



LEARNER'S DETAILS

Name: _____ School: _____

Assessment Number: _____ Date: _____

School Code: _____ Signature: _____

Instructions for Learners

1. Write your name, school name, and assessment number in the spaces provided.
2. Check the question paper carefully to ensure all pages are printed and no questions are missing.
3. Answer all the questions in the spaces provided.
4. Answer **all** questions.
5. Write your answers clearly in the spaces provide.

FOR EXAMINER'S USE

SECTION	TASK 1	TASK 2	% SCORE	EE1	EE2	ME1	ME2	AE1		AE2	BE1	BE2		
SCORE RANGE	20 MARKS	30 MARKS		90-100	75-89	58-74	41-57	31-40		21-30	11-20	1-10		
POINTS							8 POINTS	7 POINTS	6 POINTS	5 POINTS	4 POINTS	3 POINTS	2 POINTS	1 POINT
LEARNER'S TOTAL SCORE														

1. Study the pictures labelled ① and ② shown below. (3 marks)



a) On which surface does the book slide more easily? (1 mark)

b) Give a reason for your answer in (a) above. **(1 mark)**

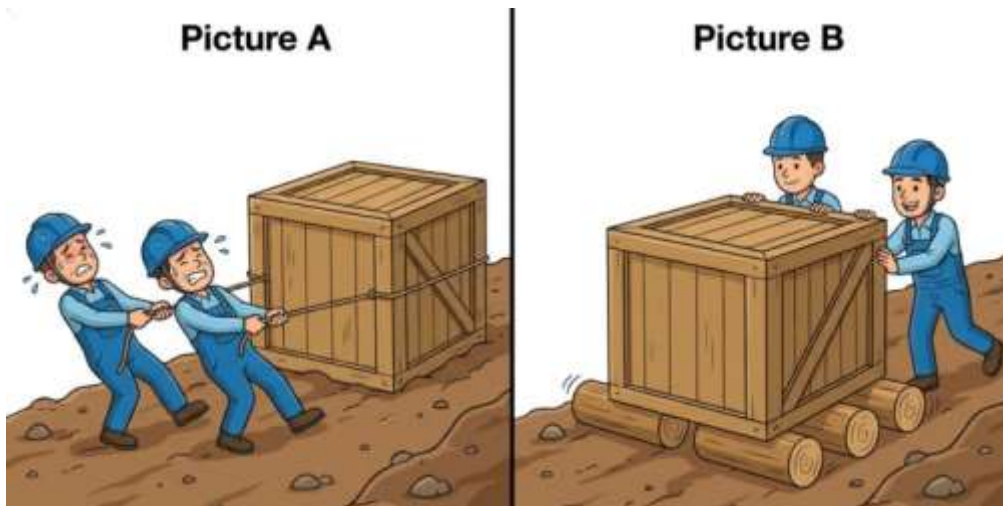
c) Name one tool that can be used to change surface ② to make it more like surface ①. **(1 mark)**

2. A learner pushed a box on a rough surface and then pushed the same box on a smooth surface. (2 marks)

a) On which surface was it easier to push the box? **(1 mark)**

b) Give a reason for your answer in (a) above. **(1 mark)**

3. The pictures below show workers moving a heavy crate in two different ways. (4 marks)



a) In which picture is it easier to move the crate? **(1 mark)**

b) Explain why it is easier in that picture. (2 marks)

c) Name the method of minimising friction shown in Picture B. (1 mark)

4. The picture below shows a situation in a house at night. (4 marks)



a) Identify the danger shown in the picture above. (1 mark)

b) Explain why this situation is dangerous. (2 marks)

c) Suggest one safe way this person could keep warm at night instead. (1 mark)

5. Force of Gravity (3 marks)

a) What is the force of gravity? (1 mark)

b) Give **two** examples that show the force of gravity in daily life. **(2 marks)**

i. _____

ii. _____

6. Friction (3 marks)

a) What is friction? **(1 mark)**

b) A ball was rolled on a smooth floor and on rough grass. On which surface did the ball travel further? **(1 mark)**

c) Give a reason for your answer in (b) above. **(1 mark)**

7. A farmer uses oxen to plough a field. The oxen are connected to the plough using ropes and a yoke. (3 marks)

a) What type of force do the oxen use to move the plough? **(1 mark)**

b) Explain why the plough is harder to pull through wet clay soil than through dry loose soil. **(2 marks)**

