

GRADE 8

INTERMEDIATE-LEVEL TEST SCIENCE

PERFORMANCE TEST

Name _____

School _____

The questions on this test measure your knowledge and understanding of science.

The test has one part in this booklet.

You may use a calculator to answer the questions on the test if you wish.

You will have 15 minutes to answer the questions on this test.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO.

This booklet contains science performance task located at your station. At this station, you will have 15 minutes to finish your work. Continue working until you see the word “STOP” at the bottom of the page or until the 15 minutes are up. If you have extra time, check your work, or wait quietly.

Do not help other students or ask others to help you. Everyone should work alone. There must be no talking between students during this test.

Read the description of the station carefully. Read carefully all of the directions in the boxes. All of your answers must be recorded in this test booklet. After you complete the task at this station, please leave the station the way it is shown on the station diagram.

At this station, you will measure the dimensions of an object and make calculations based on those dimensions.

1. Using a meter stick or metric ruler, measure the dimensions of the classroom to the nearest 0.1m. record these measurements in the data table below.

DATA TABLE:

Length (m)	Width (m)	Height (m)

2. Calculate the surface area of each wall. Use the formula for surface area, $SA=L \times W$. Record these calculations to the nearest 0.1m^2 and write them in the data table below.

Work Space: Wall 1 Area = length x height = _____ x _____ = _____ Wall 2 Area = width x height = _____ x _____ = _____ Wall 3 Area = length x height = _____ x _____ = _____ Wall 4 Area = width x height = _____ x _____ = _____

Area of Wall 1	Area of Wall 2	Area of Wall 3	Area of Wall 4

The industry standard coverage for a gallon of paint is 350 square feet. This is approximately equivalent to 32.5 m^2 . Using this value, calculate how many gallons would you have to buy to paint the walls of the room with one coat of paint?

Work Space: $1.0\text{ m}^2 = 10.7\text{ ft}^2$
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3. How many gallons should you buy to paint the walls of the classroom with one coat of paint?

4. If you needed to use two coats of paint, how much paint should you buy?_____

STOP!