

# PIRLS 2006

DPU/AU & IEA

Jan Mejdning

## EKSEMPEL SCORINGSGUIDE PIRLS FT2006 OPGAVER

Scoringguide for to frigivne tekster fra IEA PIRLS pilotundersøgelsen i 2005 i en engelsksproget version. Tillige er frigivet teksteksempler fra 2006 hovedundersøgelsen.

©DPU/Aarhus Universitet og IEA - Må ikke reproduceres i forretningsøjemed.



# CONTENTS

<b>Introduction .....</b>	<b>2</b>
Background.....	2
PIRLS Generalized Scoring Guides .....	2
Constructed-Response Question Scoring Guides .....	6
General Issues and Procedures .....	8
<b>Literary Experience .....</b>	<b>11</b>
<b>Acquire and Use Information.....</b>	<b>19</b>

## Introduction

### Background

As described in the PIRLS 2006 framework,<sup>1</sup> the PIRLS reading assessment of young children is designed to measure students' ability to construct meaning from a variety of texts by engaging in a range of comprehension processes. The assessment focuses on reading for the two purposes that account for most of the reading done by students both in and out of school:

- *For literary experience*
- *To acquire and use information*

These purposes guided the selection of reading materials that were included in the assessment. Each text chosen for the assessment is characteristic of the type of material that would typically be read for one of the two purposes. Within each purpose for reading, four different processes of comprehension are assessed:

- *Focus on and retrieve explicitly stated information*
- *Make straightforward inferences*
- *Interpret and integrate ideas and information*
- *Examine and evaluate content, language, and textual elements*

Each comprehension question in the assessment is designed to elicit and assess one of these four comprehension processes.

The PIRLS 2006 reading assessment is constructed so that each student completes two sections, or blocks. In the 40 minutes students are given to complete each block, they are asked to read the text provided and answer a set of comprehension questions about the text. Two different types of question formats are used to assess students' comprehension of the texts. One type is the multiple-choice format, in which students are provided four optional

<sup>1</sup> Ina V.S. Mullis, Ann M. Kennedy, Michael O. Martin, & Marian Sainsbury (2006). *PIRLS 2006 assessment framework and specifications 2<sup>nd</sup> Ed.*. TIMSS & PIRLS International Study Center. Chestnut Hill, MA: Boston College.

answers from which to select the one that best answers the question. Each multiple-choice question has a single, correct answer.

The other type of format used in the assessment is referred to as a constructed-response question. With this question format, students must write their answer to the question, rather than select from several options. Students' responses to these questions are scored by trained scorers using established guidelines that identify specific criteria for assigning a particular score. The purpose of this document is to provide scorers with the information and scoring guidelines they will need to reliably and validly assign a score to each student's response to the constructed-response questions in the PIRLS reading assessment.

A point value has been assigned to each constructed-response question. They are worth one, two, or three points, depending on the depth of understanding or the extent of textual support the question requires. (All multiple-choice questions are worth one point.) Students are made aware of the constructed-response questions' point value in the assessment booklets through the use of pencil icons that display the number 1, 2, or 3, depending on the individual question's point value.

### **PIRLS Generalized Scoring Guides**

Students' answers to the constructed-response questions are evaluated according to scoring guides that describe specific aspects of the response, which are considered to be evidence of performance at a particular score level. A unique scoring guide has been developed for each constructed-response question. Although each guide is tailored to a specific comprehension question, there are commonalities across all the guides. For example, the lowest score level in each guide—a score of 0—represents no comprehension of the aspect of the text being assessed by the question. Responses that receive a score of 0 may represent a misunderstanding of the text or the question, or include only information that is so vague that assigning a higher score is unwarranted.

The following generalized scoring guides for one-, two-, and three-point questions describe the degree or nature of comprehension associated with each score level in all of the guides. The score point labels vary across the three guides in order to distinguish them from each other, and to convey the range of comprehension abilities being described in each guide. These generalized scoring guides are the basis for the unique guides developed for each comprehension question in the assessment.

