IT'S ALL TRUE!

Level 1

Teacher's Guide and Comprehension Questions

Contents

About the Series

It's All True! is for students in grades 4–8 who are reading at our Reading Levels 1, 2, and 3. These reading levels correlate roughly with first, second, and third grade reading levels. However, the *content-area vocabulary and concepts* are tied to grades 4–8. So, for example, you will find grades 4–8 History/Social Studies vocabulary words and concepts such as *plague* and *famine* in a Level 1 book. However, the reading level will still be Level 1. Additionally, the last page of each book contains **Key Words**. These are primarily key content-area words. Page references allow readers to easily find the pages where the key concepts are taught.

Each set of five *It's All True!* books (one set per level):

- contains engaging nonfiction books in the content areas of *Living Things* (life science); *Earth and Space* (physical science); *History; Technology; Careers*.

- has carefully leveled text based on the most common words in the English language, as well as content-area vocabulary.
- aligns with the requirements of the Common Core State Standards.
- includes a table of contents; chapter titles and subheadings; maps, photos, and illustrations; a glossary of key words; and other features that build nonfiction reading skills.

It's All True! is the first of our *Read Up!* series. In these Level 1, 2, and 3 books, students are encouraged to enjoy similar topics and themes as they "read up" through the series. For additional information and Teacher's Guides for Levels 2 and 3, see www.highnoonbooks.com.

The Common Core Connection

The *It's All True!* series was developed in response to the call for more nonfiction materials that can be used to fulfill the Common Core State Standards (CCSS). Specifically:

- All fifteen of the *It's All True!* **Student Books** meet the College and Career Readiness Anchor Standard for Reading #10: Read and comprehend complex literary and informational texts independently and proficiently.
- The K–12 grade-specific Common Core State Standards are tied to grade-level text complexity bands. *It's All True!* **Student Books** are high interest/low reading-level chapter books. So the CCSS standard 10 that the books meet is tied to the *reading level* (grades 1, 2, or 3) rather than the higher *interest levels* of the students they are written for (grades 4–8).
- We have developed **Teacher's Guide questions** for every chapter of every book and aligned them to the Common Core State Standards (Reading Standards for Informational Text).
- Many of our **Teacher's Guide questions** can also be used to meet additional CCSS standards such as CCSS.ELA-Literacy.RST.6-8.10 (read and comprehend science/technical texts independently and proficiently) and CCSS.ELA-Literacy.RH.6-8.10 (read and comprehend history/social studies texts independently and proficiently).

Although struggling readers may not be able to meet certain grade-level criteria, the CCSS emphasize promoting "a culture of high expectations for all students." With this in mind, we have correlated our Teacher's Guide questions to the standards that we feel are most appropriate to our readers. The full text of the CCSS can be found at http://www.corestandards.org

Understanding the CCSS Coding Method

Standards are coded as follows in our correlations:

RI=Reading–Informational Text
RST=Reading–Science and Technical Subjects
RH=Reading–History/Social Studies

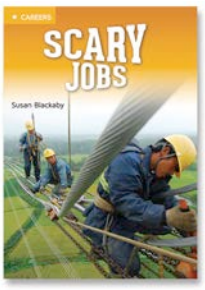
4/5/6/7/8, etc.= grade level
1/2/3/4/5, etc. = standard number

Example: RI6.7 = Reading–Informational Text, grade 6, standard 7
Example: RST6–8.2 = Reading–Science and Technical Subjects, grades 6–8, standard 2

The Level 1 Books

The five Level 1 Student Books focus on "extremes" in the areas of life science, physical science, history, technology, and careers. When your students have finished reading a chapter or the book, you can assess comprehension using the Teacher's Guide questions. Each guide starts with a list of Key Words (this list is also on the last page of the Student Book), followed by chapter-by-chapter questions. An Answer Key with CCSS correlations follows.

