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ILEARN
English/Language Arts (ELA)
Item Answer Key
This question has two parts. First, answer Part A. Then, answer Part B.

**Part A**

What is a central idea of Passage 1?

- A. The Marine Band is famous because of its nickname.
- B. The Marine Band is the most popular band in the United States.
- C. The Marine Band is a notable part of American musical history.
- D. The Marine Band plays for major events throughout the country.

**Part B**

Which detail from Passage 1 supports the answer in Part A?

- A. “It is the oldest professional musical organization in the United States.” (paragraph 1)
- B. “Sousa composed many popular songs, especially marches, earning the nickname, ‘The March King.’” (paragraph 2)
- C. “The band or portions of the band give more than 700 performances every year.” (paragraph 3)
- D. “The band also performs for schools and communities across the nation.” (paragraph 3)
This question has two parts. First, answer Part A. Then, answer Part B.

**Part A**
What role did John Philip Sousa play in the history of the United States Marine Band?

- A) He was the first band leader.
- B) He helped introduce the band to the public.
- C) He encouraged band members to perform professionally.
- D) He expanded the types of music that the band played at events.

**Part B:**
Any combination of two of these answers:

- “Under his leadership, the band grew in size and became more famous.”
- “With Sousa directing the band, it made its first recordings in 1890.”
- “In 1891, Sousa took the band on its first national tour.”

<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
</table>
| 2    | 2   | 6.RN.2.3    | Part A: B  
Part B: Any combination of two of these answers:  
“Under his leadership, the band grew in size and became more famous.”  
OR  
“With Sousa directing the band, it made its first recordings in 1890.”  
OR  
“In 1891, Sousa took the band on its first national tour.” |
Part B
Select two sentences from paragraph 2 to support the answer in Part A.

2 Perhaps the most important figure in the band’s history was John Philip Sousa. He led the band from 1880 until 1892. Under his leadership, the band grew in size and became more famous. Sousa composed many popular songs, especially marches, earning the nickname, “The March King.” “The Stars and Stripes Forever” is probably his most well-known song. Ronald Reagan signed a law in 1987 declaring it our official national march. With Sousa directing the band, it made its first recordings in 1890. In 1891, Sousa took the band on its first national tour.
This question has two parts. First, answer Part A. Then, answer Part B.

**Part A**

What is the author’s purpose in Passage 1?

- to describe the development of the Marine Band to readers
- to inform readers about where the Marine Band plays its shows
- to convince readers that leadership is important to the Marine Band
- to explain to readers how the Marine Band plans for each musical performance

**Part B**

How does the author support the purpose identified in Part A?

- by sharing the patriotic songs the band prefers to play
- by detailing the growth of the band throughout the years
- by listing events that the band attends over the course of a year
- by comparing one past leader of the band to more recent directors

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<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
</table>
| 3    | 2   | 6.RN.3.3    | Part A: A  
Part B: B |
What conclusion can a reader draw using information in both Passage 1 and the audio?

A. Many famous musicians got their start by playing in the Marine Band.
B. Jefferson gave the Marine Band its nickname because of its inspiring music.
C. The Marine Band is a source of pride for its members and for American citizens.
D. The Marine Band spends hours rehearsing and practicing for major performances.
Read this sentence from Passage 1.

“Today, the band is one of the most prestigious in the country.” (paragraph 3)

Which two phrases from paragraph 1 provide clues to the meaning of the word prestigious?

- [ ] "only drums and fifes"
- [ ] "a full orchestra"
- [x] "best musicians in the country"
- [x] "oldest professional musical organization"
- [ ] "made the band noticeable"

<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>2</td>
<td>6.RV.2.1</td>
<td>C, D</td>
</tr>
</tbody>
</table>
How does paragraph 3 add to the information about the United States Marine band in Passage 1?
A. by explaining why the band plays the particular music it plays
B. by describing when John Philip Sousa reached his peak of popularity
C. by highlighting why the band is seen as a benefit to the nation in present times
D. by giving examples that show why John Philip Sousa was the most popular leader
Which sentence from the text best summarizes the central idea of the text?