**Figure 1: Generalized Scoring Guide for One-Point Questions**

<b>Acceptable Response (Score = 1)</b>
These responses demonstrate comprehension of the aspect of text addressed in the question. They include all elements required by the question. The responses are determined to be accurate based on ideas or information in the text.
<b>Unacceptable Response (Score = 0)</b>
<p>These responses do not demonstrate comprehension of the aspect of text addressed in the question. They may attempt to provide some or all of the elements required by the question. The responses, however, are determined to be inaccurate based on information or ideas in the text. Or, they include only ideas or information that are too vague or unrelated to the question to be considered accurate.</p> <p><i>Crossed Out/Erased/Off Task/Illegible/Drawings and Doodles</i></p> <p>Also give a score of “0” to uninterpretable responses. This includes crossed-out and erased attempts, illegible and off-task responses, and drawings and doodles.</p>

**Figure 2: Generalized Scoring Guide for Two-Point Questions**

<b>Complete Comprehension (Score = 2)</b>
<p>These responses demonstrate complete comprehension of the aspect of text addressed in the question. They include all elements required by the question. When required, they demonstrate a level of comprehension that goes beyond a literal understanding, and provide appropriate interpretations, inferences, or evaluations that are consistent with the text. Or, they include complete and adequate ideas or information from the text to support an interpretation, inference, or evaluation based on the text.</p>
<b>Partial Comprehension (Score = 1)</b>
<p>These responses demonstrate only partial comprehension of the aspect of text addressed in the question. They may include some, but not all, of the elements required by the question. Or, they may address all elements required by the question, but demonstrate only a literal understanding when the question asks for an interpretation, inference, or understanding of a more abstract concept. When required by the question to provide an explanation for an interpretation, inference, or evaluation, the responses may lack adequate textual support, or provide only unrelated or vague information.</p>
<b>No Comprehension (Score = 0)</b>
<p>These responses demonstrate no comprehension of the aspect of text addressed in the question. They may attempt to provide some or all of the elements required by the question, however, the response is determined to be inaccurate based on ideas or information in the text. Or, they may fail to address any element required by the question. Or, the responses include only information or ideas that are too vague or unrelated to the question to be considered evidence of comprehension.</p> <p><i>Crossed Out/Erased/Off Task/Illegible/Drawings and Doodles</i></p> <p>Also give a score of “0” to uninterpretable responses. This includes crossed-out and erased attempts, illegible and off-task responses, and drawings and doodles.</p>

**Figure 3: Generalized Scoring Guide for Three-Point Questions**

<b>Extensive Comprehension (Score = 3)</b>
These responses demonstrate extensive comprehension of the aspect of text addressed in the question. They include all of the elements required by the question. When required, they demonstrate understanding of ideas and information that are relatively complex, abstract, or central to the theme or main topic of the text. In doing so they go beyond a literal understanding of the text, and provide substantial text support for inferences, interpretations, or evaluations when required by the question.
<b>Satisfactory Comprehension (Score = 2)</b>
These responses demonstrate satisfactory comprehension of the aspect of text addressed in the question. They may include all of the elements required by the question, but do not provide evidence of understanding text ideas or information that may be considered complex or more abstract. Or, they show some evidence of moving beyond a literal understanding of the text to make inferences, interpretation, or evaluations; however, the textual support provided in the response may not be conclusive.
<b>Minimal Comprehension (Score = 1)</b>
These responses demonstrate minimal comprehension of the aspect of text addressed in the question. They include some, but not all, of the elements required by the question. They may demonstrate understanding of specific ideas or information in the text at a literal level, but do not make connections between them when required by the question. When required by the question to provide textual support for an inference or interpretation, the responses may include only inadequate or unrelated evidence from the text.
<b>Unsatisfactory Comprehension (Score = 0)</b>
These responses demonstrate unsatisfactory comprehension of the aspect of text addressed in the question. They may attempt to include some of the elements required by the question, but they are determined to be inaccurate or inappropriate based on ideas or information in the text. Or, they may fail to address any element required by the question. Or, the responses include only ideas or information that are too vague or unrelated to the question to be considered evidence of at least minimal comprehension.  <i>Crossed Out/Erased/Off Task/Illegible/Drawings and Doodles</i>  Also give a score of “0” to uninterpretable responses. This includes crossed-out and erased attempts, illegible and off-task responses, and drawings and doodles.