Name _____



Level 1 CAREERS: *Scary Jobs*

Key Words

astronauts	pilots	tornado
disasters	sewage	tower dogs
helicopter pilots	sewer divers	volcano
hurricanes	storm chasers	volcanologists
line workers	stunt performer	water-tower divers
news reporters	test pilots	welder

Comprehension Questions

Chapter 1: Stunt Jobs

1. What are two reasons why actors need stunt doubles?

2. The man on page 6 is hanging from a helicopter. How is he doing this safely?

3. Do you think a good stunt performer needs to be smart as well as strong? Why or why not?

Chapter 2: Danger Chasers

1. What are two weather *disasters*? Why do news people chase them?

2. How are news reporters and storm chasers alike?

3. Which danger chaser job is the hardest? Why do you think so?

Chapter 3: Flying High

1. What is a *pilot*? Who were the first pilots?

2. How were Felix Baumgartner and Chuck Yeager alike? How were they different?

3. What do you have to do to become an astronaut? Would you make a good astronaut? Why or why not?

Chapter 4: Working in the Air

1. What would be hard about being a tower dog?

2. How do the people in the photo on page 32 work as a team?

3. Which job in Chapter 4 do you think is the most scary? Why?

Chapter 5: Working in the Water

1. What do underwater *welders* do? Why do they have to be careful?

2. How can divers save lives?

3. Would you do any of the scary jobs in this book? Why or why not?

Level 1 CAREERS: *Scary Jobs*
Answer Key and CCSS Correlations

Chapter 1: Stunt Jobs

1. **What are two reasons why actors need stunt doubles?** (They don't want to get hurt, and they don't have the skills that are needed.)

   RI7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

2. **The man on page 6 is hanging from a helicopter. How is he doing this safely?** (The man is using very thin safety wires that you can't see. The wires keep him from falling off of the helicopter.)

   RH6–8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

3. **Do you think a good stunt performer needs to be smart as well as strong? Why or why not?** (Answers will vary. Accept all reasonable responses. Students should state a clear opinion and support it with details from the text.)

   RI8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

Chapter 2: Danger Chasers

1. **What are two weather *disasters*? Why do news people chase them?** (Tornadoes and hurricanes are weather disasters. News people chase them to inform people about the events and to tell them when it's time to leave.

   RH6–8.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.

2. **How are news reporters and storm chasers alike?** (News reporters and storm chasers both go to where the weather disasters are. They both report what they find out about the storms. They both want to keep people safe.)

   RI5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

3. **Which danger chaser job is the hardest? Why do you think so?** (Answers will vary. Accept all reasonable responses. Students should state clear opinions and support them with details from the text.)

   RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Chapter 3: Flying High

1. **What is a *pilot*? Who were the first pilots?** (A pilot is a person who flies a plane. Orville and Wilbur Wright flew the first plane.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

2. **How were Felix Baumgartner and Chuck Yeager alike? How were they different?** (Both Felix Baumgartner and Chuck Yeager went faster than the speed of sound. Yeager was the first to do it, and he was in a plane. Baumgartner jumped from 24 miles above Earth.)

   RI5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

3. **What do you have to do to become an astronaut? Would you make a good astronaut? Why or why not?** (Astronauts need to go to college. After college, they need to work hard and get picked. Once they're picked, they train for a long time. Accept any opinion as long as it is supported.)

   RI7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Chapter 4: Working in the Air

1. **What would be hard about being a tower dog?** (Climbing to the top of the tower is hard. Tower dogs also have to travel a lot and to work at night and in rain, snow, and high winds.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

2. **How do the people in the photo on page 32 work as a team?** (The helicopter pilot flies close to a tower. The line workers step out onto the tower. They fix the problem and then climb back in the helicopter.)

   RH6–8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

3. **Which job in Chapter 4 do you think is the most scary? Why?** (Answers will vary.)

   RI3.6 Distinguish their own point of view from that of the author of a text.

Chapter 5: Working in the Water

1. **What do underwater *welders* do? Why do they have to be careful?** (They join pieces of metal together underwater. They have to be careful because the heat in their tools can be unsafe.)

   RH6–8.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.

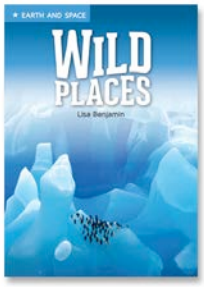
2. **How can divers save lives?** (They can rescue people who are trapped in the water; for example, people whose cars went into the water.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

3. **Would you do any of the scary jobs in this book? Why or why not?** (Answers will vary. Accept any opinion that is supported with more than one reason.)