A. “It all started a few months ago when my mom and dad made a deal with me.”

B. “The dog will be your responsibility,’ Dad warned, ’—and not just when it’s convenient.’”

C. “She was a 30-pound ball of fur, claws, and teeth with an uncanny ability to jump, dig, and chew.”

D. “But the teacher said it was the most important class of the series because she was going to talk about the commands to ‘stay’ and ‘come.’”
<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>3</td>
<td>6.RL.3.2</td>
<td></td>
</tr>
</tbody>
</table>

**Score: 2**

- The response provides one or more of the following inferences about the relationship between the narrator and her dog:
  - They are close.
  - They both have worked hard.
  - The dog has done well in obedience training school.
  - Other inferences supported by the text.
- Gives sufficient evidence to support one or more inferences.
- Details can include, but are not limited to:
  - the narrator uses the word “nailed” to describe how Libby did on the test.
  - “It was impressive” shows that the narrator is pleased with Libby’s accomplishments.
  - the narrator hugged Libby to show her enthusiasm and pleasure about Libby’s accomplishments.
  - the narrator gave Libby “the jackpot” of five sausage treats to show her pleasure about Libby’s accomplishments.
  - the narrator says, “Way to go, Libs.”
  - the narrator says, “I’m so proud of you.”

*Exemplar: One inference that could be made about the narrator is that although it was hard work and a lot of responsibility, it was worth it to see Libby succeed. The narrator worked extra hard to train Libby to come when she was called so she wouldn’t go into the street. The narrator also gave up a trip to the water park so she wouldn’t miss a puppy training class. It was all worth it in the end because Libby not only graduated, but was named most improved.*

**Score: 1**

- The response provides one or more of the inferences about the relationship and pride the narrator has with her dog provided in the two-point rationale.
- Gives limited evidence to support the inference with general reference to examples like those identified in the two-point rationale.

*Exemplar: One inference is that the narrator is happy about her dog. Libby did a good job in puppy class, she learned to sit and stay.*

**Score: 0**

- A response gets no credit if it provides no evidence of the feelings of the narrator about Libby’s accomplishments.

*Exemplar: Libby is a great dog.*
What inference can be made about the narrator's feelings about Libby's successes? Support your answer with details from the text.
Read the sentences from the text and the question that follows.

Libby, a four-month-old yellow Labrador retriever, arrived shortly thereafter. She was a 30-pound ball of fur, claws, and teeth with an uncanny ability to jump, dig, and chew.

“I think she is part-kangaroo,” I said as she bounced up and down on her hind legs to greet me.

She could also run like a racehorse. Each day after school I exercised Libby by taking her for long walks or by repeatedly throwing a tennis ball for her to chase down. When it was too wet to play outside, I lobbed an assortment of furry, squeaky toys up and down the stairs for her to retrieve. She never seemed to tire.

What do the descriptions “part-kangaroo” and “run like a racehorse” suggest about Libby?

A. She does not behave well.
B. She is playful and attentive.
C. She does not act like a dog.
D. She is energetic and excitable.
<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3</td>
<td>6.W.4</td>
<td></td>
</tr>
</tbody>
</table>

**Score: 2**
- provides an adequate opening or introduction to the narrative that may establish setting, set up the action to come, and/or introduce the narrator and/or other characters for audience and purpose
- adequately connects to or sets up the body of the narrative

*Exemplar:* Andy had woke up on a Saturday morning excited to go outside and play touch football with his friends. After Andy had got dressed he went downstairs and told his mom, “Bye mom I’m going outside to play football with my friends.” “Andy wait,” his mom said, “I need your help to make lunch remember I have a broken wrist.” “Okay mom,” Andy said.

**Score: 1**
- provides an opening or introduction to the narrative that may partially establish setting, or partially set up the action to come, and/or partially introduce the narrator and/or other characters
- provides a limited and/or awkward connection to the body of the narrative

*Exemplar:* Andy helps his mother by making a soup on a Saturday morning because his mother broke her wrist.

**Score: 0**
- provides a minimal opening or introduction to the narrative that may fail to establish setting, and/or fail to set up the action to come, and/or fail to introduce the narrator and/or other characters
- provides no connection to the body of the narrative

*Exemplar:* A boy is helping his mother with her cooking on a Saturday morning but the boy doesn’t really want to but towards the middle to the end he understands that his mother has a broken wrist. It is hard to cook or do anything like that so he needs to understand that he isn’t being punished or something like that he is helping his mom which is a good thing and he should be happy that he could help her when she was hurt because she would probably do the same for him.
A student is writing a narrative for class about a boy helping his mother. Read the draft paragraphs from the narrative and complete the task that follows.

Andy stirred the large pot of soup, watching as orange carrots and white potatoes bubbled in the broth. He and his mom had spent the morning cutting and dicing onions, celery, and green beans. After they added the spices, a wonderful aroma filled the kitchen, but Andy had other things on his mind.

As he watched the steam escape from the pot, Andy imagined his friends playing in the park. Everyone’s having fun but me, he thought to himself. If I’m lucky, we can start another game of touch football after lunch.

“Andy,” his mother said, interrupting his thoughts, “thank you for helping out. I know this is not how you wanted to spend your Saturday morning. Everything has been so difficult since I broke my wrist, but you have made things much better.”