## Constructed-Response Question Scoring Guides

Each constructed-response comprehension question in the PIRLS assessment has a unique scoring guide that provides specific criteria for assigning scores to students' responses. Two critical goals in the scoring of constructed-response questions were addressed in developing the scoring guides: 1) to make the criteria as specific as possible in order to standardize scoring decisions across countries, and 2) to accommodate a range of responses within each score level. These somewhat conflicting goals of specificity and flexibility are addressed by providing both specific and general descriptions of comprehension at each score level. In addition, "anchor" examples of actual student responses have been selected to demonstrate the range of answers within a particular score level. In combination, the scoring guides and anchor responses define the boundaries between score levels and demonstrate the variety of ways in which students may respond to a given question. The scoring guides for all items are in this document; the anchor responses are provided separately.

The example scoring guide in Figure 4 is shown so that several key features of the guides can be explained. This particular guide is for a one-point question that was developed to assess students' ability to *make straightforward inferences* while reading for the purpose of *literary experience*. The "purpose" assessed by each question is identified at the beginning of the section containing all items related to that purpose. The "process" assessed by each question is identified at the top of the first page of every guide. Each scoring guide is divided into sections corresponding to the number of score levels, including a score of zero. Note that this one-point guide has two sections—the first section provides criteria for a score of one, and the second section provides criteria for a score of zero.

For each score level, a statement regarding the specific content of students' responses that may be considered evidence of an appropriate inference is provided. Scorers should be looking for evidence of comprehension in students' responses, not necessarily a specific answer. Because students will respond to each question in a variety of ways, it would be inappropriate in most cases to identify a specific answer that must be provided by students to receive a particular score. In this example guide, note that two types of responses are described under the 1-point heading. Because the question may be answered by focusing on either a specific or general purpose of the flamingos, both types of responses are described as being appropriate if they meet the specific criteria. For each type of response, examples are provided.

**Figure 4: Example Scoring Guide*****UNBELIEVABLE NIGHT, ITEM 6*****6. Why did Anina call the flamingos?**

Purpose: Literary

Process: Make straightforward inferences

**1 – Acceptable Response**

The response demonstrates an understanding that the flamingos were food to the crocodile.

Examples:

- *To feed the crocodile.*
- *So the crocodile would eat them and not her.*
- *Because they looked like a birthday cake for the crocodile.*
- *Because the crocodile looked hungry.*

Or, the response demonstrates a general understanding that Anina used the flamingos to help her keep safe from the crocodile.

Example:

- *So they would protect her from the crocodile.*

**0 – Unacceptable Response**

The response includes no evidence of understanding that the flamingos helped her to get rid of the crocodile as food.

Examples:

- *To get them to go back into the magazine.*
- *They would help get the crocodile back in the magazine.*
- *So they would give her back her mother's hat.*

For each item, the scoring guide includes a section that explains how to code “non-responses.” There are two codes for this: “8” and “9.” The following guidelines should be used in assigning these non-response codes.

**Figure 5: Guidelines for Non-Response Codes**

Code	Guidelines
8	<p><b>Not Administered. Question misprinted, page missing, or other reason out of student’s control.</b></p> <p>A variety of circumstances may affect students’ ability to provide appropriate answers that can be scored. For example, a misprinted booklet may result in students responding to the wrong question, or a flawed question, or some event occurs that prevents students from answering a question. In these cases, a score should not be assigned.</p>
9	<p><b>Blank.</b></p> <p>The response space is completely blank or contains only accidental stray marks unrelated to the text. Do NOT assign a score of “9” if there is evidence that the student has made even the slightest attempt to respond in some way.</p>

### General Issues and Procedures

Scoring students’ answers to constructed-response questions is one of the most important aspects of the overall assessment of students’ reading literacy. Because constructed-response questions represent a substantial portion of the assessment, the reliability and validity of scoring is critical to the quality of the assessment results. The scoring guides presented in this manual and the anchor responses included in separate documents are designed to facilitate this effort. Some additional issues and procedures should be kept in mind.

#### *Reliability*

It is imperative that students’ responses are scored consistently, regardless of the person who actually assigns the scores. That is, each scorer should score a response in the same way as every other scorer. While a scorer may not always agree with every detail of every scoring guide, he or she must apply the specifics of each scoring guide consistently to ensure that the highest level of quality is maintained in the overall scoring process. It is inevitable, however, that ambiguities of interpretation will arise. In such cases, scorers should know whom to ask for advice. Team leaders should be available to resolve difficulties and provide consistency in the scoring. If necessary, NRCs or team leaders should feel free to contact Ann Kennedy at the PIRLS International Study Center with any questions about the scoring guides.

