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The sample items included in this set can be used by students and teachers to become familiar with the kinds of items students will encounter on the paper/pencil summative assessments. The sample items demonstrate the rigor of Michigan’s academic content standards. They are not to be interpreted as indicative of the focus of the M-STEP assessments; they are simply a collection of item samples. Every standard is not included in this sample set.
Read the passage and answer questions 1 through 8.

New Homes for Hermit Crabs
by Bart King

Hermit crabs are nature’s recyclers. Like many other crabs, the hermit crab eats waste. By living on sea scraps, hermit crabs help keep oceans and shores clean. Some hermit crabs hide in reefs or live in shallow waters, while others scuttle on the ocean floor. There are also hermit crabs that spend most of their lives ashore.

Unlike other crabs, the hermit crab has a thin outer shell over its soft tail. This makes the hermit crab easy prey for hungry predators. Hermit crabs stay safe by living in old seashells. A hermit crab is picky; it tries on many shells until it finds one that fits just right. The hermit crab backs into its new home and uses its tail and rear legs to grab onto the shell and carry it. If a predator shows up, the crab retreats into its shell and blocks the entrance with its strong claws.

During a lifetime, one hermit crab will inhabit many different seashells. As a hermit crab grows, the crab leaves its home, upgrading to a larger shell. In recent years, however, many hermit crabs have had trouble finding their perfect homes. What is the problem? There are not enough shells to go around!

One reason for the seashell shortage is that ocean water is not as clean as it once was. This has caused chemical changes to sea water. Some sea animals, like snails, are affected by these changes. Now there are fewer snails making shells. People visiting the beach often take shells home as souvenirs. This is another problem. Other people even take shells for their own pet hermit crabs! They do not realize that hermit crabs in the wild need those shells too.

The hermit crabs in the ocean have learned to adapt to the changing housing situation. Like the good recyclers they are, hermit crabs started moving into small bottles, plastic cups, and other ocean litter. None of these are very good choices for crabs.

Now people are working to solve this hermit crab housing shortage. They are teaching beach-goers to leave seashells where they belong—at the seashore! Some people even make fake seashells that they hope the hermit crabs will like. For example, a group called Project Shellter invited people who visited their website to create different designs for hermit crab shells.

These designers had a lot to consider. What kind of material should be used to build a seashell? The material must be light enough for the hermit crab to carry, but strong enough to protect the crab from predators. The fake shells could not contain glue or any other substance that might harm a hermit crab. Another challenge with
building a hermit crab home was the opening to the shell. Too big would mean the crab would not feel safe. Too small would be uncomfortable, and the crab would not want to move in.

Project Shellter designs were tested on hermit crabs in two aquariums. That way, project leaders could watch the crabs to find out which shells were their favorites. The most popular of these new hermit crab homes are made of plastic but they look like real seashells.

These artificial shells have two important purposes. People who own hermit crabs can give them to their pets. That keeps real seashells in the ocean, rather than in home aquariums. The Project Shellter shells are also placed in the wild for hermit crabs to find. Lucky hermit crabs can move into these new dream homes and leave those plastic cups behind.

1. Read the sentence and the directions that follow.

Chemical changes in the ocean waters have affected the production of seashells used by hermit crabs.

Which sentence from the paragraph **best** shows this idea?

**A.** One reason for the seashell shortage is that ocean water is not as clean as it once was.

**B.** This has caused chemical changes to sea water.

**C.** Some sea animals, like snails, are affected by these changes.

**D.** Now there are fewer snails making shells.

**E.** People visiting the beach often take shells home as souvenirs.

**F.** This is another problem.

**G.** Other people even take shells for their own pet hermit crabs!

**H.** They do not realize that hermit crabs in the wild need those shells too.
2. Read the paragraph and the directions that follow.

During a lifetime, one hermit crab will inhabit many different seashells. As a hermit crab grows, the crab leaves its home, upgrading to a larger shell. In recent years, however, many hermit crabs have had trouble finding their perfect homes. What is the problem? There are not enough shells to go around!

Which statement best describes the main idea of the paragraph?

A. Moving around is common for hermit crabs.
B. Hermit crabs are larger today than they used to be.
C. Hermit crabs are displeased with the remaining seashells in the ocean.
D. As hermit crabs grow, fewer seashells are available for them to use as homes.