Write an introduction to the narrative that sets up the action to come. Type your answer in the space provided.
ILEARN
English/Language Arts (ELA)
Performance Task Item Answer Key
Most of the sources provide information about hiking in national parks. Which source would be most relevant to students researching how to get the most enjoyment out of hiking in a national park? Justify and support your answer with two pieces of evidence from the most relevant source.

### Rubric

**Score: 2**
Response is an identification and an adequate evidence-based justification of which source has the most relevant information for students researching how to get the most enjoyment out of hiking in a national park supported by two pieces of evidence from the identified source.

**Score: 1**
Response is an identification and a limited/partial evidence-based justification of which source has the most relevant information for students researching how to get the most enjoyment out of hiking in a national park supported by two vague or loosely related pieces of evidence from the identified source. OR
Response is an identification and an adequate evidence-based justification of which source has the most relevant information for students researching how to get the most enjoyment out of hiking in a national park supported by one piece of evidence from the identified source.

**Score: 0**
Response is an explanation that is insufficient, incorrect or irrelevant. Just identifying the source is insufficient.
Source #2 would be the most relevant source to students who are researching how to get the most enjoyment out of hiking in a national park. This would be the most relevant source because it encourages readers to take in all of the things that are going on around them. The author of Source #2 writes, “Notice the big picture . . . but also the little details.” This source also encourages readers to do some further research on things that they saw and found interesting on a hike. The author advises, “Use the descriptions and drawings in your journal to look up more information.”

Exemplar 1 point

Source #2 would be the most relevant source to students who are researching how to get the most enjoyment out of hiking in a national park. This would be the most relevant source because it encourages readers to take in all of the things that are going on around them. The author of Source #2 advises, “Notice the big picture . . . but also the little details.”

Exemplar 0 points

Source #2 would be the most relevant source to students who are researching how to get the most enjoyment out of hiking in a national park.
Some of the sources suggest there are certain rules that people should follow when they decide to go on a hike. Provide **two** pieces of evidence, one piece of evidence each from two different sources, which support this idea and explain how each piece of evidence supports the idea that there are certain rules that people should follow when they decide to go on a hike. Identify the source for each piece of evidence by title or number.

**Rubric**

**Score: 2**
Response is an identification of two pieces of evidence from different sources that support there are certain rules that people should follow when they decide to go on a hike and an adequate evidence-based explanation of how each piece of evidence supports the idea there are certain rules that people should follow when they decide to go on a hike. Student cites the source for each piece of evidence.

**Score: 1**
Response is an identification of two pieces of evidence from different sources that support there are certain rules that people should follow when they decide to go on a hike but does not provide an evidence-based explanation of how each piece of evidence supports the idea there are certain rules that people should follow when they decide to go on a hike. Student cites the source for each piece of evidence.

OR
Response is an identification of two pieces of evidence from different sources that support there are certain rules that people should follow when they decide to go on a hike and a limited/partial evidence-based explanation of how each piece of evidence supports the idea there are certain rules that people should follow when they decide to go on a hike. Student cites the source for each piece of evidence.

OR
Response is an identification of one piece of evidence from one source that supports there are certain rules that people should follow when they decide to go on a hike and an adequate evidence-based explanation of how that piece of...
When someone decides to go on a hike they should follow certain rules. According to Source #4 it is important not to feed or touch the wild animals. This can be dangerous for the hiker and the animal. Wild animals can be dangerous and bite. Also if the animals get used to being fed by humans they become dependent on people and they won't look for food on their own. Also, Source #3 says that you should know the type of terrain you are hiking on. If the terrain is too difficult, you may not be able to finish the hike, and then someone may need to come and rescue you.

Exemplar 2 points

When someone decides to go on a hike they should follow certain rules. According to Source #4 it is important not to feed or touch the wild animals. This can be dangerous for the hiker and the animal. Wild animals can be dangerous and bite. Also if the animals get used to being fed by humans they become dependent on people and they won't look for food on their own. Also, Source #3 says that you should know the type of terrain you are hiking on. If the terrain is too difficult, you may not be able to finish the hike, and then someone may need to come and rescue you.

Exemplar 1 point

When someone decides to go on a hike they should follow certain rules. According to Source #4 it is important not to feed or touch the wild animals. This can be dangerous for the hiker and the animal. Wild animals can be dangerous and bite. Also if the animals get used to being fed by humans they become dependent on people and they won't look for food on their own.

