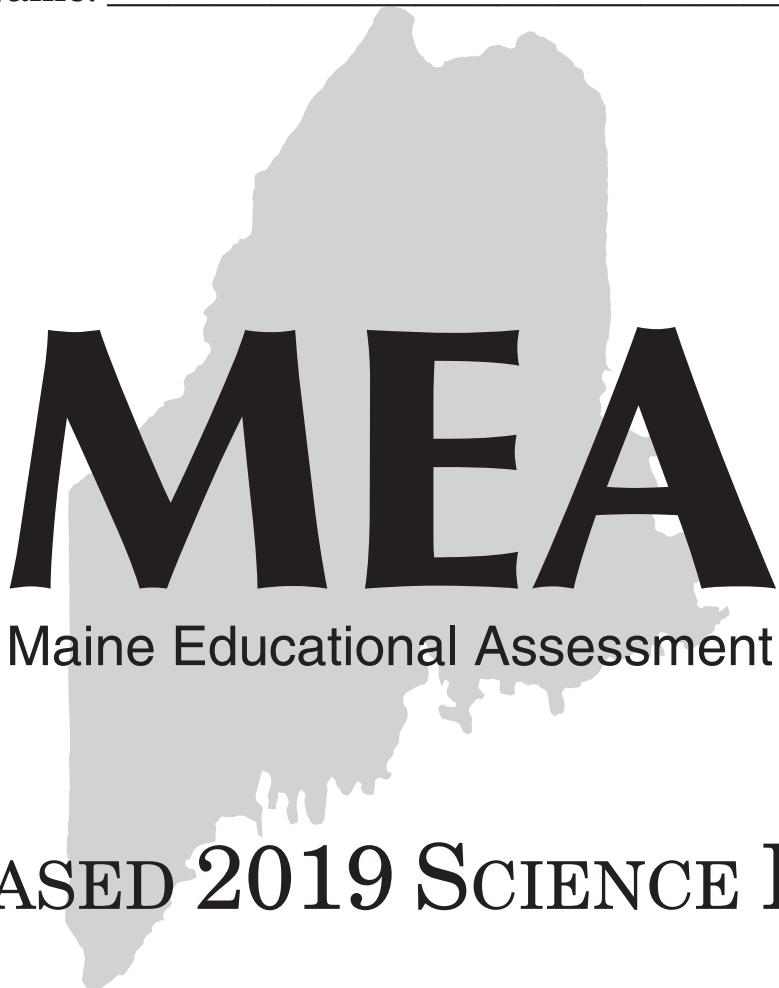


GRADE 5

STUDENT PRACTICE TEST BOOKLET

Student Name: _____



RELEASED 2019 SCIENCE ITEMS

Maine Department of Education

SCIENCE PRACTICE TEST

This practice test has eight multiple-choice questions and two constructed-response questions.

Choose the best answer for each multiple-choice question. Fill in the bubble with your answer choice to questions 1 through 8 on page 2 of your practice test answer booklet.

- 1 A student is looking through a telescope at the night sky. The student notices a distant object that has these features:

- red color
- very bright
- small size
- reflects light from the Sun

Which statement explains why the object is **not** a star like the Sun?

- A. Stars have many sizes.
- B. Stars have the same color.
- C. Stars have the same brightness.
- D. Stars have their own light energy.

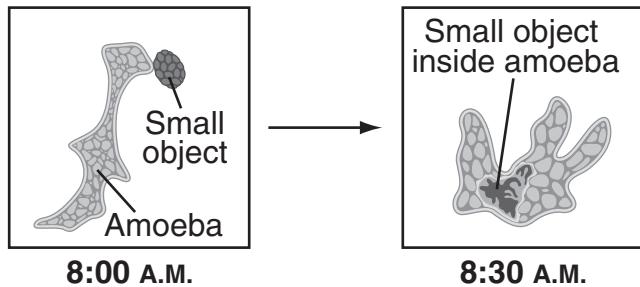
- 2 Why does a white rabbit living in the Arctic have an advantage over a black rabbit living in the Arctic?

- A. The white rabbit is harder to see.
- B. The white rabbit can find more food.
- C. The white rabbit has shorter legs and burrows faster.
- D. The white rabbit grows faster and lives in snow.

PLEASE GO ON ➔

- 3** Mountain lions in California need 25 square miles to hunt for food. New housing developments are being built where the mountain lions live. How will this change **most likely** affect the mountain lions?
- A. The mountain lions will learn to eat plants.
 - B. The mountain lions will hide in caves.
 - C. The mountain lions will decrease in number.
 - D. The mountain lions will get enough food in a smaller area.