8. Study the picture below. (3 marks)



a) Name the force that is making the ripe mangoes fall to the ground. (1 mark)

b) Explain why the mangoes fall downward and not upward or sideways. (1 mark)

c) Give one other example in nature where this force is at work. (1 mark)

9. Study the pictures labelled W, X, Y and Z showing different uses of force in daily life. (5 marks)



a) For each picture, state whether the force being used is a **push** or a **pull**. (4 marks)

Picture	Type of force
W	
X	
Y	
Z	

b) Which two pictures show a pulling force? (1 mark)

10. Explain what happens when a cold spoon is placed in a cup of hot tea. (2 marks)

11. Explain why the writing and sitting surfaces of school desks are made smooth. (2 marks)

12. Pendo noticed that ripe mangoes always fell from the tree to the ground. (2 marks)

a) Name the force that caused the mangoes to fall. (1 mark)

b) Name the scientist who discovered this force. (1 mark)

13. Explain how brakes on a bicycle use friction to stop the bicycle. (2 marks)

14. Study the table above. (5 marks)

Effect of force	Example
Force can make a stationary object move.	
Force can stop a moving object.	
Force can change the direction of a moving object.	
Force can change the speed of an object.	
Force can change the shape of an object.	

a) Complete the table by giving **one correct example** for each effect of force. **(5 marks)**



a) Name the force applied between the knife and the sharpening stone. **(1 mark)**

b) Explain how rubbing the knife on the stone makes it sharp. **(2 marks)**

16. Study the pictures above. **(4 marks)**



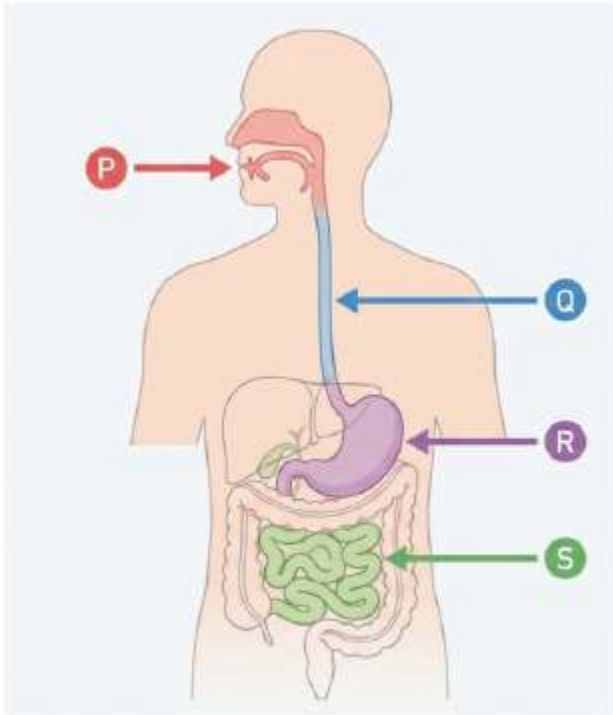
a) Will the vehicle in Picture ① be able to move? Give a reason. **(2 marks)**

b) How has force been used to restrain the dog in Picture ②? **(1 mark)**

c) What effect of force is common in both pictures? **(1 mark)**

17. The diagram below shows part of the human digestive system. Study it and answer the questions that follow.

(4 marks)



a) Identify the parts labelled **P** and **R**.

(2 marks)

P: _____

R: _____

b) State the function of the part labelled Q.

(1 mark)

c) Name the part that comes immediately after S.

(1 mark)

18. During a nature walk, Grade 4 learners observed different animals in the school compound and the neighbouring environment.

(5 marks)

a) State three things the learners should have carried during the nature walk.

(3 marks)

i. _____

ii. _____

iii. _____

b) Give two safety measures the learners should observe when handling animals during the walk.

(2 marks)

i. _____

ii. _____

19. The notice below was sent to parents of learners at Bidii Primary School. Study it and answer the questions that follow.