Exemplar 0 points

It is fun to see wild animals when you are hiking.
### Performance Task Item 3

<table>
<thead>
<tr>
<th>Source #1: The Three “R”s of Folding Time Grand Canyon Style</th>
<th>Source #2: Follow in Muir’s Footsteps—Take a Nature Walk</th>
<th>Source #3: Take a Hike!</th>
<th>Source #4: How to Be a Green Traveler</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is a good idea to bring food when you hike.</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Try to conserve water while you are in the park.</td>
<td>✗</td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>Primarily, three types of rock make up the Grand Canyon.</td>
<td>✗</td>
<td></td>
<td>✗</td>
</tr>
</tbody>
</table>
Now begin work on your story. Manage your time carefully so that you can

• plan your multi-paragraph story.
• write your multi-paragraph story.
• revise and edit the final draft of your multi-paragraph story.

Word-processing tools and spell check are available to you.

For Part 2, you are being asked to write a story that is several paragraphs long, so please be as thorough as possible. Type your response in the space provided. The box will expand as you type.

Remember to check your notes and your prewriting/planning as you write and then revise and edit your story.
### 4-Point Narrative Performance Task Writing Rubric (Grades 3–8) Organization/Purpose

<table>
<thead>
<tr>
<th>Score 4</th>
<th>Score 3</th>
<th>Score 2</th>
<th>Score 1</th>
</tr>
</thead>
</table>
| The organization of the narrative, real or imagined, is fully sustained and the focus is clear and maintained throughout:  
- an effective plot helps to create a sense of unity and completeness  
- effectively establishes a setting, narrator/characters, and/or point of view  
- consistent use of a variety of transitional strategies to clarify the relationships between and among ideas  
- natural, logical sequence of events from beginning to end  
- effective opening and closure for audience and purpose | The organization of the narrative, real or imagined, is adequately sustained, and the focus is adequate and generally maintained:  
- an evident plot helps to create a sense of unity and completeness, though there may be minor flaws and some ideas may be loosely connected  
- adequately establishes a setting, narrator/characters, and/or point of view  
- adequate use of appropriate transitional strategies to clarify the relationships between and among ideas  
- adequate sequence of events from beginning to end  
- adequate opening and do sure for audience and purpose | The organization of the narrative, real or imagined, may be somewhat sustained and may provide little or no focus:  
- there may be an inconsistent plot, and/or flaws may be evident  
- unevenly or minimally establishes a setting, narrator/characters, and/or point of view  
- uneven use of appropriate transitional strategies or little variety  
- weak or uneven sequence of events  
- opening and closure, if present, are weak | The organization of the narrative, real or imagined, may be maintained but may provide little or no focus:  
- there is little or no discernible plot or there may just be a series of events  
- may be brief or there is little to no attempt to establish a setting, narrator/characters, and/or point of view  
- few or no appropriate transitional strategies may be evident and may cause confusion  
- little or no organization of an event sequence; frequent extraneous ideas and/or a major drift may be evident  
- opening and/or closure may be missing or unsatisfactory |

No Score: Insufficient (includes copied text); in a language other than English; off-topic; or off-purpose.
### 4-Point Narrative Performance Task Writing Rubric (Grades 3–8) Development/Elaboration

<table>
<thead>
<tr>
<th>Score 4</th>
<th>Score 3</th>
<th>Score 2</th>
<th>Score 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The narrative, real or imagined, provides thorough, effective elaboration using relevant details, dialogue, and/or description: • experiences, characters, setting and/or events are clearly developed • connections to source materials may enhance the narrative • effective use of a variety of narrative techniques that advance the story or illustrate the experience • effective use of sensory, concrete, and figurative language that clearly advances the purpose • effective, appropriate style enhances the narration</td>
<td>The narrative, real or imagined, provides adequate elaboration using details, dialogue, and/or description: • experiences, characters, setting, and/or events are adequately developed • connections to source materials may contribute to the narrative • adequate use of a variety of narrative techniques that generally advance the story or illustrate the experience • adequate use of sensory, concrete, and figurative language that generally advances the purpose • generally appropriate style is evident</td>
<td>The narrative, real or imagined, provides uneven, cursory elaboration using partial and uneven details, dialogue, and/or description: • experiences, characters, setting, and/or events are unevenly developed • connections to source materials may be ineffective, awkward, or vague but do not interfere with the narrative • narrative techniques are uneven and inconsistent • partial or weak use of sensory, concrete, and figurative language that may not advance the purpose • inconsistent or weak attempt to create appropriate style</td>
<td>The narrative, real or imagined, provides minimal elaboration using few or no details, dialogue, and/or description: • experiences, characters, setting, and/or events may be vague, lack clarity, or confusing • connections to source materials, if evident, may detract from the narrative • use of narrative techniques may be minimal, absent, incorrect, or irrelevant • may have little or no use of sensory, concrete, or figurative language; language does not advance and may interfere with the purpose • little or no evidence of appropriate style</td>
</tr>
</tbody>
</table>