- 4** A student uses a microscope to observe an amoeba in science class. The student watches the amoeba slowly approach a small object. The diagram below shows what the student observed at 8:00 a.m. and what the student observed 30 minutes later.

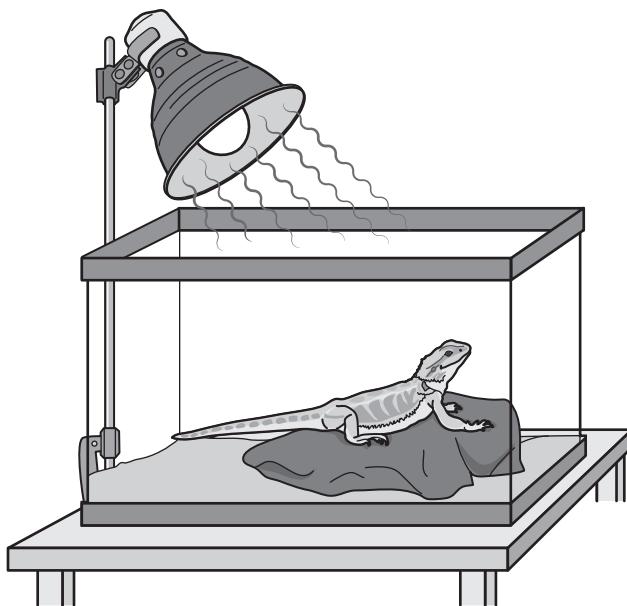


Based on the diagram, how is the amoeba behaving like an animal?

- A. The amoeba is sharing food.
- B. The amoeba is forming a nest.
- C. The amoeba is reproducing.
- D. The amoeba is getting food.

PLEASE GO ON ➔

- 5 The diagram below shows a tank with a lizard resting on a rock under a lamp.



Based on the diagram, which statement describes one way energy is transferred in the tank?

- A. Heat from the air moves to the lamp.
- B. Heat from the rock moves to the lizard.
- C. Cold from the rock moves to the air.
- D. Cold from the lizard moves to the lamp.

- 6 A gardener plants morning glory plant seeds. When the plants grow, some have pink blossoms and some have blue blossoms.

Which statement **best** explains why the blossoms are different colors?

- A. The gardener gave different nutrients to different seeds.
- B. The blue seeds received more water than the pink seeds.
- C. The gardener planted some of the seeds near other blue flowers.
- D. The seeds came from morning glory plants with blue and pink flowers.

PLEASE GO ON ➔

- 7 The data table below shows information about Earth and the Moon.

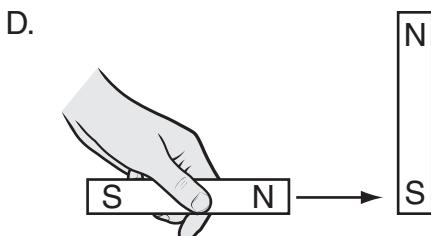
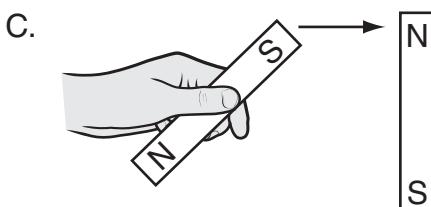
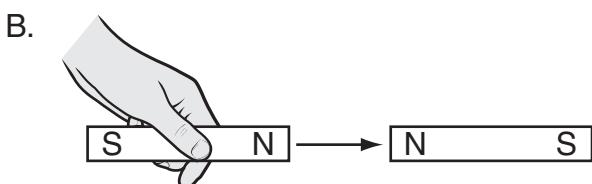
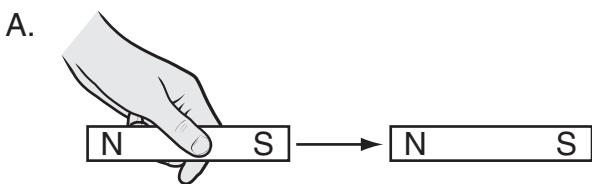
Earth and Moon Data

Data	Earth	Moon
Time to complete one orbit (days)	365.2	27.3
Speed of revolution (km/s)	29.8	1.0
Length of day (hours)	24.0	708.7
Total distance of orbit (million km)	94.0	2.4

Based on the table, why does it take more time for Earth to orbit the Sun than it takes for the Moon to orbit Earth?