(3 marks)

**BIDII PRIMARY SCHOOL
NOTICE TO PARENTS/GUARDIANS**

All Grade 4 learners will participate in a deworming exercise on **Friday, 28th August 2026**. Parents are requested to ensure that their children attend school on this day. Any learner who is unwell should be kept at home and the school informed.

a) What is the purpose of the notice? (1 mark)

b) What should a parent do if their child is unwell on the deworming day? **(1 mark)**

c) Give one reason why deworming is important for children. **(1 mark)**

20. A learner told the class that vomiting is a symptom of an unhealthy digestive system. (3 marks)

a) State what happens during vomiting. **(1 mark)**

b) Name two other symptoms of an unhealthy digestive system. **(2 marks)**

i. _____

ii. _____

21. The table below lists some eating habits. Study the table and answer the questions that follow.

(4 marks)

Eating habit
Eating fruits and vegetables
Drinking enough water
Eating too many sugary foods
Skipping meals

a) Sort the eating habits into **healthy** and **unhealthy** habits for the digestive system. **(3 marks)**

Healthy habits:

i. _____

ii. _____

Unhealthy habit:

b) Explain why drinking enough water is important for the digestive system. **(1 mark)**

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MARKING SCHEME

1. Study the pictures labelled ① and ② shown below.

(3 marks)

a) On which surface does the book slide more easily? (1 mark)

- Surface ① — **the smooth surface.** (1 mark)

b) Give a reason for your answer. (1 mark)

- The smooth surface produces **less friction**, allowing the book to slide more easily. (1 mark)

c) Name one tool that can be used to change surface ② to be like surface ①. (1 mark)

- **Wood planer** or **sandpaper.** (1 mark)

Note: Smooth surfaces produce less friction than rough surfaces. Sandpaper and wood planers can be used to smooth rough surfaces.

2. A learner pushed a box on a rough surface and then pushed the same box on a smooth surface.

(2 marks)

a) On which surface was it easier to push the box? (1 mark)

- On the **smooth surface.** (1 mark)

b) Give a reason for your answer. (1 mark)

- A smooth surface produces **less friction** than a rough surface, making the box easier to move. **(1 mark)**

Note: Rough surfaces produce more friction and therefore offer greater resistance to movement.

3. The pictures below show workers moving a heavy crate in two different ways.

(4 marks)

a) In which picture is it easier to move the crate? **(1 mark)**

- Picture **B**. **(1 mark)**

b) Explain why it is easier in that picture. **(2 marks)**

- The round logs act as **rollers** and roll instead of sliding on the ground. **(1 mark)**
- Rolling produces **less friction** than dragging, making the crate easier to move. **(1 mark)**

c) Name the method of minimising friction shown in picture B. **(1 mark)**

- Using **rollers**. **(1 mark)**

Note: Rollers, wheels and ball bearings reduce friction by changing sliding motion into rolling motion.

4. The picture below shows a situation in a house at night.

(4 marks)

a) Identify the danger shown in the picture. **(1 mark)**

- A **burning charcoal stove is left in a closed room** where someone is sleeping. **(1 mark)**

b) Explain why this situation is dangerous. **(2 marks)**

- Burning charcoal produces a **dangerous gas** that can cause difficulty in breathing. **(1 mark)**
- In a closed room, the gas can build up and may **cause death**. **(1 mark)**

c) Suggest one safe way this person could keep warm at night instead. **(1 mark)**

- Use a **hot-water bottle** wrapped in a towel. **(1 mark)**

Also accept: Warm blankets or warm clothing.

5. What is the force of gravity?

(3 marks)

a) Define the force of gravity. **(1 mark)**

- Gravity is the force that **pulls objects downward towards the ground**. **(1 mark)**

b) Give two examples of gravity in action. (2 marks)

Accept any two:

1. Ripe mangoes falling from a tree.
2. A ball thrown upwards falling back to the ground.
3. Raindrops falling from clouds.
4. Water flowing downhill.
5. A person landing after jumping.

