese
Lunch	20 peanuts
Two slices bread	
Two table spoons	Supper
margarine	One cup rice
Half a cup beans	Four fish fingers baked in two
One banana	tablespoons of oil
	Half a cup pumpkin
	Half a cup cabbage
	Small glass of grape Juice

6.1 Complete the table below by giving one example of each food group that Thembi ate.

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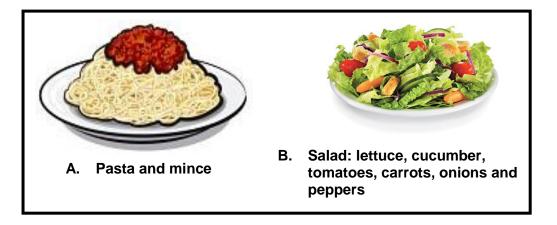
Food Group	Example
Carbohydrates	(a)
Protein	(b)
Fats and Oils	(c)
Vitamins and minerals	(d)

6.2 Thembi is growing two centimeters in a month. What type of food (solid and liquids) should she be eating more?

(1)

- 6.3 Refer to Thembi's diet and use your knowledge of a food pyramid to answer the following questions:
 (a) Is Thembi following a balanced diet for the one day?
 (b) Give a reason for your answer in Question 6.3 (a)
 (c) Name one food that Thembi should eat more often.
 (1)
- (d) How many servings of meat did Thembi have during the day?
- (10)

(1)



Study the pictures of two types of food and answer the questions that follow:

- 7.1 Athletes that are running long distances need specific food in preparation for a race. Which food above (A or B) will you suggest to the athletes to eat the night before the (1) race?

8.1	Give the term for a food additive that is used to make food last longer.	(1)
8.2	State two reasons why food is processed.	(2)
8.3	Give a reason why highly processed food is bad for your health.	(1)
8.4	You went on an overnight camping trip and caught a lot of fish. There are no cooling facilities available to keep the meat fresh.	
	List 5 steps that you would follow to preserve the fish. Step 1	
	Step 2	
	Step 3	
	Step 4	
	Step 5	(5)
		(9)
	Total:	35 Marks

WCED NST Grade 6 Term 1 – March

MARKING MEMORANDUM

1.1 1.2 1.3	Question 1 D ✓ C ✓ C ✓	(1) (1) (1) (3)
2.1 2.2	Question 2 B ✓ (apple) A ✓ (peanut)	(1) (1) (2)
3.1 3.2 3.3	Question 3 Protein ✓ Kwashiorkor ✓ Decomposers ✓	(1) (1) (1) (3)
4.1 4.2 4.3 4.4	Question 4 Sunlight ✓ Carbon Dioxide ✓ Water and Minerals ✓ Oxygen ✓	(1) (1) (1) (1) (4)
5.1 5.2	Question 5 To test for starch ✓ It does not contain starch ✓	(1) (1) (2)
6.1	 Question 6 (a) Cereal or bread or bread roll or rice or banana or apple or pumpkin or cabbage or grape juice (any one of ✓) (b) Milk or beans or cheese or fish or peanuts (any one of ✓) (c) Margarine or oil or peanuts (any one of ✓) (d) Milk or cheese or cereal or banana or apple or pumpkin or cabbage or grape juice (any one of ✓) 	(1) (1) (1) (1)
6.2	Milk or cheese or beans or peanuts or fish, (any one of \checkmark)	(1)
6.3	 a) Yes or No ✓ b) ✓✓ If No-Thembi's diet does not contain the right amounts of servings from each food group OR If Yes- Thembi's diet includes food from each food group 	(1) (2)
	 c) Grains and or /dairy products ✓ d) One serving of fish ✓ 	(1) (1) (10)

	Step 5 Hang fish to dry	(5)
8.4	Step 1 Clean the fish and remove the gut (internal organs) Step 2 Wash fish in water Step 3 Fillet fish	
8.3	The longer the food is processed more nutrients are lost \checkmark	(1)
	Any two ✓ ✓	
	To improve the nutrient value	
8.2	To preserve the food (last longer) To taste better/ (To make it edible)	(2)
8.1	Preservative ✓	(1)
	Question 8	
	Any one ✓	(2)
	Or The mince contains proteins which will also provide stored energy to the athlete.	
7.2	The pasta in meal A contains carbohydrates which will provide energy during the race.	(1)
7.1	Question 7 Meal A / Pasta and mince ✓	(1)

MARK WEIGHTING FOR GRADE 6 TERM 1 TEST

	Topics	Cognitive levels			Teaching time in weeks	Suggested mark allocation	Time alloc ation
		Low 50%	Middle 35%	High 15%			
b	Photosynthesis	1 2	4		2.5	7	
1 Processing	Nutrients in food	1 1 4	2	1	1.5	9	Š
TERM 1 Living & Pro	Nutrition	1 1 1 1	2 2		1.5	9	50 Minutes
Life & I	Food Processing	1 1 1	2	5	2.5	10	
	Ecosystems & Food webs	Will only cover in weeks 9 & 10 Questions in Term 2		2	0		
	TOTAL	Mark 17	Marks 12	Marks 6	8	35 marks	