   RI7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Name _____



Level 1 EARTH AND SPACE: *Wild Places*

Key Words

Amazon	Mount Everest	Sahara
Antarctica	Nile	Sherpa
continent	nomads	South Pole
desert	oxygen	temperature
Marianas Trench	plates	water pressure

Comprehension Questions

Chapter 1: The Hottest Desert

1. Where is the Sahara Desert? How big is it?

2. What does the photo on page 4 show? What does this tell you about where people live?

3. Think about how nomads live. What would be hard about this life? What would you like about it?

Chapter 2: The Coldest Continent

1. Name three ways Antarctica is different from other continents.

2. What are some animals that live in Antarctica? How can they live in such a cold place?

3. Why do people live in Antarctica? Would you want to live there? Why or why not?

Chapter 3: The Highest Mountain

1. What is *oxygen*? Why do people who climb Mount Everest carry oxygen?

2. Does everyone who goes up Mount Everest come down? Explain.

3. Who are the *Sherpa* people? How do they live?

Chapter 4: The Deepest Ocean

1. Where is the Marianas Trench? How big and deep is it?

2. What is the same about how Mount Everest and the Marianas Trench were formed? What is different about how they were formed?

3. Why have only a few people gone into the Marianas Trench?

Chapter 5: The Biggest Rivers

1. What are the two biggest rivers in the world? Where are they?

2. Look at the pictures on page 34 and page 39. How are they different from each other? What does this tell you about the rivers?

3. Which river do *you* think is the *biggest* in the world? Use facts from the chapter in your answer.

Level 1 EARTH AND SPACE: *Wild Places*
Answer Key and CCSS Correlations

Chapter 1: The Hottest Desert

1. **Where is the Sahara Desert? How big is it?** (The Sahara Desert is in northern Africa. It's almost as big as the United States.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

2. **What does the photo on page 4 show? What does this tell you about where people live?** (The photo shows city lights from space. The lights follow the Nile River. This shows that people live near the river so they can use the water.)

   RI6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

3. **Think about how nomads live. What would be hard about this life? What would you like about it?** (Opinions will vary, but should be supported by the text.)

   RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Chapter 2: The Coldest Continent

1. **Name three ways Antarctica is different from other continents.** (Students should note three of the following: It's the coldest continent; it has ice instead of beaches, forests, and grass lands; it has 24-hour daylight sometimes and 24-hour night sometimes; it's a cold desert and has white-outs; it has animals that can live on ice and in very cold water; very few people live there.)

   RST6–8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

2. **What are some animals that live in Antarctica? How can they live in such a cold place?** (Whales, seals and many birds, including penguins, live in Antarctica. They have a lot of fat that keeps them warm.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

3. **Why do people live in Antarctica? Would you want to live there? Why or why not?** (Scientists live there to learn about Antarctica. Opinions about living in Antarctica will vary. Accept all responses that include an opinion and one or more reasons.)

   RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Chapter 3: The Highest Mountain

1. **What is *oxygen*? Why do people who climb Mount Everest carry oxygen?** (Oxygen is a gas we need to breathe. There's less oxygen in the air the higher you go, and Mount Everest is very high. So people take oxygen so they can breathe better.)

   RI4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*.

2. **Does everyone who goes up Mount Everest come down? Explain.** (No; some people die trying to climb the mountain, and some bodies are left there.)

   RST6–8.1 Cite specific textual evidence to support analysis of science and technical texts.

3. **Who are the *Sherpa* people? How do they live?** (Sherpas are people who live and work on Mount Everest. They live in small towns around the lower part of the mountain. Some of them help people climb Mount Everest.)

   RST6–8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

Chapter 4: The Deepest Ocean

1. **Where is the Marianas Trench? How big and deep is it?** (The Marianas Trench is in the Pacific Ocean. It's more than 1,500 miles long, 43 miles wide, and 7 miles deep.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

2. **What is the same about how Mount Everest and the Marianas Trench were formed? What is different about how they were formed?** (They were both formed from moving plates. Mount Everest formed when plates pushed the land up. The Marianas Trench formed when one ocean plate moved under another ocean plate. It made a deep cut.)

   RI5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

3. **Why have only a few people gone into the Marianas Trench?** (It's too dark, too deep, and too cold. The water pressure is so high that subs have to be very, very strong or they'll be crushed.)

   RST6–8.1 Cite specific textual evidence to support analysis of science and technical texts.

