

Practice Test

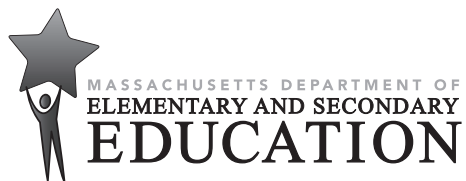
Chemistry

HIGH SCHOOL

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

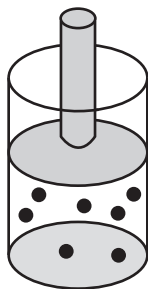
- Read all parts of each question carefully.
- Make each response as clear, complete, and accurate as you can.
- Support your responses.
- Check your answers.

Chemistry

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 A cylinder of gas particles is shown below.



The cylinder is fitted with a moveable piston that can be raised and lowered. Which of the following would result in an **increase** in the pressure of the gas below the piston?

- A. increasing the volume of the cylinder
- B. removing some of the gas from the cylinder
- C. decreasing the volume of the cylinder
- D. decreasing the pressure outside the cylinder

- 2 The correct name for an aqueous solution of HCl is

- A. chloric acid.
- B. chlorous acid.
- C. hydrochloric acid.
- D. hydrogen chloride.

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** Several chemists examined a pure, unknown substance and observed and measured its physical properties. Their results are shown below.

Unknown Substance

Physical Property	Description or Value
Color	Clear and colorless
Flammability	None
Odor	Sweet, distinctive odor
Melting point	-22.9°C
Boiling point	76.74°C
Density at 20°C	1.585 g/cm ³
Water solubility at 20°C	0.08 g/100 g H ₂ O

Based on the data recorded in the table, answer the following.

- What is the physical state of this substance at room temperature? Explain how the information in the table is used to make this classification of the substance's state.
- The substance is unreactive in water. What will happen if 10.0 g of this substance is added to 200.0 g of water at 20°C and standard pressure? Explain your response. Show your calculations and include units in your answer.

MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM

High School Chemistry Practice Test Answer Document

<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.• Make no stray marks on this form.• Do not fold, tear, or mutilate this form.
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**NO TEST MATERIAL
ON THIS PAGE**