Ann Kennedy  
 Phone: +1-  
 Fax: +1-  
 Email: PIRLS@

### ***Validity***

In scoring constructed responses, the issues of reliability and validity are intertwined. If scoring is not reliable and consistent, the validity of the assessment is in question. Several other issues, however, must be considered as well. First, it is important that all scorers recognize that the PIRLS assessment is an assessment of reading comprehension not writing ability. Thus, the criteria described in the scoring guides relate only to evidence of reading comprehension. There is no evaluation of students' writing ability as a part of the scoring criteria. This is quite evident in the range of student responses provided as anchor responses for each guide. Some students receiving the highest score for comprehension on a particular question will provide written answers that contain awkward sentences, misspellings, and poor word choices. Given the fact that it is a timed test, and students' responses may be considered "first-draft writing," this is to be expected. If the ideas present in the response are considered evidence of a particular level of understanding, a particular score should be assigned regardless of the quality of the writing.

It is also important to keep in mind that some students will provide answers that demonstrate comprehension of the text, but do not address the elements required by the question. In these cases, it is important to adhere to the scoring guidelines and not give credit for interesting, even insightful, responses that do not address the question.

A final validity issue relates to the fact that scorers will be scoring all of the responses provided by a single student in sequence. Scorers must be diligent to score each response independent from their impression of the student's comprehension demonstrated in his or her other responses. For example, if a student has demonstrated at least satisfactory comprehension throughout most of their responses, and then provides an ambiguous response to a subsequent question, scorers must be cautious not to assume a level of understanding that may not be present in that response. In order to guard against developing an impression of students' overall comprehension abilities, it would be best for scorers to approach each response within a test booklet as if it were provided by a different student.

### ***Conflicting Evidence in Students' Responses***

Some students may provide an answer that meets all of the requirements of the question and warrants a high score, but also includes some information that is inaccurate or unrelated. The general rule in these cases is to ignore the inaccurate or unrelated portion of the response, and assign the score based on the accurate portion of the response that addresses the elements required by the question. An exception to this, however, would be when the inaccurate or unrelated portion of the response is a direct contradiction of the accurate portion. Another exception would be when the inaccurate portion seriously outweighs whatever level of understanding is demonstrated in the accurate portion. In these cases, it may be an indication that the student is simply unsure of how to respond and is attempting to provide a range of answers to the question. The higher score should not be assigned in these situations.

***A Final Note***

Reading and scoring the responses of fourth graders to comprehension questions is both challenging and rewarding, and is often an entertaining experience. The creativity of students' ideas and the variety of interpretations they bring to each question leads to many unpredictable responses. The scoring guide and the anchor papers must always be the basis for each and every scoring decision. Although reading responses supportively is encouraged—that is, allowing for minor errors or lack of clarity—it is imperative that scorers not overinterpret the responses provided by students. The responsibility for demonstrating comprehension falls to the student; it is not for the scorer to assume what the student meant in his or her response. In the end, this is the most fair, reliable, and valid way to score students' answers to constructed-response questions.

# Literary Experience

***DOLPHIN RESCUE, ITEM 6*****6. Do you think the diver should have dived the second time?****Please circle your answer****Yes****No****Give two reasons from the story to explain why you think this.***Process: Interpret and integrate ideas and information*

<p><b>2 – Complete Comprehension</b></p> <p>The response provides a personal evaluation supported with two specific piece of information from the text that are relevant to the diver’s decision. See the list below for acceptable reasons. Note that the response may include a “Yes” and a “No” response provided that each response is supported with information from the text.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>Yes because the chain was expensive and Amos told him he could.</i></li> <li>- <i>No because he might run out of air and the boat might be gone.</i></li> <li>- <i>Yes because he could be rich. No because he could die trying to get it.</i></li> </ul>
<p><b>1 – Partial Comprehension</b></p> <p>The response provides one reason that supports the yes or no choice. Note that this may be expressed as two separate statements, but which make the same point.</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>- <i>No because a big storm was coming and he might get caught in the storm</i></li> </ul>
<p><b>0 – No Comprehension</b></p> <p>The response may or may not provide a yes or no choice. The information provided in support of the personal evaluation is inaccurate or unrelated to the text, or restates the question without providing additional information. The response may also have appropriate information from the text, but the information is inconsistent or inappropriate for the response given.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>Yes. It was exciting.</i></li> <li>- <i>Yes, he wanted to meet Bobo.</i></li> <li>- <i>He was curious to find something else.</i></li> <li>- <i>No, it was stupid.</i></li> </ul>