- A. Earth is larger than the Moon.
- B. Earth has shorter days than the Moon.
- C. Earth travels farther than the Moon to complete an orbit.
- D. Earth orbits the Sun at a faster speed than the Moon orbits Earth.

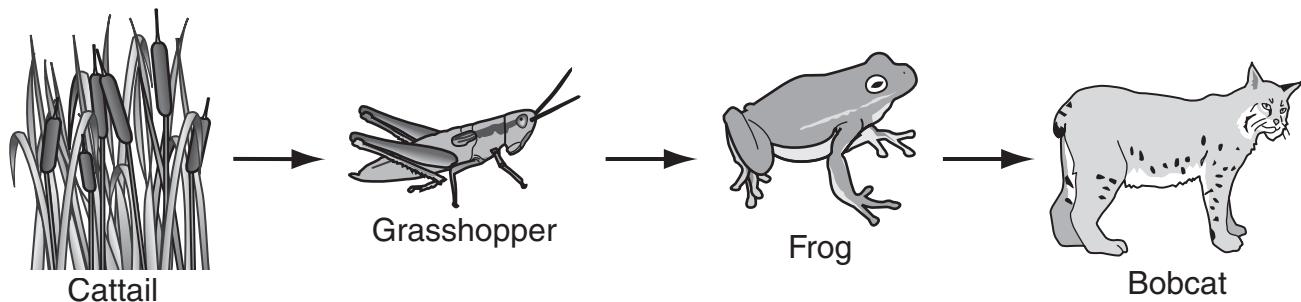
- 8 Which action will result in the magnets pushing apart?



PLEASE GO ON ➔

Write your answers to constructed-response questions 9 and 10 in the boxes provided on pages 2 and 3 of your practice test answer booklet. Be sure to answer and label all parts of the questions.

- 9 A pond food chain is shown below. The cattail is a plant that grows in swamp or marsh areas.



- Explain **two** ways the cattail can affect the pond environment.
- Explain **two** ways the frog can affect the pond environment.

Be sure to label parts a and b in your answer booklet.

PLEASE GO ON ➔

- 10** A teacher performs a demonstration to show parts of the rock cycle. She uses balls of soft-colored dough. The teacher has an equal amount of light, medium and dark-colored dough balls.

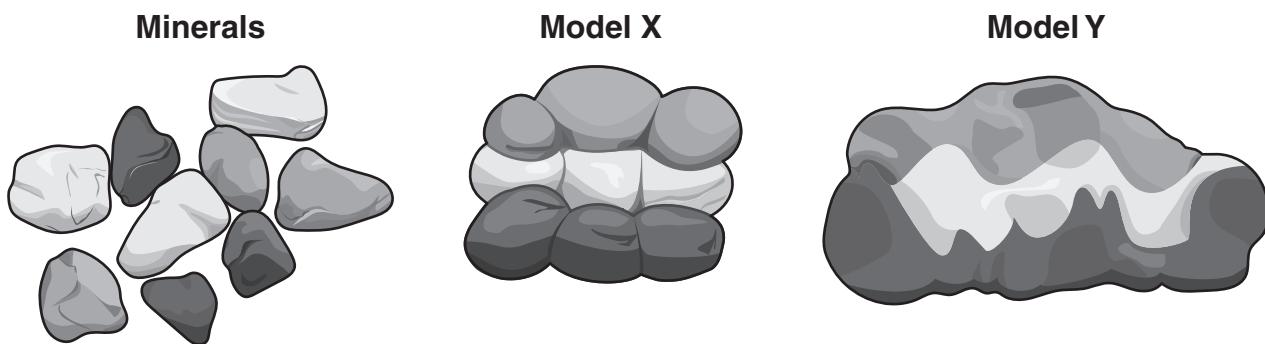
Step 1:

- The teacher tells the class that the dough balls represent minerals.
- She gently pushes the dough balls together into one form.
- Each ball of colored dough is still visible.
- The teacher names this form Model X.

Step 2:

- The teacher presses down on Model X until the dough balls are all flat.
- The colors are a little more mixed together.
- She names this form Model Y.

The “minerals” and models are shown in the diagram below.



- a. Describe what part of the rock cycle is shown in Model X. Describe how the model shows what happens in this part of the rock cycle.
- b. Describe what part of the rock cycle is shown in Model Y. Describe how the model shows what happens in this part of the rock cycle.
- c. Explain how Earth events cause the changes shown in Model X and Model Y.

Be sure to label parts a, b, and c in your answer booklet.

STOP