3. The author uses a word that means “fake” in the text. Which sentence has a word that means “fake”?

A. These artificial shells have two important purposes.
B. People who own hermit crabs can give them to their pets.
C. That keeps real seashells in the ocean, rather than in home aquariums.
D. The Project Shellter shells are also placed in the wild for hermit crabs to find.
E. Lucky hermit crabs can move into these new dream homes and leave those plastic cups behind.

4. What conclusion can be drawn about the author’s point of view about litter? Support your answer with details from the text.

5. What conclusion can be drawn about the effects people have on hermit crabs? Support your answer with details from the text.
6. The question has two parts. First, answer part A. Then, answer part B.

**Part A**

Read the paragraph from the text and the directions that follow.

One reason for the seashell shortage is that ocean water is not as clean as it once was. This has caused chemical changes to sea water. Some sea animals, like snails, are affected by these changes. Now there are fewer snails making shells. People visiting the beach often take shells home as souvenirs. This is another problem. Other people even take shells for their own pet hermit crabs! They do not realize that hermit crabs in the wild need those shells too.

Which statement **best** describes what the information in the paragraph shows about the author’s point of view?

A. The author believes that people visiting beaches can cause harm without knowing it.

B. The author believes that there have been a lot of changes in the quality of water in the ocean.

C. The author believes that snail production needs to increase to provide more homes for hermit crabs.

D. The author believes that people visiting beaches often don’t think about how taking seashells home with them adds to the shortage of seashells for hermit crabs.

**Part B**

Which sentence from the text **best** supports your answer in part A. Choose one option.

A. One reason for the seashell shortage is that ocean water is not as clean as it once was.

B. This has caused chemical changes to sea water.

C. Now there are fewer snails making shells.

D. People visiting the beach often take shells home as souvenirs.

E. Other people even take shells for their own pet hermit crabs!

F. They do not realize that hermit crabs in the wild need those shells too.
7. What is the best reason the author chose to end the text with a summary?
   A. to highlight the hermit crab’s ability to adapt to the environment
   B. to show how people can benefit both hermit crabs and the ocean
   C. to help the reader understand why the hermit crab changes homes
   D. to inform the reader about the damage humans have done to the ocean

8. Read the sentence from the text.
   Hermit crabs are nature’s recyclers.
   What does the use of the word recyclers suggest about the author’s point of view?
   A. It reminds readers how important it is to clean up ocean beaches.
   B. It shows readers how to take care of litter when they are at the beach.
   C. It shows how skilled sea creatures are at using what is available to them.
   D. It shows how clean nature is on its own and suggests readers do the same.
9. A student is writing a report for science class about ways to model good health. Read the introduction and the first sentence of the next paragraph of the draft of the report. Then, complete the task that follows.

Living a healthy life is one of the most important things a person can do, and this often means making the right choices. These choices can help determine how much energy a person has and even how long he or she lives.

What do we need to do to stay healthy?

The student took these notes from reliable sources.

1. stay physically active with exercise
2. stay away from sugary or fried foods
3. eat healthy foods (fruits, vegetables, chicken, or fish)
4. do physical activities during recess
5. get plenty of rest

Use the student’s notes to write a paragraph that adds more facts or concrete details to support the underlined sentence of the report.
A student is writing a report about dolphins for a science assignment. The student needs to revise the draft of the report to eliminate ideas that do not support the main idea.

Main idea: Dolphins are mammals that have adapted to live in the ocean.

Choose two sentences that do not support the main idea and so should be removed.

A. All mammals, including dolphins, share certain features.
B. Since dolphins are mammals, they give birth to live babies.
C. Like all mammals, dolphins produce milk for their young, are warm-blooded, and have hair.
D. Cold-blooded animals cannot control their body temperature.
E. Unlike fish, which have gills, dolphins breathe air using lungs.
F. Young amphibians have gills.
G. Dolphins must make trips to the ocean’s surface to breathe.
H. The blowhole on a dolphin’s head acts as a “nose” making it easy for the dolphin to get air.
I. Dolphins are among the few mammals that live entirely in the water.
11. A student is writing an opinion letter to her teacher about snacks in her classroom. Read a draft of the letter and complete the task that follows.

Dear Mrs. Johnson,
I am writing to make a suggestion that you allow us students to keep healthy snacks in our desks to eat whenever we want. During class we are often hungry, and it distracts us from our work. If we could have a snack whenever we wanted one instead of just at snack time, I think we would be able to concentrate better on our assignments. In addition, healthy snacks are good brain food. Therefore, they would help us finish our work on time and get better grades. I know you might say that the room would be too messy with all of the snacking going on, but I bet that students would agree to clean up after themselves if they could have snacks when they wanted them.