**Acceptable Reasons for Diving or Not Diving the Second Time**

Note to scorers: The response must provide two acceptable reasons from the list below. To be credited, the evaluation (“yes” or “no”) must be clear even where neither “yes” or “no” or both “yes” and “no” are circled.

Examples for “Yes” response:

- *The gold chain was very valuable / the biggest treasure they had found/ He might find more treasure.*
- *Amos said it was okay.*
- *There was a chance that the diver could get the chain in 5 minutes.*

Examples for “No” response:

- *The boat might not stay in place / he might become stranded.*
- *His air might not last.*
- *Amos was alarmed / he would place Amos in danger.*
- *A storm was coming (bad weather / big waves).*
- *It was dangerous / he might die (drown)/ Bobo might not have come to save him.*
- *Bobo was not there (referring to the diver’s intentions to save him).*
- *The chain would be difficult to get.*
- *He could have come back another time.*
- *Gold is not worth risking lives for.*

***DOLPHIN RESCUE, ITEM 7***

**7. You are warned in the story that the boat might be gone when the diver surfaced the second time. Give two ways you know this from the story.**

*Process: Make straightforward inferences*

<p><b>2 – Complete Comprehension</b></p> <p>The response demonstrates an understanding of the foreshadowing details up to the point in the story when the diver surfaces and finds the boat gone.</p> <p>The response provides two of the details provided in the list below.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>The waves may have ripped the boat away. The ropes would not hold more than 5 minutes.</i></li> <li>- <i>There is a storm with strong squalls. The boat strained against the anchor ropes.</i></li> <li>- <i>The waves were up to 15 feet. Amos says it. [Note that this is an acceptable response related to Amos' warning that the ropes may not hold the boat for more than 5 minutes.]</i></li> </ul>
<p><b>1 – Partial Comprehension</b></p> <p>The response only provides one of the details in the list below.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>There was a strong squall.</i></li> <li>- <i>A storm was coming</i></li> <li>- <i>The anchor ropes wouldn't hold the boat for long.</i></li> </ul>
<p><b>0 – No Comprehension</b></p> <p>The response may provide detail from the story after the diver surfaced for the second time.</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>- <i>The boat was gone.</i></li> </ul> <p>Or, the response may provide detail from the story that is inaccurate or unrelated.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>His air was running low.</i></li> <li>- <i>Amos was steering the boat.</i></li> </ul>

**Details that Foreshadow the Disappearance of the Boat**

- *There is a storm/strong squalls/waves up to 15 feet.*
- *The boat strained against the anchor ropes.*
- *Amos says.*
- *“The ropes may hold the boat another five minutes, but no more”.*
- *Huge waves may already have ripped the boat away.*

***DOLPHIN RESCUE, ITEM 8*****8. What did the diver realize when he called the chain a “gold anchor?”***Process: Examine and evaluate content, language, and textual elements***2 – Complete Comprehension**

The response recognizes one of the following negative consequence of taking the gold chain:

- It is life-threatening.
- It could cause him to drown.
- It was dangerous or could cause death.

Examples

- *The chain would cost him his life.*
- *The chain was heavy and would make him drown.* [Note: “It was heavy” without further explanation or as part of a general description of the chain is not acceptable.]

**1 – Partial Comprehension**

The response recognizes the negative consequences of taking the chain but not the severity.

- He was wrong.

Or, the response gives a literal interpretation of the anchor image:

- It would sink him to the bottom.
- It was going to drag him to the bottom.

Examples

- *The chain would carry him down to the bottom of the ocean.*
- *He would sink to the bottom.*

**0 – No Comprehension**

Response does not show understanding of the anchor image; it may provide a physical description of the chain or its value, or it may provide inaccurate information from the story.

