

## Exhibit 2.4: High International Benchmark (550)

Exhibit 2.4 contains the description of comprehension skills and strategies demonstrated by ePIRLS students at the High International Benchmark. At the High International Benchmark, students demonstrated that they could distinguish relevant information to provide comparisons; interpret and integrate information across webpages to make contrasts; and evaluate how graphic elements and language choices support content.

Exhibits 2.4.1 through 2.4.4 contain examples of the types of items successfully answered by students achieving at the High International Benchmark. Each exhibit shows achievement results for the countries that participated in ePIRLS, with up and down arrows indicating a significantly higher or lower percentage of success than the international average. The reading comprehension process and scale anchoring description are provided above the item. For multiple-choice items, the correct response is indicated. Constructed response questions were worth 1, 2, or 3 points. Each constructed response item is shown with an illustrative student response and the amount of credit awarded the response is shown across the bottom of the exhibit, usually full credit.

Example Item 2.4.1 illustrates that students were able to make an inference to recognize a definition presented via text and images. In Example Item 2.4.2 they could provide either a positive or negative reason to live in New York in the 1850s. Example 2.4.3 is a complex example, where students demonstrated that they were able to navigate across four sets of images and text to describe the capabilities of different parts of a Mars rover. In Example 2.4.4, they evaluated the purpose of the animated diagram showing Earth and Mars orbiting around the Sun.

### Exhibit 2.4: ePIRLS 2016 Online Informational Reading at the High International Benchmark (550)

○	High International Benchmark
550	<p><i>When reading and viewing relatively complex <b>Online Informational Texts</b>, students can:</i></p> <ul style="list-style-type: none"><li>• Make inferences to distinguish relevant information and provide comparisons</li><li>• Interpret and integrate information within and across webpages with interactive features to provide examples and make contrasts</li><li>• Evaluate how graphic elements and language choices support content</li></ul>

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

**Exhibit 2.4.1: High International Benchmark for ePIRLS Online Informational Reading – Example Item 1**

Process: Make Straightforward Inferences

Description: Make a straightforward inference to recognize a definition from text and images

The screenshot shows the ePIRLS Online Reading 2016 interface. The main content area displays the 'Mars Exploration Program' website with sections for 'Missions', 'Flybys', 'Orbiters', and 'Rovers'. The 'Missions' section includes text and three diagrams illustrating different mission types: flyby, orbiter, and rover. The 'Flybys' section states: 'The first missions simply flew past Mars. They took as many pictures as possible as they went by.' The 'Orbiters' section states: 'By the year 2000, countries were able to put spacecraft into orbit around Mars. Long-term studies were now possible. Today, several spacecrafts are still orbiting Mars.' The 'Rovers' section states: 'In recent years, scientists thought of ways to put rovers on Mars. A rover is a remote-controlled vehicle with six wheels. It is the size of a small car. It can travel around and explore the surface of Mars.'

The sidebar on the right is titled 'ePIRLS Class Project' and contains a question: '12. Which describes a flyby mission?' with four radio button options: 'Spacecraft is flown by a human pilot.', 'Spacecraft takes pictures as it goes by Mars.', 'Spacecraft flies in circles around Mars.', and 'Spacecraft is flown by remote-control.' The 'SAVE' button is highlighted in orange.

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

Note: Results based on students who participated in both PIRLS and ePIRLS.

Country	Percent Correct
Ireland	77 (1.5) ▲
≡ Denmark	76 (1.6) ▲
† United States	75 (1.2) ▲
<sup>3</sup> Singapore	75 (1.0) ▲
Sweden	75 (1.5) ▲
Norway (5)	73 (1.4) ▲
<sup>1 2</sup> Canada	71 (1.6) ▲
<sup>3</sup> Israel	70 (1.3) ▲
Chinese Taipei	68 (1.1)
International Avg.	67 (0.4)
Italy	62 (1.3) ▼
Slovenia	61 (1.4) ▼
<sup>2</sup> Portugal	60 (1.4) ▼
United Arab Emirates	56 (0.8) ▼
<sup>1</sup> Georgia	42 (2.1) ▼

**Benchmarking Participants**

Dubai, UAE	71 (1.1) ▲
Abu Dhabi, UAE	49 (1.7) ▼

- ▲ Percent significantly higher than international average
- ▼ Percent significantly lower than international average

See Appendix B.1 for target population coverage notes 1, 2, and 3. See Appendix B.4 for sampling guidelines and sampling participation notes †, ‡, and ≡.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

**Exhibit 2.4.2: High International Benchmark for ePIRLS Online Informational Reading – Example Item 2**

Process: Interpret and Integrate Ideas and Information

Description: Interpret and integrate information to draw a conclusion and support it with evidence

The screenshot shows the ePIRLS Online Reading 2016 interface. The main content area displays a webpage titled "Elizabeth Blackwell Opens The New York Infirmary" with a "Need for Doctors" section. The text describes the overcrowding and disease in 1850s New York. To the right, a student response is shown for question 13: "According to the webpage, would New York have been a good place to live in the 1850s?" The student selected "Yes" and provided the answer: "You could start a new life there". The interface includes navigation tabs, a "Class Project" sidebar, and a "SAVED" button.

The answer shown illustrates the type of student response that would receive full credit (1 point).

Note: Results based on students who participated in both PIRLS and ePIRLS.

