1. Read the sentence from the article.

   Though the Carl Hayden team didn’t know it, MIT had designed an innovative system of bladders and pumps to carry out this task.

Which word is most opposite in meaning of innovative?

A. customary  
B. cutting-edge  
C. inventive  
D. breaking new ground

LA.910.1.6.8
The correct answer is A. Options B, C, and D are incorrect because they represent correct meanings of the assessed word found within the excerpted text.

Definitions are from thefreedictionary.com in which innovative is defined as being or producing something like nothing done or experienced or created before. Option A is correct because customary is opposite in meaning to the assessed word. Customary is defined as commonly practiced, used, or encountered; usual. Option B is incorrect because cutting-edge is similar in meaning to the assessed word. Cutting-edge is defined as the position of greatest advancement or importance; the forefront. Option C is incorrect because inventive is similar in meaning to the assessed word. Inventive is defined as creative. Option D is incorrect because breaking new ground is similar in meaning to the assessed word. Breaking new ground is defined as to initiate a new venture.

2. Readers can learn many things from the map on page 138 EXCEPT

   F. The state with the most entries was the state of Florida.  
   G. Carl Hayden High School from Phoenix, Arizona, was not the only high school that had a team enter the competition.  
   H. All entries were from states that bordered large bodies of water—either lakes or oceans.  
   I. Entries from the east coast probably had to raise more money for plane fare and to ship their robots to the competition.

LA.910.2.2.1
The correct answer is I. Options F, G, and H are incorrect because they represent facts, details, or other information drawn from the text feature.

Option F is incorrect because it shows that Florida has 3 entries which is the most (California has 3 dots for two entries and to show the location of the competition). Option G is incorrect
because the map names two other high schools – Palm Beach Lakes High School in Florida and Ball High School in Texas. **Option H** is incorrect because the map shows entries from states bordering the Atlantic Ocean, Pacific Ocean, and Lake Superior. **Option I** is correct because it contains information that may be implied but it is not a statement that could be proven from data provided on the map.

3. The illustrations on pages 140 and 141 show the ROVs from MIT and Carl Hayden. Which statement is NOT supported by information shown in the illustrations?

- A. The ROV from MIT is connected to the surface by a multicolored tether.
- B. The ROV from MIT is more enclosed with box-like shapes.
- C. Both ROVs are emitting air bubbles as they work underwater.
- D. Neither ROV is unable to attach its sampling tube to the underwater drum.

**LA.910.2.2.1**

The correct answer is **D**. **Option A** is incorrect because it is supported by information contained in the right-hand photo on page 140 that shows the multi-colored tether. **Option B** is incorrect because it is supported by information contained in both photos on page 140 that show the many box-like shapes of the MIT ROV. **Option C** is incorrect because it is supported by information contained in all four photos on pages 140 and 141 that show the bubbles escaping from the two ROVs. **Option D** is correct because only the right-hand photo on page 141 as well as the inset photo of the Carl Hayden ROV shows the connection to the drum.

4. If the high school newspaper wrote an article about the Carl Hayden’s experience at the third annual Marine Advanced Technology Education Center’s Remotely Operated Vehicle (ROV) Competition, which would be the best title for the article?

- F. Carl Hayden High School Robot Sinks
- G. We Are Not the Worst
- H. MIT 113.58 Carl Hayden High School 118.92
- I. Stinky and the Dream Team

**LA.910.1.7.3**

The correct answer is **I**. Options F, G, and H are incorrect because they represent incorrect interpretations of the main idea.

**Option F** is incorrect because the ROV did not sink. **Option G** is incorrect because although it is true that the team was not the worst, this is not the best option for a title about the competition. **Option H** is incorrect because the scores reported for MIT are incorrect. **Option I** is correct because the team named the ROV “Stinky,” and the main idea of the article was what great things could be accomplished by building and acting as a team.

5. Why did the author write this magazine article?
A. to show that high school students can be smart and inventive enough to beat college students in a robotics competition
B. to report on a science and engineering competition victory by a four-man team of undocumented Mexican high school students
C. to prove that the student group with the most money to spend creating a ROV will win the contest
D. to interest high schools students in participating in magnet programs that focus on science and engineering

LA.910.1.7.2
The correct answer is B. Option A is incorrect because it represents facts and details that do not support the author’s purpose. Option C is incorrect because it represents incorrect interpretation of the author’s purpose. Option D is incorrect because it represents a plausible but incorrect distractor.

Option A is incorrect because although this is a statement of what happened, it is not the reason for the article. Option B is correct because this is the reason for the article. Option C is incorrect because MIT had the most money, and they did not win. Option D is incorrect because although this could be an outcome of the article, it was not the purpose of the article.
6. Read the title of this news feature.

   **Reading, Writing, and … Recreation?**

   What definition of *recreation* best fits the meaning intended by the author when he used the word in the title?