Examples

- *The chain was made of gold with jewels.*
- *The anchor was a gold chain.*

***DOLPHIN RESCUE, ITEM 11***

- 11. What were two important lessons the diver learned in this story?  
Use what happened in the story to explain your answer.**

*Process: Interpret and integrate ideas and information*

<p><b>3 – Extensive Comprehension</b></p> <p>The response provides two higher-level lessons from the story action focusing on the concepts of greed, friendship, the value of life, and being rewarded for good deeds. See the list below for acceptable higher-level lessons.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>It isn't worth risking your life for gold. Friendship can save your life.</i></li> <li>- <i>A good deed is rewarded with a good deed. Life is more valuable than jewels.</i></li> </ul>
<p><b>2 – Satisfactory Comprehension</b></p> <p>The response provides one lesson abstracted from the story action and may provide one story-level lesson. See the list below for acceptable lessons.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>Don't go diving in bad weather. No gold is worth a life.</i></li> <li>- <i>Friends are more important than material things. Listen when someone tries to warn you.</i></li> </ul>
<p><b>1 – Minimal Comprehension</b></p> <p>The response provides 1 or 2 story-level lessons from the list below.</p>
<p><b>0 – Unsatisfactory Comprehension</b></p> <p>The response may provide a generalized lesson that is based on the story but is not important to the overall theme or message of the story, or provides information that is inaccurate or is not text-based.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>Don't neglect Bobo</i></li> <li>- <i>Never dive alone (general remark – not from this story)</i></li> <li>- <i>Bring tools with you when you dive</i></li> </ul>

**Acceptable Lessons Learned from the Story****Higher-level lessons abstracted from the story**

- *No gold is worth your life. /Do not be eager for gold or material things.*
- *Being good pays off in the end.*
- *Don't endanger your own life or others lives (consider others).*
- *Do not underestimate the powers of nature.*

**Story-level lessons**

- *You should always listen to someone who knows about things.*
- *Make friends with a dolphin so it can help when there is trouble.*
- *You should not go diving when the weather is bad.*

# **Acquire and Use Information**

## Spacewalking, Item 3

**3. What is the main difference between being in space and being on earth?**

*Process: Make straightforward inferences*

**1 – Acceptable Response**

The response identifies the lack of gravity or air/oxygen in space, or an example of the results of no gravity or air, as the main difference between space and earth.

Examples:

- *In space you can float.*
- *In space there is no oxygen to breathe.*

**0 – Unacceptable Response**

The response identifies a difference that is not a main difference or does not identify an appropriate or accurate difference.

Examples:

- *In space you wear a spacesuit.*
- *You can't eat solid food in space.*

**SPACEWALKING, ITEM 4****4. Why must the spacewalking astronauts wear spacesuits when they are outside the shuttle? Give two reasons from the article.***Process: Make straightforward inferences*

<b>2 – Complete Comprehension</b>
<p>The response demonstrates understanding of the reasons for needing to wear a spacesuit by providing two of the following reasons:</p> <p>There is no air (oxygen) to breathe; the temperatures can be extreme; the battery power keeps them alive.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>The temperature can be very hot or very cold.</i></li> <li>- <i>They need them to help them keep cool.</i></li> <li>- <i>They protect them from the heat of the sun.</i></li> <li>- <i>The battery pack has oxygen and fans to keep them alive.</i></li> </ul>
<b>1 – Partial Comprehension</b>
<p>The response provides only one of the reasons mentioned above.</p>
<b>0 – No Comprehension</b>
<p>The response provides a reason that is vague, inaccurate, or inappropriate.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>They would die.</i></li> <li>- <i>It keeps them alive.</i></li> <li>- <i>They need food and water.</i></li> <li>- <i>They need to talk to the people inside the space shuttle.</i></li> <li>- <i>They can't wear normal clothes.</i></li> </ul>

**SPACEWALKING, ITEM 5****5. Give two reasons why it takes the astronauts several hours to get ready to go outside the space shuttle?***Process: Make straightforward inferences*