**No Score:** Insufficient (includes copied text); in a language other than English; off-topic; or off-purpose.

### 2-Point Narrative Performance Task Writing Rubric (Grades 3–8) Conventions

<table>
<thead>
<tr>
<th>Score 2</th>
<th>Score 1</th>
<th>Score 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>The response demonstrates an adequate command of conventions: • adequate use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling</td>
<td>The response demonstrates a partial command of conventions: • limited use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling</td>
<td>The response demonstrates little or no command of conventions: • infrequent use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling</td>
</tr>
</tbody>
</table>

**No Score:** Insufficient (includes copied text); in a language other than English; off-topic; or off-purpose.

**Holistic Scoring:**
- **Variety:** A range of errors includes sentence formation, punctuation, capitalization, grammar usage, and spelling
- **Severity:** Basic errors are more heavily weighted than higher-level errors.
- **Density:** The proportion of errors to the amount of writing done well. This includes the ratio of errors to the length of the piece

The points for Organization/Purpose and Evidence/Elaboration rubrics are averaged together for one 4-point score. This is combined with the Conventions score for a 6-point total score.
Select all of the expressions that are equivalent to $3.1^4$.

- ✔️ $(3.1)(3.1)(3.1)(3.1)$
- ✔️ $(9.61)(3.1)(3.1)$
- □ $(3.1)(3.1)(2)$
- ✔️ $(9.61)(9.61)$
- □ $(3.1)(4)$
Eli ran for two weeks. During the first week, Eli ran 12 miles. During the next week, he ran 15 miles.

What is the ratio of the number of miles Eli ran in the first week to the total number of miles he ran in both weeks?

A.   12:15  
B.    12:27  
C.  15:27  
D.     15:12
An expression is shown.

6n

What is the value of the expression when \( n = 7 \)?

42
The amount of rainfall, in inches, in a city each month for 12 months is shown.

<table>
<thead>
<tr>
<th>Month</th>
<th>Amount of Rain (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>2.04</td>
</tr>
<tr>
<td>February</td>
<td>1.96</td>
</tr>
<tr>
<td>March</td>
<td>2.65</td>
</tr>
<tr>
<td>April</td>
<td>1.66</td>
</tr>
<tr>
<td>May</td>
<td>1.91</td>
</tr>
<tr>
<td>June</td>
<td>2.14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Amount of Rain (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>3.34</td>
</tr>
<tr>
<td>August</td>
<td>2.89</td>
</tr>
<tr>
<td>September</td>
<td>2.97</td>
</tr>
<tr>
<td>October</td>
<td>1.89</td>
</tr>
<tr>
<td>November</td>
<td>1.82</td>
</tr>
<tr>
<td>December</td>
<td>1.68</td>
</tr>
</tbody>
</table>

Click on the graph to create a histogram for these data.
Use the Connect Line tool to create a rectangle with an area of 35 square units and one side with vertices at (1, 3) and (1, -4).

Select two (2) points to connect or press and drag to create and connect points.
It takes 4 hours to paint 15 doors at the factory.

At this rate, how many hours will it take to paint 90 doors?

24
A school earns $70 from selling 50 tickets for the school play. Each ticket costs the same price.

How much does the school earn for 1 ticket?

$1.40

<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Calculator</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>2</td>
<td>Allowed</td>
<td>6.NS.9</td>
<td>1.40, or any equivalent value</td>
</tr>
</tbody>
</table>
A figure is shown.

What is the area, in square centimeters, of the figure?

134.5
A storage container is shown, with measurements in feet (ft).

1 ft
2 ft
2.5 ft

What is the volume, in cubic feet, of the storage container?

5

<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Calculator</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>2</td>
<td>Allowed</td>
<td>6.GM.5</td>
<td>5, or any equivalent value</td>
</tr>
</tbody>
</table>
A butcher displays the cost, in dollars, of different amounts of meat in the table shown.

<table>
<thead>
<tr>
<th>Amount of Meat (pounds)</th>
<th>Cost (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>7</td>
<td>49</td>
</tr>
</tbody>
</table>

Create an equation that can be used to find the cost, \( c \), for \( p \) pounds of meat.

\[ c = 7p \]
ILEARN Mathematics
Performance Task Item Answer Key
Using the class data shown in Table 1, complete the following frequency table.

<table>
<thead>
<tr>
<th>Pet</th>
<th>Total 1st Choice Votes</th>
<th>Total 2nd Choice Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldfish</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Hamster</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Turtle</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

**Rubric**

**Score: 1**
Student enters all correct values into the frequency table as shown.

**Score: 0**
All other responses.
Create your own method for using the votes to decide a winner. Explain your method using the information from **Table 1** to determine the winning pet.

