

Practice Test

Science and Technology/Engineering

GRADE 5

Student Name

School Name

District Name



This is a practice test. Your responses to practice test questions must be recorded on your Practice Test Answer Document.

Mark only one answer for each multiple-choice question. If you are not sure of the answer, choose the answer you think is best.

HOW TO ANSWER OPEN-RESPONSE QUESTIONS

- Read all parts of each question carefully.
- Make each response as clear, complete, and accurate as you can.
- Support your responses.
- Check your answers.

Science and Technology/Engineering

DIRECTIONS

This practice test contains two multiple-choice questions and one open-response question. Mark your answers to these questions in the spaces provided on page 4 of your Practice Test Answer Document.

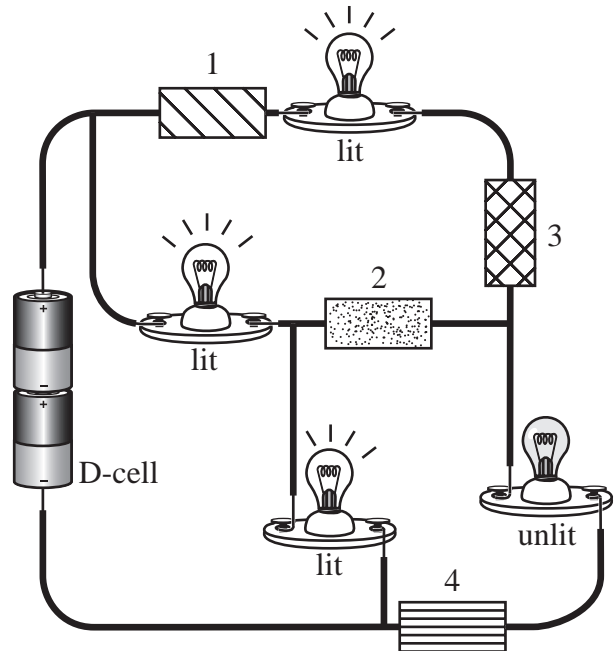
- 1 Rayna is collecting seeds from a sunflower. She notices that most of the leaves on the sunflower plant have patterns of holes made by chewing insects, as shown in the picture below.



Next year, she will plant the sunflower seeds that she has collected. How many of the sunflower plants that grow are expected to inherit the chewed leaf pattern?

- A. all of the plants
- B. most of the plants
- C. half of the plants
- D. none of the plants

- 2 The circuit diagram below shows D-cells connected to four light bulbs and four different materials labeled 1, 2, 3, and 4.



Which of the four materials is acting as an insulator rather than a conductor?

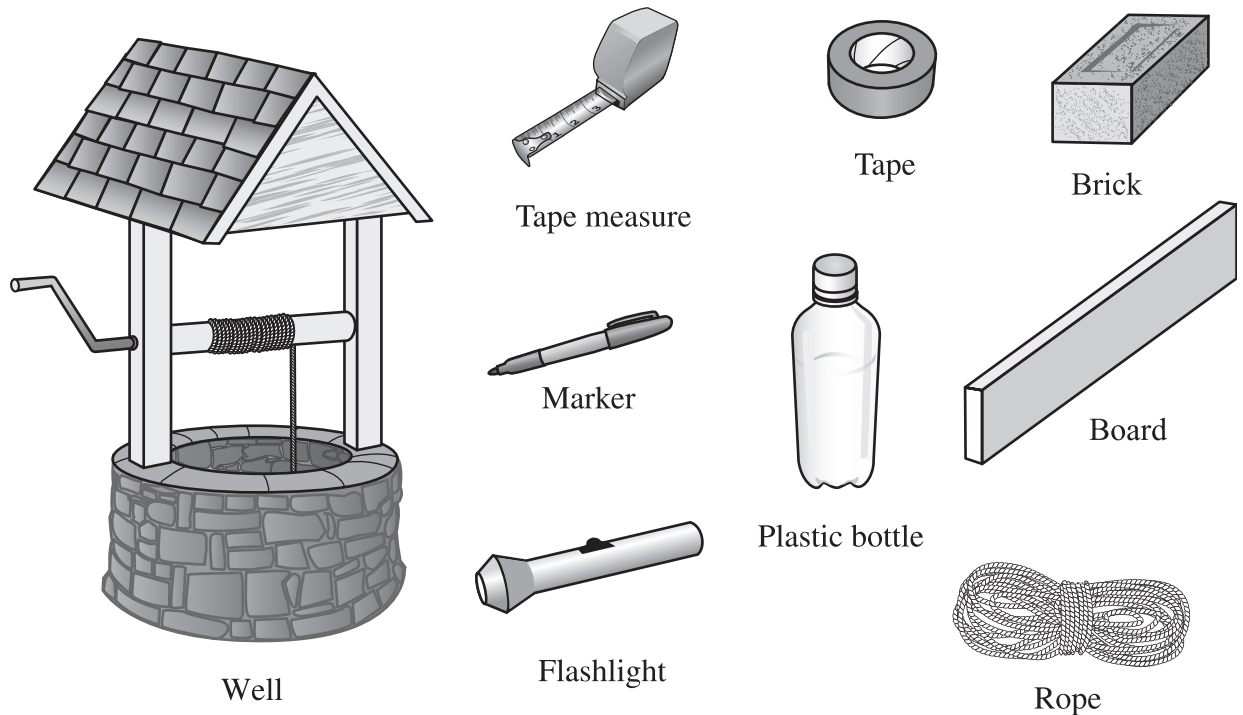
- A. 1
- B. 2
- C. 3
- D. 4

Question 3 is an open-response question.

- BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.
- Show all your work (diagrams, tables, or computations) in your Practice Test Answer Document.
- If you do the work in your head, explain in writing how you did the work.

Write your answer to question 3 in the space provided on page 4 of your Practice Test Answer Document.

- 3 Rosa wants to measure the depth of the well in her backyard. To help her find the depth of the well, Rosa gathered her tape measure and several objects from around her house. Her tape measure is 12 ft. long, but the well is deeper than 12 ft. The well and the objects that Rosa gathered are shown below.



- Identify which of these objects Rosa can use with her tape measure to find the depth of the well.
- Explain how Rosa can use her tape measure and **each** object you identified in part (a) to find the depth of the well.

MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM

Grade 5 Science and Technology/Engineering

Practice Test Answer Document

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| <p>School Name: _____</p> <p>District Name: _____</p> <p>Last Name of Student: _____</p> <p>First Name of Student: _____</p> | <p style="text-align: center;">Marking Instructions</p> <ul style="list-style-type: none">• Use a No. 2 pencil only.• Do not use ink, ballpoint, or felt-tip pens.• Make solid marks that fill the circles completely.• Erase cleanly any marks you wish to change.• Do not make any stray marks on this form.• Do not fold, tear, or damage this form. |
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