<p><b>2 – Complete Comprehension</b></p> <p>The response recognizes that getting ready to go outside the shuttle takes several hours because their spacesuits have many pieces, or because the suits are bulky or awkward.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>Because they have many pieces to put on.</i></li> <li>- <i>Because the suits are bulky/awkward.</i></li> </ul>
<p><b>1 – Partial Comprehension</b></p> <p>The response provides a general understanding that the spacesuits are the reasons why getting ready takes several hours.</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>- <i>Because they have to put on spacesuits.</i></li> </ul>
<p><b>0 – No Comprehension</b></p> <p>The response provides a reason that is vague, circular, inaccurate, or inappropriate.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>- <i>Their space suits are very heavy.</i> [Note that this is inaccurate – the text states that spacesuits are heavy on Earth.]</li> <li>- <i>They have to scratch their noses.</i></li> </ul>

**SPACEWALKING, ITEM 7****7. Why does there need to be a third astronaut in the airlock?**

*Process: Focus on and retrieve explicitly stated information*

**1 – Acceptable Response**

The response states that someone has to help the others lock pieces of their suits together (get dressed) or that someone has to close the hatch to the airlock before they leave.

Examples:

- *They need someone to close the door to the airlock.*
- *They need help getting ready.*

**0 – Unacceptable Response**

The response identifies a vague, inappropriate or inaccurate reason for the third astronaut to be in the airlock.

Examples:

- *So someone can save them if they get into trouble in space.*
- *To help*
- *Someone has to drive the shuttle.*

**SPACEWALKING, ITEM 8**

**8. Number the parts of the spacesuit in the order in which the astronauts put them on. The first one has been done for you.**

*Process: Make straightforward inferences*

- \_\_\_\_\_ Upper half of suit
- \_\_\_\_\_ Helmet
- \_\_\_1\_ Elastic underwear
- \_\_\_\_\_ Bottom part
- \_\_\_\_\_ Cap with radio speakers

<b>1 – Acceptable Response</b>
The response provides the correct sequence: 3, 5, 1, 2, 4
<b>0 – Unacceptable Response</b>
The response does not provide the correct sequence.

**SPACEWALKING, ITEM 10****10. Why is the hard upper torso the most important part of the spacesuit?**

*Process: Make straightforward inferences*

<b>1 – Acceptable Response</b>
<p>The response demonstrates understanding that the hard upper torso contains the life support system.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"><li>- <i>It carries the life support.</i></li><li>- <i>It keeps them alive.</i></li><li>- <i>It supplies the oxygen, batteries and fans.</i></li><li>- <i>It keeps them cool.</i> [Note that this is an acceptable response since the upper torso contains fans.]</li></ul>
<b>0 – Unacceptable Response</b>
<p>The response does not demonstrate understanding that the upper torso is related to keeping the astronauts alive.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"><li>- <i>The helmet attaches to it.</i></li><li>- <i>It has the rubber tubes for keeping cool.</i> [Note that this is not an acceptable response because it refers to the long underwear and not the upper torso.]</li></ul>

**SPACEWALKING, ITEM 11****11. Why did the author mention the astronauts “scratching their noses one last time” before they go into space?***Process: Examine and evaluate content, language, and textual elements***1 – Acceptable Response**

The response recognizes that the astronauts can’t scratch without taking off their helmets.

Examples:

- *Because if they take off their helmet in space they will die.*
- *Because they won’t be able to scratch it until the spacewalk is over.*
- *They would have to take off their helmet and you can’t do that while in space.*

**0 – Unacceptable Response**

The response provides an inaccurate or inappropriate reason for scratching their noses one last time.

Examples:

- *For luck.*
- *Because they can’t move in space.*

**SPACEWALKING, ITEM 12****12. Tell one way that the numbered boxes help the reader to understand the information.**

*Process: Examine and evaluate content, language, and textual elements*

<b>1 – Acceptable Response</b>
<p>The response demonstrates understanding that the boxes make it easier to understand the steps of putting on a spacesuit.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"><li>- <i>The boxes tell you what you have to do first.</i></li><li>- <i>You get step by step instructions.</i></li><li>- <i>Helps you know the order you should follow when reading about the parts of the spacesuit.</i></li><li>- <i>It shows the order that they put the different pieces on.</i></li></ul>
<b>0 – Unacceptable Response</b>
<p>The response provides a vague, inaccurate, or inappropriate description of the purpose of the boxes.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"><li>- <i>It tells you how to put on a spacesuit.</i></li><li>- <i>So it is not so confusing.</i></li><li>- <i>It helps to understand the information.</i></li></ul>