Chapter 5: The Biggest Rivers

1. **What are the two biggest rivers in the world? Where are they?** (The Amazon River is in South America. The Nile River is in Africa.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

2. **Look at the pictures on page 34 and page 39. How are they different from each other? What does this tell you about the rivers?** (The picture of the Amazon on page 34 shows a river running through a thick rain forest. The picture of the Nile on page 39 shows a river running through very dry land, with buildings along the river and boats on the river. This shows that the Amazon and the Nile are in places with very different climates and types of land; it also suggests that more people live along the Nile than the Amazon.)

   RI6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

3. **Which river do *you* think is the *biggest* in the world? Use facts from the chapter in your answer.** (Answers will vary. Accept all responses that include an opinion supported by facts from the chapter.)

   RST6–8.1 Cite specific textual evidence to support analysis of science and technical texts.

Name _____

Level 1 HISTORY: *Dying Times*

Key Words

Black Death	famine	locusts
chemicals	fleas	pandemic
cholera	influenza	plague
continent	island	swarm

Comprehension Questions

Chapter 1: The Black Death

1. What is a *plague*? Why was the plague called the "Black Death"?

2. Look at the map on page 4. What does it show about how the Black Death moved in Europe?

3. The drawing in the picture on page 1 was made in 1656. How does it show the things you read about in the chapter?

Chapter 2: A Swarm of Locusts

1. What is a *swarm*? Why do people call a swarm of locusts a *plague* of locusts?

2. What problems does a locust swarm cause?

3. Look at the map and read the text on page 15. In what part of the United States did the locusts cause the biggest problems? Tell how you know.

Chapter 3: The Great Famine

1. What caused the Great Famine in Ireland?

2. Look at the last paragraph on page 25. How do the facts in sentences 2–6 support sentence 1: *The Great Famine changed things in many ways*?

3. Why were there three million fewer people in Ireland in 1852?

Chapter 4: A Time of Cholera

1. What happens when people get *dehydrated*?

2. Why is it important to keep waste water far away from drinking water?

3. How did the map on page 33 help stop cholera?

Chapter 5: A Killer Flu

1. How did World War I help make the Spanish influenza a *pandemic*?

2. In what way was the Spanish influenza worse than the Black Death?

3. Do you think a bad flu like the Spanish influenza would kill as many people today? Use the text to support your answer.

Level 1 HISTORY: *Dying Times*
Answer Key and CCSS Correlations

Chapter 1: The Black Death

1. **What is a *plague*? Why was the plague called the "Black Death"?** (A plague is a sickness that many people get at the same time. It was called the "Black Death" because it gave people black lumps on their bodies. Then they died.)

   RH6–8.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.

2. **Look at the map on page 4. What does it show about how the Black Death moved in Europe? (**It shows that the Black Death swept from south to north in Europe.)

   RH6–8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

3. **The drawing in the picture on page 1 was made in 1656. How does it show the things you read about in the chapter?** (The picture shows a doctor—the word "Doctor" is in the title—wearing a bird mask and a long, dark coat. The chapter talks about the mask and coat, and also talks about the sweet-smelling plants in the mask and *why* doctors wore this outfit. You may wish to point out that the photograph on the cover also shows a plague doctor outfit.)

   RH6–8.9 Analyze the relationship between a primary and secondary source on the same topic.

Chapter 2: A Swarm of Locusts

1. **What is a *swarm*? Why do people call a swarm of locusts a *plague* of locusts?** (A swarm is a huge number of locusts moving together. People call a swarm a *plague* of locusts because it can cause huge problems like a plague does.)

   RI8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

2. **What problems does a locust swarm cause?** (Locust swarms eat plants, including food crops and the plants that cows and other animals eat. As a result, farmers don't have food to eat or to sell, their animals don't have food to eat, and people and animals go hungry.)

   RI5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.

3. **Look at the map and read the text on page 15. In what part of the United States did the locusts cause the biggest problems? Tell how you know.** (The locusts caused the biggest problems near the middle of the country; especially in big parts of Texas, Kansas, Nebraska, and Iowa. Students know this because the text says that the green part of the map shows where the locusts caused the biggest problems.)

   RH6–8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

Chapter 3: The Great Famine

1. **What caused the Great Famine in Ireland?** (Many people grew potatoes for their families to eat. A plant disease killed all the potatoes. The people didn't have enough to eat.)