<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Task Item 2</td>
<td>3</td>
<td>PS.4</td>
<td>See Rubric</td>
</tr>
</tbody>
</table>

**Rubric**

**Score: 2**  
Student clearly describes his/her selected method for using votes to decide a winner.  
AND  
Student explains which pet is the winner based on this method.

**Score: 1**  
Student describes which pet won, but does not support his/her answer with a method.  
OR  
Student clearly describes a method for using the given information to determine the winning pet, but then does not use his/her method to determine which pet won.

**Score: 0**  
Student just states a winning pet without explanation.

**NOTE:** As long as students use their calculations correctly from Item 1 to answer Item 2, full credit should be granted.
The goldfish is the winning pet. The reason why the goldfish won is because I counted the 1st choice votes. Then I counted the 2nd choice votes. Then I added up the 1st and 2nd choice votes.

The goldfish got 15 votes. The hamster got 11 votes. The turtle got 14 votes. Then I saw that the goldfish got the most votes.

The pet that won is the turtle because it got more votes in the first time that is why its the winner.

Although it is true that the turtle got the most votes in the first round, the student did not clearly state that the method he/she used was to consider just the 1st place votes. The student has demonstrated only a partial understanding of the mathematical content and practices essential to this item.

Although correct information and calculations are shown, the student did not explain which pet won and did not describe a method for determining the winner. No evidence is present that demonstrates the student’s understanding of the mathematical content and practices essential to this item.
Your teacher wants to use a point system to select the winning pet. She wants each pet to get a certain number of points for each 1st choice vote and a certain number of points for each 2nd choice vote.

Your teacher decides to use these rules for her point system:

- Points need to be positive whole numbers
- Points for a 1st choice vote have to be greater than or equal to the points for a 2nd choice vote.

Determine point values for the 1st and 2nd choice that would result in the turtle winning. Use words and numbers to explain how this point system results in the turtle winning.

**Rubric**

**Score: 2**

The student describes a method that meets the two criteria (assigns positive whole number of points to each first choice and second choice, and 1st choice is greater or equal to the 2nd choice values).

AND

The student gives a valid explanation for why the turtle wins using this method.

**Score: 1**

The student describes a method that meets the two criteria (assigns positive whole number of points to each first choice and second choice, and 1st choice is greater or equal to the 2nd choice values), but does not give a valid explanation for why the turtle wins using this method.

OR

The student gives a valid explanation for why the turtle wins using this method, but does not describe the method.

**Score: 0**

No viable method or viable explanation is provided.
Scoring Rationale: 2 points
The student correctly describes a method that meets the criteria and provides a valid explanation for why the turtle wins using this method. The response contains evidence of the student’s competence in problem solving and modeling to the full extent that these processes apply to this item.

Scoring Rationale: 1 point
The student correctly described a method that meets the criteria of positive whole numbers and 1st choice points greater than or equal to 2nd choice points. However, the student didn’t recognize that these point values create a tie between the goldfish and turtle. This error prevents the response from receiving full credit.
Exemplar 0 points

<table>
<thead>
<tr>
<th>B</th>
<th>I</th>
<th>U</th>
<th>Tx</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>hamster 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goldfish 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>turtle 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The turtle has more because it has 9 points and the rest have less.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scoring Rationale: 0 points

The student gives a potentially valid explanation, but the method is not described. Additionally, the inferred method (1 point for first choice votes and 0 points for second choice votes) does not meet the criteria (positive whole number values). There are significant omissions that indicate a lack of comprehension in regard to the mathematical content and practices essential to this task.
Your classmate claims that there is no point system that could result in the goldfish winning. Do you agree or disagree with your classmate? Use words and numbers to explain your reasoning.

**Rubric**

**Score: 2**
The student disagrees with his/her classmate’s claim and explains his/her reasoning by providing a point system for 1st and 2nd choice which meets the criteria from Item 3 and results in the Goldfish winning the contest. For example: Equal values for 1st and 2nd choice, 4 pts for 1st and 3 pts for 2nd, etc.

**Score: 1**
The student disagrees with his/her classmate’s claim and provides a point system for 1st and 2nd choice which may be flawed or lack sufficient detail. OR

The student agrees with his/her classmate’s claim and provides a point system that supports his/her position.

**Score: 0**
No scoring method or incorrect scoring method given.
Your principal surprises you by buying your class a turtle. He brings the turtle to your class along with a sheet from the pet store titled “Turtle Tank Rules”.

The rules state:

- Tank walls must be at least 1 foot tall so the turtle can’t climb out.
- There must be at least 400 square inches of floor space for the turtle to walk around on.

Your teacher says the volume of the tank must be smaller than 5000 cubic inches so it doesn’t take up too much room in the classroom.