(1 mark each)

6. What is friction?

(3 marks)

a) Define friction. (1 mark)

- Friction is the force that **opposes the movement of objects whose surfaces are in contact.** (1 mark)

b) On which surface did the ball travel further? (1 mark)

- The **smooth floor.** (1 mark)

c) Give a reason for your answer. (1 mark)

- Smooth surfaces produce **less friction**, so the ball rolls further before stopping. (1 mark)

7. A farmer uses oxen to plough a field. The oxen are connected to the plough using ropes and a yoke.

(3 marks)

a) What type of force do the oxen use to move the plough? (1 mark)

- **Pulling force.** (1 mark)

b) Explain why the plough is harder to pull through wet clay soil than through dry loose soil. (2 marks)

- Wet clay is **sticky and heavy** and produces more friction against the plough. (1 mark)
- Dry loose soil produces **less resistance/friction**, making the plough easier to pull. (1 mark)

8. Study the picture below.

(3 marks)

a) Name the force that is making the ripe mangoes fall to the ground. (1 mark)

- **Gravity.** (1 mark)

b) Explain why the mangoes fall downward and not upward or sideways. (1 mark)

- Gravity pulls objects **downward towards the ground. (1 mark)**

c) Give one other example in nature where this force is at work. (1 mark)

Accept any one:

- Water flowing downstream.
- Raindrops falling from clouds.
- A ball falling back after being thrown upwards.
- A child sliding down a slide.

9. Study the pictures labelled W, X, Y and Z showing different uses of force in daily life.

(5 marks)

a) For each picture, state whether the force being used is a push or a pull. (4 marks)

- W — **Pushing force. (1 mark)**
- X — **Pulling force. (1 mark)**
- Y — **Pulling force. (1 mark)**
- Z — **Pushing force. (1 mark)**

b) Which two pictures show a pulling force? (1 mark)

- Pictures **X and Y. (1 mark)**

10. Explain what happens when a cold spoon is placed in a cup of hot tea.

(2 marks)

- Heat flows from the **hot tea to the cold spoon** because heat moves from a hotter object to a cooler object. **(1 mark)**
- The spoon becomes **warm**, while the tea loses some heat and becomes slightly cooler. **(1 mark)**

11. Explain why the writing and sitting surfaces of school desks are made smooth.

(2 marks)

- Smooth surfaces **reduce friction**, making it easier for books to move across the writing surface. **(1 mark)**
- They also make the sitting surface **more comfortable. (1 mark)**

12. Pendo noticed that ripe mangoes always fell from the tree to the ground.

(2 marks)

a) Name the force that caused the mangoes to fall. (1 mark)

- **Force of gravity. (1 mark)**

b) Name the scientist associated with the discovery of gravity. (1 mark)

- **Isaac Newton. (1 mark)**

13. Explain how brakes on a bicycle use friction to stop the bicycle.

(2 marks)

- When the brake lever is squeezed, the **brake pads press against the wheel rim. (1 mark)**
- This creates **friction**, which slows down and eventually stops the wheel. **(1 mark)**

14. Study the table above.

(5 marks)

Give an example showing each effect of force.

1. **Change shape** — Crumpling a piece of paper. **(1 mark)**
2. **Start motion** — Kicking a stationary ball. **(1 mark)**
3. **Stop motion** — Stopping a moving ball with your foot. **(1 mark)**
4. **Change direction** — A ball bouncing off a wall. **(1 mark)**
5. **Hold objects together** — Nails joining two pieces of wood. **(1 mark)**

Accept any correct examples.

15. Study the picture above.

(3 marks)

a) Name the force applied between the knife and the sharpening stone. (1 mark)

- **Friction. (1 mark)**

b) Explain how rubbing the knife on the stone makes it sharp. (2 marks)

- Friction between the knife and the rough stone **wears away tiny particles of metal** from the blade. **(1 mark)**
- This makes the edge **thinner and sharper. (1 mark)**

16. Study the pictures above.

(4 marks)

a) Will the vehicles in picture ① be able to move? Give a reason. (2 marks)

- **No. (1 mark)**
- The **wheel clamps hold the tyres firmly**, preventing the wheels from turning. **(1 mark)**

b) How has force been used to restrain the dog in picture ②? (1 mark)

- A **chain is attached to the dog and a fixed post**, keeping the dog in place. **(1 mark)**

c) What effect of force is common in both pictures? (1 mark)

- Force is used to **hold objects together or keep them in place. (1 mark)**

17. The diagram below shows part of the human digestive system. Study it and answer the questions that follow.

(4 marks)

a) Identify the parts labelled P and R. (2 marks)