Sincerely,
Tina Young

Which sentence is the best closing statement for this student’s letter?

A. Please allow us to bring snacks that are easy to clean up and keep in our desks until snack time.

B. Please think about requiring students to bring only healthy snacks to school for snack time so that they will get better grades.

C. Please consider my request to keep healthy snacks that are easy to clean up in our desks so that we can have them when we are hungry and focus on our work.

D. Please ask all of the students if they would like to bring something healthy for snack time every day so that they can focus on their work.
12. Annie is writing a story for her class. Read the draft of the story and complete the task that follows.

After hiking for two hours, I longed to get back to the awesome nature center at the trailhead. The dusty hiking trail was taking its toll as my body was beginning to bother me. The moist air of this summer day was leaving me breathless, and the pecking of the woodpeckers was on my last nerve. To add to my problems, I was having trouble avoiding the dangerous vines on the edge of the trail that the park ranger had warned us to avoid.

The writer wants to replace the underlined words to make her meaning more exact. Which two sets of words would make her word choices better?

A. feel better, ugly
B. ache, poisonous
C. shake, suspicious
D. throb, toxic
E. feel strange, drooping
F. improve, tangled
13. A student is writing a research report about the Grand Canyon. Read the sentences from his report and the directions that follow.

Many animals live in the Grand Canyon. These animals need the Colorado River, which runs at the bottom of the canyon. The river gives the animals water to drink and a place to swim. Because lots of plants grow near the river, plant-eating animals can easily locate food there. Many people travel to the river in the Grand Canyon hoping to see the many different types of animals who live there.

Select all of the sources that would most likely give the student more information about the ideas he has written.

A. www.tripstothecanyon.com
   Visit the Grand Canyon with your family. There are many things you can see on your trip. Let us help you plan your trip now!

B. www.canyonrivertravel.com
   There are many ways to explore the Grand Canyon. People can walk or ride a boat down the river. Families can even ride donkeys on the trails.

C. www.grandcanyonform.com
   How was the Grand Canyon made? The canyon was formed by the river that runs through the middle. See and learn about different types of rocks that are found in the Grand Canyon.

D. www.animalpicturesEZ123.com
   Canyons are great places to take pictures of animals. Here are some tips on how to take pictures of animals.

E. www.wildlifeofgrandcanyon.com
   Here is a list of the most common wildlife found within the Grand Canyon. Get facts about their homes, what they eat, and which ones to avoid.

F. www.grandcanyontrails2hike.com
   The Colorado River is a good place for many types of living things to find food and water. Read all about how the river helps living things in the canyon.
A student is writing a report about exploring the ocean. The student wrote the following opinion: Exploring oceans is important. He found a source.

Read the source. Choose the sentences that support the opinion. Choose all that apply.

A. Ocean researchers explore oceans and make many discoveries that are sometimes not planned.

B. These researchers use specialized cameras and equipment to gather information.

C. Once information is collected, the researchers record their findings.

D. Their findings benefit living things in many ways.

E. For example, sometimes research provides details about new sources of energy or food.

F. At other times, research reveals how particular regions are being affected by specific climate changes.

G. The findings of the researchers and the resources they use can create interest in the science fields.
15. A student is writing a research report about musical instruments. He wrote an opinion in the report. Read the opinion and the directions that follow.

There are many kinds of musical instruments, and it can be hard to choose which one to learn how to play. When deciding what instrument to learn how to play, people often consider the size of the instrument. Many young children play the violin because violins come in tiny sizes. The sound of an instrument is also important to consider when choosing an instrument. For example, some people like the trumpet for its very loud sound. However, the best instrument to learn how to play is the piano. A piano has keys that, when pressed down, play different notes.

The student took notes about musical instruments. Choose two notes that support the student’s opinion.

A. It is difficult to bring a piano to a party to play.
B. It is very easy to play a song on the piano after just a few short lessons.
C. Some people say the human voice is the most beautiful instrument of all.
D. Many people enjoy listening to music, no matter what instruments are used.
E. Some piano students quit because they do not like to practice or do not have time for it.
F. Learning how to play the piano can help people learn how to play other instruments as well.