

GRADE 5

STUDENT PRACTICE TEST BOOKLET

Student Name: _____



MEA

Maine Educational Assessment

RELEASED 2018 SCIENCE ITEMS

Maine Department of Education

SCIENCE PRACTICE TEST

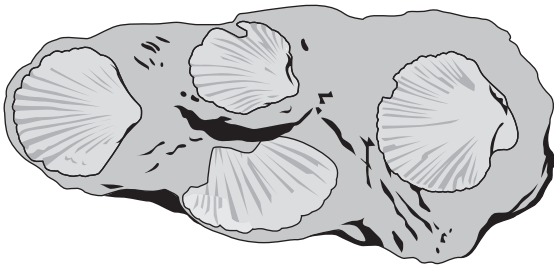
This practice test has eight multiple-choice questions and two constructed-response questions.

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 makes a pile of food scraps, grass cuttings, and leaves in a backyard. After a year, what will this pile of old plant materials **most likely** become?

A. clay
B. dust
C. rock
D. soil

- 2 The picture below shows a rock with fossils of a type of organism.

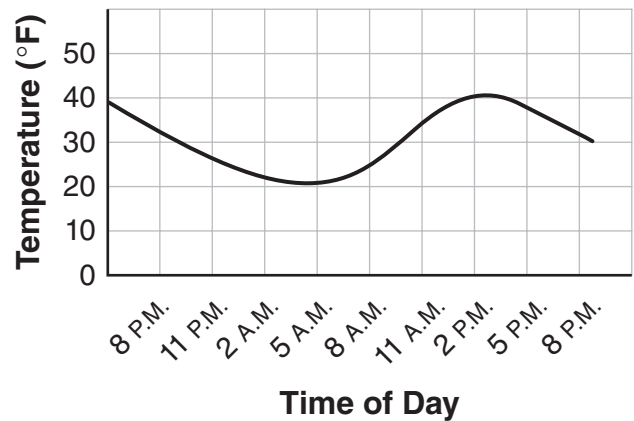


In which habitat did this organism **most likely** live?

A. field
B. ocean
C. rocks
D. trees

- 3 The graph below shows the temperature over a 24-hour period in Bangor, Maine, beginning on April 10, 2010.

The Temperature in Bangor, ME,
Beginning on April 10, 2010

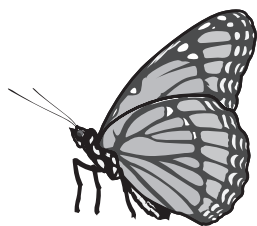


Which cause-and-effect relationship is supported by the information in the graph?

- A. When Earth revolves around the Sun, it is farthest from the Sun at 6 A.M. each day.
B. When Earth revolves around the Sun, it is closest to the Sun at 3 P.M. each day.
C. When Earth rotates, it is warmed by the Sun the most between 11 A.M. and 5 P.M.
D. When Earth rotates, it moves the slowest between 2 A.M. and 8 A.M.

PLEASE GO ON →

- 4 The pictures below show a viceroy butterfly and a monarch butterfly that are similar in color, size, and shape.



Viceroy

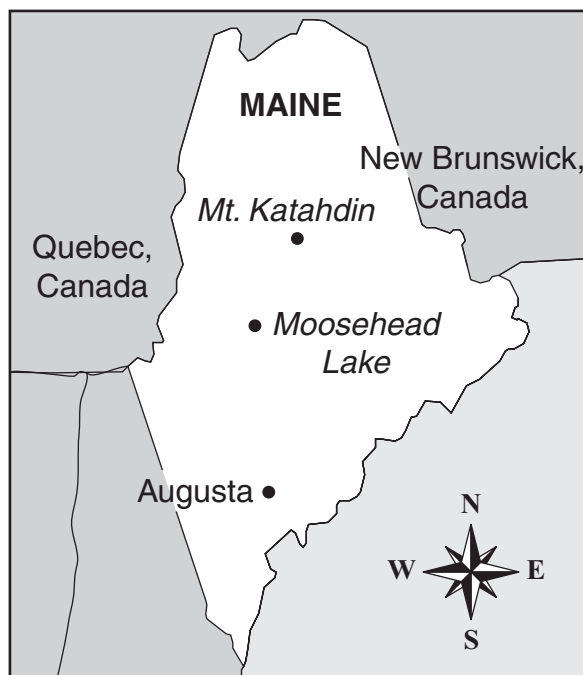


Monarch

Predators do not like the taste of monarch butterflies. How does the viceroy benefit from looking like the monarch?