- P — Mouth. **(1 mark)**
- R — Stomach. **(1 mark)**

b) State the function of the part labelled Q. (1 mark)

- Q (gullet) transports food from the mouth to the stomach. **(1 mark)**

c) Name the part that comes immediately after S. (1 mark)

- Large intestine. **(1 mark)**

Note:

- **P — Mouth:** Where food enters and chewing begins.
- **Q — Gullet:** Tube that carries food from the mouth to the stomach.
- **R — Stomach:** Bag-shaped organ that mixes and breaks down food.
- **S — Small intestine:** Long, coiled tube where nutrients are absorbed.
- The **large intestine** comes immediately after the small intestine.

18. During a nature walk, Grade 4 learners observed different animals in the school compound and the neighbouring environment.

(5 marks)

a) State three things the learners should have carried during the nature walk. (3 marks)

Accept any three:

1. Pen and notebook. **(1 mark)**
2. Digital device/camera for taking photographs. **(1 mark)**
3. Protective gear such as gloves. **(1 mark)**

b) Give two safety measures the learners should observe when handling animals during the walk. (2 marks)

Accept any two:

1. Follow the teacher's instructions. **(1 mark)**
2. Wear protective gear such as gloves. **(1 mark)**

3. Wash hands with soap and water after handling animals. **(1 mark)**
4. Avoid harming or provoking the animals. **(1 mark)**

Note:

During a nature walk, learners should carry materials for recording observations, taking photographs and ensuring their safety. When handling animals, they should follow instructions, use protective equipment, maintain hygiene and avoid harming the animals.

19. The notice below was sent to parents of learners at Bidii Primary School. Study it and answer the questions that follow.

(3 marks)

a) What is the purpose of the notice? (1 mark)

- To inform parents about the school's deworming programme. **(1 mark)**

b) What should a parent do if their child is unwell on the deworming day? (1 mark)

- The parent should inform the class teacher. **(1 mark)**

c) Give one reason why deworming is important for children. (1 mark)

- Deworming removes intestinal worms that compete with the child for nutrients from food. **(1 mark)**

Also accept:

- It helps maintain a healthy digestive system.
- It improves the child's nutrition.
- It helps children remain healthy and concentrate better in class.

Note:

The notice informs parents about a **school deworming programme**. Deworming is important because intestinal worms can take nutrients from the food eaten by children, leading to poor nutrition and reduced well-being.

20. A learner told the class that vomiting is a symptom of an unhealthy digestive system.

(3 marks)

a) State what happens during vomiting. (1 mark)

- During vomiting, food or stomach contents are brought back up through the mouth. **(1 mark)**

b) Name two other symptoms of an unhealthy digestive system. (2 marks)

Accept any two:

1. Stomach ache. **(1 mark)**
2. Diarrhoea. **(1 mark)**

3. Bloating. **(1 mark)**
4. Constipation. **(1 mark)**
5. Presence of intestinal worms. **(1 mark)**

Note:

Vomiting occurs when the contents of the stomach are brought back through the mouth. Other common signs of an unhealthy digestive system include **stomach ache, diarrhoea, bloating, constipation and intestinal worms**.

21. The table below lists some eating habits. Study the table and answer the questions that follow.

(4 marks)

a) Sort the eating habits into **healthy and **unhealthy** habits for the digestive system. (3 marks)**

Healthy eating habits:

- Eating foods rich in fibre.
- Drinking enough water daily.
- Chewing food properly.

Unhealthy eating habits:

- Eating too much fatty food.
- Eating too many sugary foods.
- Skipping meals.

Marking:

- Correct identification of healthy habits — **1½ marks**
- Correct identification of unhealthy habits — **1½ marks**

b) Explain why drinking enough water is important for the digestive system. (1 mark)

- Water helps food and waste move smoothly through the digestive system and prevents stool from becoming hard, thereby preventing constipation. **(1 mark)**

Note:

Healthy eating habits help the digestive system function properly. **Fibre** helps food and waste move through the digestive tract, while **water** keeps stool soft. **Chewing food properly** also makes digestion easier. Excessive fatty and sugary foods and skipping meals may negatively affect digestion.