   RI4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

2. **Look at the last paragraph on page 25. How do the facts in sentences 2–6 support sentence 1: *The Great Famine changed things in many ways*?** (Each sentence tells a fact about what happened during the Great Famine: there wasn't enough food, so people went hungry; people got sick; people got diseases; people died from hunger and diseases. Together, these sentences show the changes that the Great Famine caused.)

   RI8.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.
3. **Why were there three million fewer people in Ireland in 1852?** (About one million people had died from the Great Famine and about two million people had moved away.)

   RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Chapter 4: A Time of Cholera

1. **What happens when people get *dehydrated*?** (When people get dehydrated they lose too much water. If they get too dehydrated they can die.)

   RI6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

2. **Why is it important to keep waste water far away from drinking water?** (Waste water is dirty water. If dirty water mixes with drinking water, people who drink the water can get sick.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

3. **How did the map on page 33 help stop cholera?** (A doctor put red marks on the map to show where a lot of people died. He saw that there was a pump in the area where the red marks were. He thought the pump might be the problem, so he asked city leaders to take the handle it. People stopped using the pump, and stopped getting cholera.)

   RI6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

Chapter 5: A Killer Flu

1. **How did World War I help make the Spanish influenza a *pandemic*?** (During the war soldiers went from place to place fighting and brought the flu with them. They also went home and brought it with them. This made the flu spread around the world.)

   RI5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

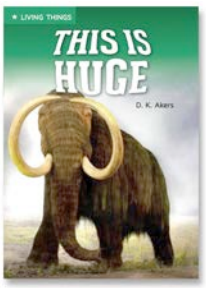
2. **In what way was the Spanish influenza worse than the Black Death?** (The Spanish influenza killed as many as 50 million people in one year. That was more people than died in all five years of the Black Death.)

   RI8.3 Analyze how a text makes connections among and distinctions between individuals, ideas or events (e.g., through comparisons, analogies, or categories).

3. **Do you think a bad flu like the Spanish influenza would kill as many people today? Use the text to support your answer.** (Answers will vary but should show an understanding of the material in this chapter. Students may point out that because so many people travel today, it is very easy for the flu to spread and become a pandemic. On the other hand, today there are flu shots and doctors know more about how to treat patients and stop the flu from spreading.)

   RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Name_____



Level 1 LIVING THINGS: *This Is Huge*

Key Words

African elephant
American crocodile
bison
blue whale
clone
corals
extinct
fossils
fungus
giant tortoise
ground sloth
ice age
Komodo dragon
mammals
mammoth
mastodon
mollusks
Pando
reptile
sequoia

Comprehension Questions

Chapter 1: Ice Age Animals

1. What is a *mammal*?

2. How were the mammoth and the mastodon alike? How were they different?

3. What happened to many of the large animals that lived during the Ice Age?

Chapter 2: Huge Mammals

1. What is the biggest mammal in the world? What is the biggest land mammal?

2. Choose one of the huge mammals in this chapter. How does it get and eat its food?

3. Look at the four headings in the chapter "Huge Mammals." How are the four headings alike? How do they help you understand the chapter?

Chapter 3: Huge Reptiles

1. What are three huge *reptiles*? Which one is the largest reptile in the world?

2. How are mammals and reptiles different from each other?

3. Which huge reptile do you think is most scary? Why? Include facts you learned from Chapter 3.

Chapter 4: Coral Reefs

1. Corals are small animals. So why can you see the Great Barrier Reef from space?

2. How do corals eat?

3. How does the Great Barrier Reef help people?

Chapter 5: Growing Big

1. What is the world's tallest tree? What is the world's heaviest tree?

2. Why do people call the Oregon fungus a *humongous* fungus and not just a *very big* fungus?

3. How are Pando and the Humongous Fungus alike? How are they different?

Level 1 LIVING THINGS: *This Is Huge*
Answer Key and CCSS Correlations

Chapter 1: Ice Age Animals

1. **What is a *mammal*?** (A mammal is an animal that has hair and feeds its babies milk.)

   RST6–8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 6–8 texts and topics*.

2. **How were the mammoth and the mastodon alike? How were they different?** (The mammoth and the mastodon both had large ears, tusks, and a long nose. The mastodon was smaller than the mammoth, with smaller tusks and different teeth.)

   RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

3. **What happened to many of the large animals that lived during the Ice Age?** (Many of them went extinct, and scientists aren't sure why.)

   RI5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*.