- A. The viceroy mates with the monarch.
- B. The viceroy competes for the same food.
- C. The viceroy is not a target for predators.
- D. The viceroy is the first to form a chrysalis.

- 5 A camper is staying at Moosehead Lake. The map below shows the location of Moosehead Lake.



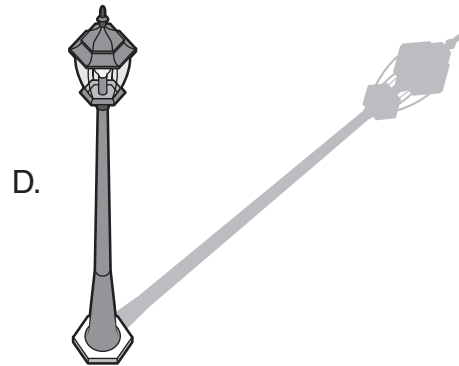
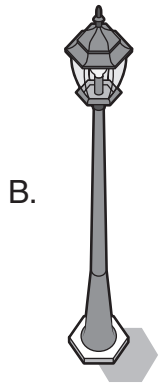
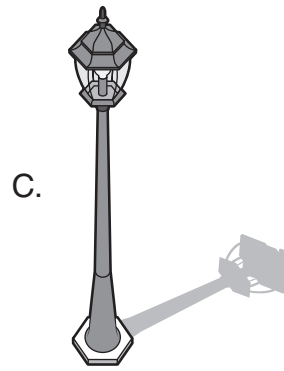
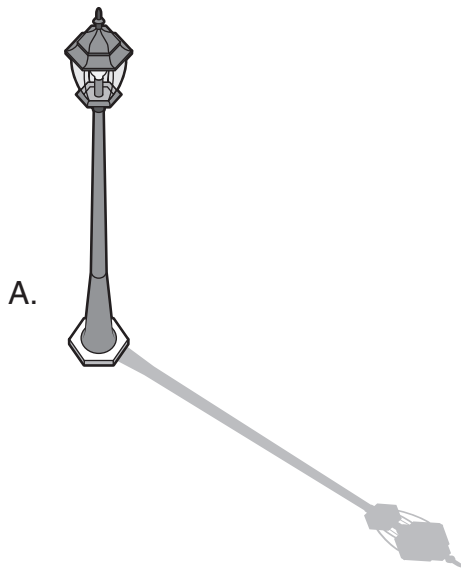
Smoke drifts up from the camper's campfire. A strong wind is blowing from the east.

Which direction will the wind **most likely** blow the smoke from the fire?

- A. toward New Brunswick, Canada
- B. toward Quebec, Canada
- C. toward Augusta
- D. toward Mt. Katahdin

PLEASE GO ON →

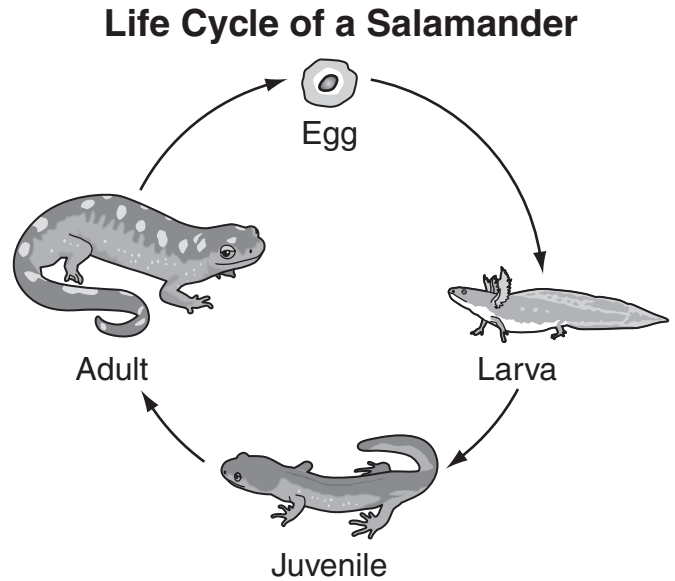
6 Based on these shadows, which picture was taken at about noon (12 P.M.)?



PLEASE GO ON →

- 7 A ship travels 80 kilometers around an island in 2 hours. What is the speed of the ship?
- A. 0.025 km/h
 - B. 40 km/h
 - C. 78 km/h
 - D. 160 km/h

- 8 The diagram below shows the life cycle of a salamander.