Give the dimensions of a tank that would work for your new turtle. Use words and numbers to explain how your tank satisfies the "Turtle Tank Rules" and your teacher's requirement.

Volume of a rectangular prism = length × width × height

Rubric

Score: 2
The student gives dimensions that satisfy all three constraints (height, base area, and volume) and provides an explanation as to why the chosen dimensions meet all requirements.

Score: 1
The student gives dimensions that satisfy all three constraints (height, base area, and volume), but does not provide an explanation as to why the chosen dimensions meet all requirements.

OR

The student gives dimensions that satisfy two of the three constraints and provides an explanation that supports those dimensions.

Score: 0
Student only gives dimensions to satisfy one of the constraints and does not provide any valid explanation.
ILEARN Science
Item Answer Key
The diagram shows part of a roller coaster.

In which positions does the roller coaster car have the MOST kinetic energy?

- position Q and position T
- position R and position Q
- position S and position R
- position T and position R

Answer Key: C
The calendar shows some moon phases. Select the correct moon phases for the 21st and 25th of the month, and drag each phase into the correct box on the calendar.

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>New moon</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: Waning gibbous on 21st, last quarter moon on 25th.
A musk thistle plant was moved into a new environment. The musk thistles grew very well in their new home. Other plants in the area began to die because the musk thistles were taking all the nutrients from the soil.

A scientist discovered the problem and decided to bring in weevils. Weevils eat musk thistles. The weevils ate the musk thistles and greatly reduced their numbers. Some of the plants native to the area began to grow again. Which statement from the story describes a feedback mechanism that is keeping a population within certain limits?

A. The musk thistles grew very well in their new home.
B. A scientist discovered the problem and decided to bring in weevils.
C. The weevils ate the musk thistles and greatly reduced their numbers.
D. Some of the plants native to the area began to grow again.
Plants use the process of photosynthesis to make **sugar** so that they can **grow and reproduce**.
In 1990, zebra mussels, which are not native to North America, had been found in all the Great Lakes. Zebra mussels eat algae.

Which of these will MOST LIKELY happen as the population of zebra mussels in the Great Lakes increases?

- Native algae eaters will increase.
- Native algae eaters will decrease.
- Native algae eaters and predators of zebra mussels will increase.
- Native algae eaters and predators of zebra mussels will decrease.

<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>2</td>
<td>6.LS.5</td>
<td>B</td>
</tr>
</tbody>
</table>

In 1990, zebra mussels, which are not native to North America, had been found in all the Great Lakes. Zebra mussels eat algae.

Which of these will MOST LIKELY happen as the population of zebra mussels in the Great Lakes increases?

- Native algae eaters will increase.
- Native algae eaters will decrease.
- Native algae eaters and predators of zebra mussels will increase.
- Native algae eaters and predators of zebra mussels will decrease.
Biologists study the effect of different temperatures on breathing in goldfish. The number of times the fish open their gills determines how many breaths the fish take. The biologists place goldfish in three different fish tanks. The tanks are at different temperatures. They count the number of breaths taken in five minutes. Their data is given in Table 1.

<table>
<thead>
<tr>
<th>Fish Tank</th>
<th>Temperature (°C)</th>
<th>Breathing Rate (breaths/5 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>250</td>
</tr>
<tr>
<td>2</td>
<td>20 (normal temperature)</td>
<td>450</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>690</td>
</tr>
</tbody>
</table>

Table 1. Breathing Rate of Goldfish at Different Temperatures

Explain why the breathing rates of the fish are different in each tank.

Type your answer in the space provided.

The goldfish's breathing rate changes with a change in water temperature. The fish alters its breathing rate to adapt to the changes in the water temperature. This helps the fish to maintain its homeostasis that helps it survive.
Which material is Earth MOSTLY made of?

- A. ice
- B. gas
- C. rock
- D. soil

**Table:**

<table>
<thead>
<tr>
<th>Item</th>
<th>DOK</th>
<th>Standard(s)</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
<td>6.ESS.3</td>
<td>C</td>
</tr>
</tbody>
</table>
A student wants to write a report about antennas. An antenna is a device that converts electrical signals into radio waves and back. Antennas are commonly used with televisions and radios.

The student finds four sources with information about how antennas work, given in Table 1.

<table>
<thead>
<tr>
<th>Title</th>
<th>Type of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna Basics</td>
<td>published journal</td>
</tr>
<tr>
<td>How Does a Receiving Antenna Work?</td>
<td>discussion forum</td>
</tr>
<tr>
<td>Antenna Theory and Design</td>
<td>textbook</td>
</tr>
<tr>
<td>Why You Should Get an Antenna</td>
<td>magazine article</td>
</tr>
</tbody>
</table>

Select the blank boxes in the table to enter a ranking of 1, 2, 3, or 4 for each source based on its reliability. A ranking of “1” represents the most reliable source, and “4” represents the least reliable source.