Chapter 2: Huge Mammals

1. **What is the biggest mammal in the world? What is the biggest land mammal?** (The blue whale is the biggest mammal in the world and the African elephant is the biggest land mammal.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

2. **Choose one of the huge mammals in this chapter. How does it get and eat its food?** (The blue whale makes its mouth and throat huge to eat thousands of pounds of krill each day. The African elephant uses its trunk to pick up grass and parts of trees to eat. The American bison eats grasses and small plants by chewing its food twice, like a cow. The giraffe uses its long neck and long tongue to reach and eat leaves from tall trees.)

   RST6–8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

3. **Look at the four headings in the chapter "Huge Mammals." How are the four headings alike? How do they help you understand the chapter?** (Each heading is the name of a different huge mammal. Writing about one huge mammal at a time makes it easy to understand the things that are alike and different about them.)

   RST6–8.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.

Chapter 3: Huge Reptiles

1. **What are three huge *reptiles*? Which one is the largest reptile in the world?** (Three huge reptiles are the American crocodile, the Komodo dragon, and the giant tortoise. The American crocodile is the world's largest reptile.)

   RI6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

2. **How are mammals and reptiles different from each other?** (Mammals have hair. Reptiles have scales. Mammals have babies and take care of them. Reptiles lay eggs. They don't care for their babies. Mammals are warm-blooded. Reptiles are cold-blooded.)

   RI5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text

3. **Which huge reptile do you think is most scary? Why? Include facts you learned from Chapter 3.** (Answers will vary. Accept any reasonable answer that draws on facts from the chapter.)

   RST6–8.1 Cite specific textual evidence to support analysis of science and technical texts.

Chapter 4: Coral Reefs

1. **Corals are small animals. So why can you see the Great Barrier Reef from space?** (The Great Barrier Reef can be seen from space because it's made of many smaller reefs that are made of huge numbers of corals, dead and alive.)

   RI6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

2. **How do corals eat?** (They get food the way plants do: by making it from sunlight. They also catch food with their tentacles.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

3. **How does the Great Barrier Reef help people?** (People get food from coral reefs. Scientists learn about sea life and look for animals and plants that may make sick people better. Coral reefs keep the coast safe by helping block storms. Tourists visit the reef for fun.)

   RST6–8.1 Cite specific textual evidence to support analysis of science and technical texts.

Chapter 5: Growing Big

1. **What is the world's tallest tree? What is the world's heaviest tree?** (The coast redwood is the world's tallest tree. The giant sequoia is the world's heaviest tree.)

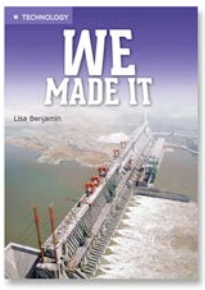
   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

2. **Why do people call the Oregon fungus a *humongous* fungus and not just a *very big* fungus?** (Students may say that *humongous* is much bigger than *very big*; or that *humongous* rhymes with *fungus* and that makes it a fun name.)

   RI7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.

3. **How are Pando and the Humongous Fungus alike? How are they different?** (Pando and the Humongous Fungus are both clones. They are both old, but Pando is older. We can see most of Pando above the ground, while almost all of the Humongous Fungus is underground. Pando is a tree and the Humongous Fungus is a fungus.)

Name_____



Level 1 TECHNOLOGY: *We Made It*

Key Words

astronauts	gravity	power plant
biome	Great Pyramid	rain forest
Burj Khalifa	hydropower	reservoir
dam	International Space	skyscrapers
dome	Station	structures
Eden Project	Lincoln Cathedral	Three Gorges Dam

Comprehension Questions

Chapter 1: Out of This World

1. What is a *structure*? Give three examples of structures from the chapter.

2. What structure is shown on page 1? Why was it built?

3. Look at pages 6 and 7. What steps were taken to build the ISS?

Chapter 2: Old and Tall

1. Why do you think this chapter is called "Old and Tall"?

2. What do we know about how the Great Pyramid was made?

3. Which structure took longer to finish, the Great Pyramid or Lincoln Cathedral?

Chapter 3: Reaching for the Sky

1. What is a *skyscraper*? Where is the tallest skyscraper in the world?

2. Look at the picture on page 18. How does it help you understand "The Race to the Sky"?

3. How was the Burj Khalifa skyscraper built to be strong?

Chapter 4: Keeping Water Back

1. How does a *dam* create a *reservoir*?

2. Look at the map on page 31 and read the text on pages 30–31. How far apart are the cities of Chongqing and Sandouping? What happened to the people who lived between those two cities?