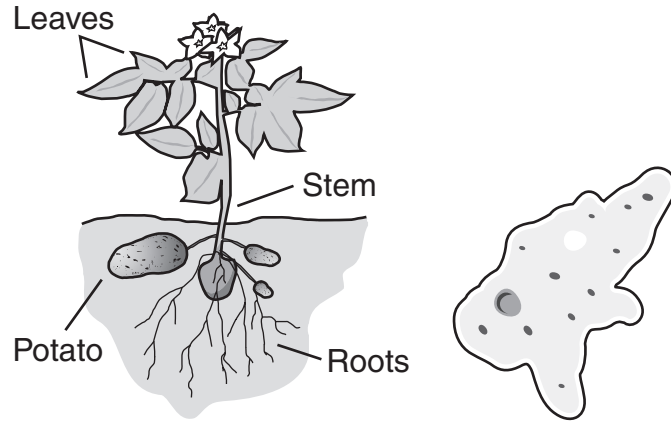
Why is the larva better able to swim than the adult?

- A. The larva is smaller than the adult.
- B. The larva has shorter legs than the adult.
- C. The larva has a fin-shaped tail and the adult does not.
- D. The larva can fit between water plants and the adult cannot.

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 The pictures below show a potato plant and an amoeba.



Potato Plant

Amoeba

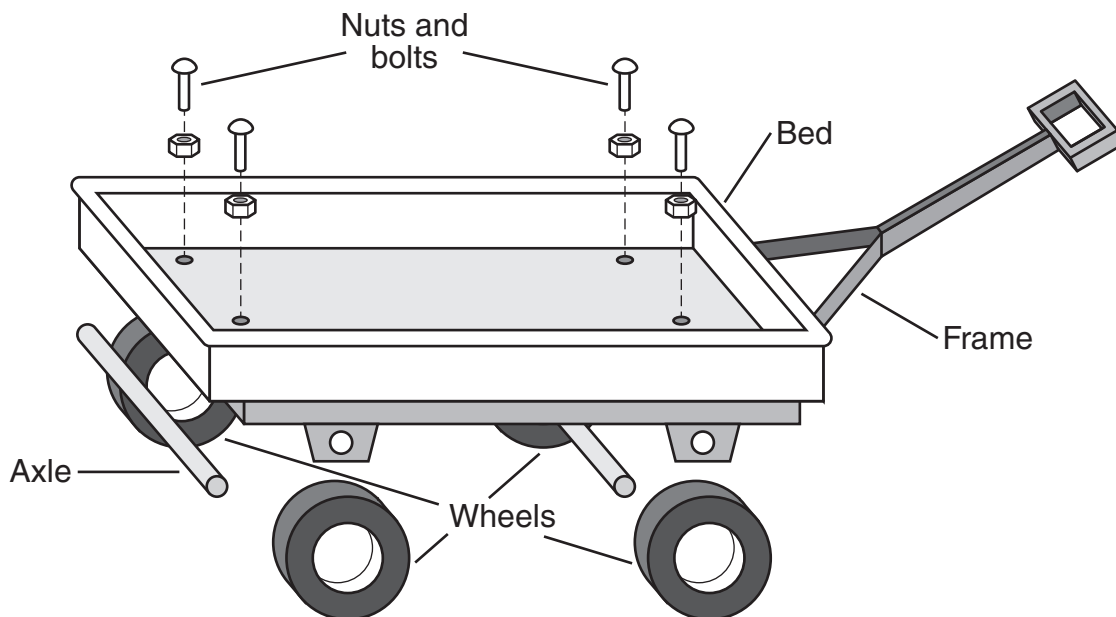
- Describe **two** ways a potato plant and an amoeba are similar.
- Describe **two** ways a potato plant and an amoeba are different.

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

PLEASE GO ON →

- 10 The diagram below shows a wagon and the weights of its parts.

Wagon Parts



Part Name	Number of Pieces	Weight of Part (kg)	Total Weight of Part(s) (kg)
Bed	1	20	20
Frame	1	10	10
Wheels	4	5	?
Axles	2	2	?
Nuts	4	1	?
Bolts	4	1	?

- Calculate the weight of the wagon's wheels, axles, nuts, and bolts.
- Explain whether the total weight of all the wagon parts is equal to, less than, or greater than the weight of the complete wagon. Use evidence to support your answer.

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