Country	Percent Full Credit
Ireland	78 (1.4) ▲
Sweden	75 (1.4) ▲
Norway (5)	75 (1.6) ▲
≡ Denmark	74 (1.5) ▲
<sup>3</sup> Singapore	74 (1.3) ▲
<sup>†</sup> United States	71 (1.6) ▲
<sup>1 2</sup> Canada	70 (1.7) ▲
International Avg.	61 (0.4)
Slovenia	59 (1.2)
<sup>3</sup> Israel	58 (1.3) ▼
Italy	57 (1.6) ▼
<sup>2</sup> Portugal	52 (1.3) ▼
Chinese Taipei	41 (1.4) ▼
United Arab Emirates	36 (0.7) ▼
<sup>1</sup> Georgia	35 (1.7) ▼

**Benchmarking Participants**

Dubai, UAE	57 (0.7) ▼
Abu Dhabi, UAE	27 (1.3) ▼

- ▲ Percent significantly higher than international average
- ▼ Percent significantly lower than international average

See Appendix B.1 for target population coverage notes 1, 2, and 3. See Appendix B.4 for sampling guidelines and sampling participation notes †, ‡, and ≡.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

**Exhibit 2.4.3: High International Benchmark for ePIRLS Online Informational Reading – Example Item 3**

Process: Interpret and Integrate Ideas and Information

Description: Interpret and integrate textual and visual information from a web page to recognize 4 functions by navigating across interactive images

The screenshot displays the ePIRLS Online Reading 2016 interface. The main content area shows a website titled "Mars Exploration Program" with a navigation menu including "Home", "Getting to Mars", "Missions", "Seeking Signs of Life", and "Rover Called Curiosity". The main text reads: "The Rover Called Curiosity: Like a person, Curiosity has different body parts. These help the rover explore the surface of Mars almost like a person would." Below this are four tabs: "ARM and HAND", "BODY", "EYES", and "WHEELS and LEGS". A large image of the Curiosity rover is shown with its robotic arm highlighted in red. Text below the image states: "Curiosity has a robot arm and hand. It holds and uses tools so it can collect samples of rocks and dirt." To the right of the rover image is a vertical banner that says "Take a Walk" and "And See the World" with a "Life On A" button. The sidebar on the right is titled "ePIRLS Class Project" and shows a "SAVED" status. It contains a question: "16. Match each part of Curiosity with something that the part does. Click on the drop-down menus." Below the question are four dropdown menus labeled A, B, C, and D. The selected options are: A. Arm and Hand (collect rocks), B. Body and Instruments (analyze rocks), C. Eyes (take pictures), and D. Wheels and Legs (maintain balance). A "SAVE" button is at the bottom of the sidebar.

The answer shown illustrates the type of student response that would receive full credit (2 points).

Note: Results based on students who participated in both PIRLS and ePIRLS.

Country	Percent Full Credit
<sup>3</sup> Singapore	70 (1.3) ▲
Chinese Taipei	70 (1.2) ▲
Norway (5)	54 (2.0) ▲
<sup>†</sup> United States	54 (1.6) ▲
Ireland	53 (2.1) ▲
Sweden	50 (1.4) ▲
≡ Denmark	48 (1.8)
<sup>1 2</sup> Canada	48 (2.0)
Italy	47 (1.6)
International Avg.	47 (0.4)
<sup>3</sup> Israel	39 (1.4) ▼
Slovenia	37 (1.6) ▼
<sup>2</sup> Portugal	35 (1.6) ▼
United Arab Emirates	29 (0.9) ▼
<sup>1</sup> Georgia	16 (1.3) ▼

**Benchmarking Participants**

Dubai, UAE	49 (1.0)
Abu Dhabi, UAE	21 (1.3) ▼

- ▲ Percent significantly higher than international average
- ▼ Percent significantly lower than international average

See Appendix B.1 for target population coverage notes 1, 2, and 3. See Appendix B.4 for sampling guidelines and sampling participation notes †, ‡, and ≡.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

**Exhibit 2.4.4: High International Benchmark for ePIRLS Online Informational Reading – Example Item 4**

Process: Evaluate and Critique Content and Textual Elements

Description: Evaluate the use of an animated diagram to determine its purpose

The screenshot shows the ePIRLS Online Reading 2016 interface. The main content area is titled "Mars Exploration Program" and includes a navigation menu with "Home", "Getting to Mars", "Missions", "Seeking Signs of Life", and "Rover Called Curiosity". The "Getting to Mars" section is active, displaying text about the challenges of reaching Mars and a diagram of Earth and Mars orbits. A pop-up window titled "Orbit" defines the term. To the right, a sidebar encourages users to "Be A Star!" with a "Be A Star!" button. On the far right, a "Class Project" sidebar contains a question (10) about the purpose of a diagram showing Earth and Mars orbits, with four multiple-choice options and a "SAVE" button.

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

Note: Results based on students who participated in both PIRLS and ePIRLS.

Country	Percent Correct
Norway (5)	85 (1.0) ▲
Sweden	85 (1.4) ▲
≡ Denmark	84 (1.3) ▲
Ireland	78 (1.5) ▲
<sup>3</sup> Singapore	77 (1.1) ▲
Slovenia	75 (1.5) ▲
<sup>†</sup> United States	75 (1.1) ▲
<sup>1 2</sup> Canada	75 (1.3)
International Avg.	72 (0.4)
Chinese Taipei	70 (1.3)
<sup>2</sup> Portugal	70 (1.3) ▼
<sup>3</sup> Israel	67 (1.2) ▼
Italy	66 (1.6) ▼
United Arab Emirates	52 (1.1) ▼
<sup>1</sup> Georgia	50 (1.8) ▼

**Benchmarking Participants**

Dubai, UAE	70 (1.1) ▼
Abu Dhabi, UAE	44 (2.1) ▼

- ▲ Percent significantly higher than international average
- ▼ Percent significantly lower than international average

See Appendix B.1 for target population coverage notes 1, 2, and 3. See Appendix B.4 for sampling guidelines and sampling participation notes †, ‡, and ≡.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.