3. How does the Three Gorges Dam help the people in China? What are some problems that the dam causes?

Chapter 5: Biomes in Domes

1. What is a *biome*? Describe the three biomes of the Eden Project.

2. Why are the domes good structures for biomes?

3. Workers made all the structures in this book. Which structure would you like to have worked on? Tell why.

Level 1 TECHNOLOGY: *We Made It*
Answer Key and CCSS Correlations

Chapter 1: Out of This World

1. **What is a *structure*? Give three examples of structures from the chapter.** (A structure is something that people make; people can go into or onto a structure. A structure has a fixed size and shape. Examples include a house, a museum, a space station, a plane, and a bridge.)

   RI5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*.

2. **What structure is shown on page 1? Why was it built?** (The structure is the International Space Station. It was built for astronauts to live in. They do experiments there to learn about space.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

3. **Look at pages 6 and 7. What steps were taken to build the ISS?** (First, huge parts were made on Earth. Next, the parts were sent into space a few at a time. Then astronauts started to put them together. Computers help them put each part into place.)

   RI4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Chapter 2: Old and Tall

1. **Why do you think this chapter is called "Old and Tall"?** (The two structures in this chapter are both very old and were also at one time the tallest structures in the world.)

   RI6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.

2. **What do we know about how the Great Pyramid was made?** (We know that it was made out of more than 2 million blocks of stone and that it took more than 20,000 workers and 20 years to build it. We know that workers cut blocks of stone far from where the pyramid was made, moved them, and then did different jobs to build the pyramid.)

   RI6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

3. **Which structure took longer to finish, the Great Pyramid or Lincoln Cathedral?** (The Lincoln Cathedral took longer to finish. It took more than 200 years, while the pyramid took 20 years.)

   RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Chapter 3: Reaching for the Sky

1. **What is a *skyscraper*? Where is the tallest skyscraper in the world?** (A skyscraper is a very tall structure. The tallest skyscraper today is Burj Khalifa in Dubai.)

   RI4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*.

2. **Look at the picture on page 18. How does it help you understand "The Race to the Sky"?** (It not only shows how buildings got taller and taller as time passed, but it also shows the shape of each building, how many feet each building was, its name, and where it was located.)

   RI4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

3. **How was the Burj Khalifa skyscraper built to be strong?** (It was built with lots of steel, which is strong and light. It was built in a Y shape to make it strong. Parts of the skyscraper have a round shape. That helps the wind flow around the building.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

Chapter 4: Keeping Water Back

1. **How does a *dam* create a *reservoir*?** (A *dam* blocks the flow of water down a river. The water that is held back forms a lake, or *reservoir* of water.)

   RI7.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

2. **Look at the map on page 31 and read the text on pages 30–31. How far apart are the cities of Chongqing and Sandouping? What happened to the people who lived between those two cities?** (The two cities are about 400 miles apart. The Three Gorges Dam created a reservoir between them. Water flooded all of the towns between them. So people who lived in those areas had to move.)

   RI6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

3. **How does the Three Gorges Dam help the people in China? What are some problems that the dam causes?** (The dam stops bad floods, which keeps people, homes, farms, and work places safe. The dam makes power for the people of China. However, more than a million people had to move from their homes to build the dam. The land around the dam isn't safe anymore, and dirt is piling up in the reservoir.)

   RI5.1 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.

Chapter 5: Biomes in Domes

1. **What is a *biome*? Describe the three biomes of the Eden Project.** (A biome is a place on Earth where things grow. Each biome has different weather and plants that grow in it. The Eden Project has a rain-forest biome that is hot and wet. It has a biome that is warm but not very wet. The third biome is the area outside the domes.)

   RST6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 6-8 texts and topics*.

2. **Why are the domes good structures for biomes?** (They are big and strong, with clear roofs and walls which let in a lot of sunlight. They have room for many plants, and systems for using rainwater to water them. Workers can even use hot-air balloons to take care of the treetops.)

   RI4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

3. **Workers made all the structures in this book. Which structure would you like to have worked on? Tell why.** (Answers will vary but should be supported by the text.)

   RST6–8.1 Cite specific textual evidence to support analysis of science and technical texts.