**SPACEWALKING, ITEM 14**

**14. Why is the airlock an important part of the space shuttle? Give two reasons from the article.**

*Process: Make straightforward inferences*

<p><b>2 – Complete Comprehension</b></p> <p>The response provides two reasons why the airlock is important.</p> <p>The reasons may include a reason related to the airlock as a gateway;</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>- <i>It opens out into space on one side.</i></li> <li>- <i>It is where the astronauts go when they come back from the spacewalk.</i></li> </ul> <p>Or related to the airlock’s environment;</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>- <i>It pumps out the air.</i></li> <li>- <i>It keeps the air in.</i></li> </ul> <p>Or aspects of safety related to the airlock.</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>- <i>It keeps the people NOT going on a spacewalk safe.</i></li> <li>- <i>It keeps the astronauts inside the shuttle from being sucked out.</i></li> <li>- <i>It is where you hook the wires between the suit and the shuttle.</i></li> </ul>
<p><b>1 – Partial Comprehension</b></p> <p>The response provides only one reason noted above.</p>
<p><b>0 – No Comprehension</b></p> <p>The response may provide a response that describes a function of the airlock that is not significant, or does not provide an accurate or appropriate reason for why the airlock is important.</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> <li>- <i>It is where the astronauts get dressed.</i></li> <li>- <i>The airlock is important.</i></li> </ul>

**SPACEWALKING, ITEM 15**

**15. Imagine that you wanted to be an astronaut. Use information from the article to describe one thing you might like and one thing you might not like about being an astronaut and explain why.**

*Process: Interpret and integrate ideas and information*

<p><b>2 – Complete Comprehension</b></p> <p>The response states an appropriate text-based description of one thing that the student might like and one thing that the student might not like about being an astronaut and may provide a reason to support the description. (Please note that the reasons may be implicit or grounded in personal opinion. Such a response is acceptable provided the reason given is accurate or does not contradict the text.)</p> <p>See the chart below for appropriate ideas for each description.</p> <p><u>Examples:</u></p> <p><b>Might like and why:</b> I want to see what the Earth looks like in outer space.  <b>Might not like and why:</b> Because it takes so long to get ready for a walk.</p> <p><b>Might like and why:</b> Wearing the microphone because it sounds cool.  <b>Might not like and why:</b> Having air pumped out of the airlock and my ears popping.</p> <p><b>Might like and why:</b> I would like to be floating in space because I've never tried it before.  <b>Might not like and why:</b> Working in space as it needs a lot of effort.</p>
<p><b>1 – Partial Comprehension</b></p> <p>The response states an appropriate text-based description of a good and/or bad thing about being an astronaut with accurate support of only <b>one</b> description.</p> <p>See the chart below for appropriate ideas for each description.</p>
<p><b>0 – No Comprehension</b></p> <p>May or may not provide a description of either a good or bad thing about being an astronaut that includes only inaccurate information or information unrelated to the text.</p>

### Acceptable Descriptions of Things That You Might Like or Not Like About Being An Astronaut

Note to Scorers: Students may provide a reasonable paraphrase of these ideas.

#### Things That You Might Like

- *Having no gravity/floating/doing somersaults*
- *Seeing earth from space/view of earth/see our planet from far away*
- *Doing experiments*
- *Wearing the cap and microphones (because I like to talk with my friends)*
- *Wearing a spacesuit (because it would keep me safe in space)*
- *Walking in space*

#### Things That You Might Not Like

- *Wearing the suit (it is uncomfortable/bulky/takes a long time to put on/has too many parts/makes you not able to scratch an itch)*
- *Having ears pop (in the airlock)*
- *Having to repair things/working in space (could be dangerous/takes a lot of effort)*
- *Running out of oxygen (because you can die)*
- *Floating/drifted into space (because the thin wire might snap)*

#### Not Acceptable Descriptions of Things You Might Like/ Not Like

##### Like Not Acceptable

- *I could learn about space*
- *It would be fun/an adventure*
- *Seeing space (because I've never seen it before)*
- *It would be scary*

##### Not Like Not Acceptable

- *I could die/something might happen/it is dangerous*
- *The spacesuit is too heavy*
- *The spacesuit is too cold/hot*
- *The food (tastes bad)*
- *I would miss my family*