- There may be more than one correct response.

<table>
<thead>
<tr>
<th>Source</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published journal</td>
<td>1</td>
</tr>
<tr>
<td>Discussion forum</td>
<td>4</td>
</tr>
<tr>
<td>Textbook</td>
<td>2</td>
</tr>
<tr>
<td>Magazine article</td>
<td>3</td>
</tr>
</tbody>
</table>
A student pulls a swing back until it is half a meter from its resting position. She lets go and watches the swing move back and forth until it stops. She repeats this process with the swing starting at one meter.

Which question can the student answer using this process?

- A. At what height does the swing have the greatest kinetic energy?
- B. How much kinetic energy is lost during the first back-and-forth swing?
- C. When during the swing does the most potential energy transfer into heat energy?
- D. Does a swing with more starting potential energy move faster when it is at the bottom of its swing?
A scientist studies how the temperature of a substance changes when other substances are mixed with it. His procedure is given in Table 1.

Table 1. Procedure

1. Label three identical beakers as X, Y, and Z.
2. Add 200 milliliters (mL) of 80°C water in each beaker.
3. Add 5 ice cubes to beaker X, 10 ice cubes to beaker Y, and 15 ice cubes to beaker Z. All ice cubes should be the same size.
4. Record the water temperature in each beaker after the ice dissolves.

The table lists four parts of the investigation.

Select one box per row to identify each part as a dependent variable, an independent variable, or a control.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Temperature of Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Temperature of Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Ice Cubes Added</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For 2 points:
Only “Volume of Water” and “Initial Temperature of Water” selected as Controls
AND
Only “Number of Ice Cubes Added” selected as the Independent Variable and “Final Temperature of Water” selected as the Dependent Variable

NOTE: A student may earn partial credit (1 point) for having ANY TWO or THREE variables correct.
ILEARN Science
Performance Task Item Answer Key
Part A
Use the data in Table 1 to determine the position, distance, and displacement of the electric car. Enter the values in the blank boxes in the table.

<table>
<thead>
<tr>
<th>Position</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position of electric car at 12 seconds</td>
<td>8</td>
</tr>
<tr>
<td>Total distance electric car traveled</td>
<td>16</td>
</tr>
<tr>
<td>Final displacement of electric car</td>
<td>8</td>
</tr>
</tbody>
</table>

A full credit (9 points) response includes:

**Part A (for 3 points):**
8 is entered for final position
AND
16 is entered for total distance traveled
AND
8 is entered for displacement

**Part B (for 1 point):**
Graph showing rise until 12 meters and decline to 8 meters is selected

**Part C (for 2 points):**
3 m/s is selected for speed and 3 m/s forward is selected for velocity at 4 seconds
AND
2 m/s is selected for speed and 2 m/s backward is selected for velocity at 10 seconds

**Part D (for 2 points):**
Plastic is ranked highest
AND
Foam track is ranked lower than plastic track

**Part E (for 1 point):**
“The car will take about 8 seconds to reach the wall.” is selected
Part B
Which graph shows how the position of the electric car changes over time?

![Graphs showing position vs. time]

Part C
Use the data in Table 1 to determine the speed and velocity of the electric car at two times.
- Select the down arrow to select a value for speed in the first table.
- Select the down arrow to select a value for velocity in the second table.

<table>
<thead>
<tr>
<th>Speed</th>
<th>Time (s)</th>
<th>Speed (m/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>3 m/s</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>2 m/s</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Velocity</th>
<th>Time (s)</th>
<th>Velocity (m/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>3 m/s forward</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>2 m/s backward</td>
</tr>
</tbody>
</table>

Part D
Design a new track that will make the electric car move at the fastest speed. The new track should use one of the different surfaces that Tori tested.
- Use the data in Table 2 to rank the track designs in order of how well they speed up the electric car.
- A rank of 1 means that the track speeds up the electric car the most.
- A rank of 3 means that the track speeds up the electric car the least.

<table>
<thead>
<tr>
<th>Track Design</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dirt Surface</td>
<td>3</td>
</tr>
<tr>
<td>Plastic Surface</td>
<td>1</td>
</tr>
<tr>
<td>Foam Surface</td>
<td>2</td>
</tr>
</tbody>
</table>
Part E
Which statement best describes the motion of the electric car on the fastest track selected in part D?

A. The car will take about 4 seconds to reach the wall.
B. The car will take about 8 seconds to reach the wall.
C. The car will take about 20 seconds to reach the wall.
D. The car will take more than 20 seconds to reach the wall.