   F. an activity that diverts or amuses or stimulates
   G. refreshment of health or spirits by relaxation and enjoyment
   H. the act or activity of providing pleasure or amusement especially for the public
   I. an activity that is relaxing or fun

   LA.910.1.6.3
   The correct answer is F. Options G, H, and I are incorrect because they represent plausible but incorrect distractors based on the text.

   **Option F** is correct because the article shows how recreation can lead to both resting the mind and stimulating the mind which can lead to better achievement in school. **Option G** is incorrect because it addresses only relaxation and enjoyment. **Option H** is incorrect because it addresses the concept of recreation as amusement for the public in general. **Option I** is incorrect because it addresses recreation as fun and not all relaxation is fun—Courtney Otto’s recreation was a challenge.

7. According to the news article, why do students participate in extra-curricular activities?

   A. to investigate interests or participate in new experiences
   B. to have something to do in their free time before school
   C. to hopefully meet a new cute girlfriend or boyfriend
   D. to raise their grade in a class; to ensure they pass the class

   LA.910.1.7.3
   The correct answer is A. Options B, C, and D are incorrect because they represent plausible but incorrect distractors based on the text.

   **Option A** is correct because on page 150 the reader learns, “High school isn’t just about going to classes, then heading home. It is also an opportunity for students to explore interests, take in new experiences, and get connected to their school.” **Option B** is incorrect because students can participate after school and on weekends not just before school. **Option C** is incorrect because the article does not directly address the social boy-girl aspect of extracurricular activities.
Option D is incorrect because the article does not say that extracurricular activities are required for passing a specific class.

8. What was NOT true of Lorenzo Santillan, Cristian Arcega, Oscar Vazquez, and Luis Aranda of Carl Hayden High School as written about in “La Vida Robot” and Courtney Otto from Kentucky featured in “Reading, Writing, and … Recreation?”

F. The students took part in contests open to students across the United States.
G. The students engaged in a team effort where each team member needed a different set of skills.
H. The results of their extra-curricular accomplishments helped the students get accepted to colleges.
I. The students’ grade point averages were affected by their extra-curricular activities.

LA.910.1.7.7
The correct answer is I. Options F, G, and H are incorrect because they represent similarities drawn from the text that are related to the test question.

Option F is incorrect because the ROV contest was national (see the caption on page 127) and Courtney Otto won the National Catholic Forensic League title in 2004 (page 150). Option G is incorrect because not all contests mentioned in “Reading, Writing, and … Recreation?” were team contests (pages 150-151 mention a variety of clubs, not contests). Option H is incorrect because the Carl Hayden students (page 147 Epilogue) and Courtney Otto (page 150 – Dartmouth College) found that their extracurricular activity successes helped them with college admission/scholarships. Option I is correct because in “La Vida Robot” the reader is told about Lorenzo increasing his grade point average (page 130), but although Courtney’s participation in forensics helped her get accepted to Dartmouth, there is no mention of her participation resulting in an increase in her GPA.

9. The author included Ashley Brown’s story in the news article to show that

A. participating in an extra-curricular activity could lead to other worthwhile experiences and, perhaps, the identification of a career option.
B. a hobby from home could become an activity after school and maybe an option to participate in competitions.
C. some extra-curricular activities can be expensive in both time and money spent practicing and performing.
D. both girls and boys benefit from participating in school activities that occur before or after the regular academic school day.

LA.910.1.7.2
The correct answer is A. Options B, C, and D are incorrect because they represent incorrect interpretations of the author’s perspective.

Option A is correct because Ashley’s tutoring reinforced her desire to become a teacher. Option B is incorrect because Ashley’s extracurricular activity was not a hobby from home. Option C is incorrect because although some extracurricular activities may be expensive,
Ashley’s was not. **Option D** is incorrect because although the statement may be true, Ashley tutored students during the school day.

10. Based on the illustrations found in “La Vida Robot” and in “Reading, Writing, and … Recreation?” which two illustrations could have a caption reading, “A Student Team Effort Leads to Success”?

F. page 127 and page 151  
G. page 132 and page 150  
H. page 134 and page 143  
I. page 133 and page 136  

**L.A.910.2.2.1**  
The correct answer is **F**. Options G, H, and I are incorrect because they represent incorrect analysis and interpretation of text features.

**Option F** is correct because the photo on page 127 shows the entire ROV team and the photo on page 151 shows a basketball team. **Option G** is incorrect because the photo on page 132 shows one team member and the photo on page 150 shows a chess player who may or may not be on a chess team. **Option H** is incorrect because the photo on page 134 shows some ROV team members and one of their teachers while the photo on page 143 shows the teacher advisors for the ROV team. **Option I** is incorrect because the photo on page 133 shows one of the ROV team members while the photo on page 136 shows members of the Virginia ROV team.