Literacy Link 22 Read Aloud: Draw Conclusions

SKILLS MINI LESSON (approximately 10 minutes)

Connect (1 minute)

- Imagine this: You're walking by a construction site. You see a vast hole dug out for the foundation of the building. It has four sides at right angles to the ground. At the bottom of the enormous hole is a big dump truck.
- The next day, walking by again, you see the same sight, but the dump truck is gone. How did it get out? (Students might speculate that a piece of equipment outside the hole, such as a crane, pulled it out or that a ramp was lowered into the hole and someone drove the truck out.)
- You just drew a conclusion. You combined your observation that the truck was no longer there with your knowledge that it could not drive up the sides of the hole to conclude that a piece of equipment such as a crane or ramp was used to remove the truck.
- Today we'll draw conclusions about how the Great Pyramid of Khufu in Egypt was built.

Read Aloud and Model (5 minutes)

- I'm going to read aloud from a book on the Seven Ancient Wonders of the World. Listen carefully for clues that will help you, along with the author, draw conclusions from the facts. Those conclusions will tell you what you really want to know about the building of the Great Pyramid of Khufu.

The Mysterious Great Pyramid
by Dakarai Ashoka

The Great Pyramid of Khufu was built by the Egyptian pharaoh Khufu around 2560 BC to serve as his tomb when he died. It stands 481 feet high and was the tallest structure on Earth for 43 centuries. The structure is made of 2 million stone blocks, each weighing more than two tons. You could fit five of the largest churches of Europe in the area this pyramid occupies. The interior stones are joined so closely that even a card won't fit between them. The ancient Egyptians built the Great Pyramid of Khufu with no modern means to transport heavy building materials and no precision tools. They left no record describing the design or building of the pyramid.

- I have to stop here to wonder how the ancient Egyptians could've achieved this impossible-seeming design and engineering feat. I look for clues in the text that will give me something to go on. There aren't any! I'm perplexed and intrigued. I'll go on.

Modern historians have never stopped theorizing about how the Great Pyramid was built. Even with an almost countless supply of strong bodies and a few brilliant minds, there were a host of problems to be solved: getting the massive stones to the site, building a ramp that would enable workers to reach greater heights—the challenges go on and on.

Let's look alone at the problem of moving stones into the right position. The ancient Egyptians didn't even have a machine as simple as a pulley for hoisting. But what they did have were larch tree trunks at least 20 ft long and 6 inches in diameter at the base. And if they had these tree trunks, they had levers. Levers are not complicated machines; they are simply bars used to move or lift a load at one end by applying force to the other end. A seesaw is a lever. So

is a balancing scale. So if two pyramid workers pressed down on one end of the lever and then released the lever, a stone sitting atop the other end would be pushed upward. It's even possible to push 2-ton stone blocks up a hill using this method, although it would take a long time. But if you had 1,000 workers doing this in sync, at the sound of a whistle or bell, many stones could be slowly moved up the hill in unison.

- To come up with this theory about levers, historians had to draw conclusions—that is, they had to combine clues about ancient Egypt with personal background knowledge to come up with new information. One clue was the fact that the Egyptians had no machines for heavy lifting. Another significant clue was that it's known there were huge larch trees growing in the area. Historians combined these clues with their own knowledge about how tree trunks can be used as levers to make moving heavy weights much easier. Presto! They arrived at the sensible conclusion that ancient Egyptians used logs as levers to lighten the weight of the stones and move them.

Engage (2–4 minutes) (Whole Class)

- It's amazing to think that the Great Pyramid was the tallest structure on Earth for 43 centuries.
- As of 2004, the Taipei 101 (for 101 stories) in Malaysia was the tallest building in the world. Before that, Two International Finance Center in China was the highest (2003). Before that, Emirates Tower One in the United Arab Emirates held the record for world's tallest building (1999). Prior to that, the highest building in the world was Petronas Towers in Malaysia (1998).
- What conclusion can you draw about the 1–4 year span between tall building records in recent years and the fact that the Great Pyramid held that distinction for 4,300 years?! (Students should conclude that the building of the Great Pyramid was an astounding feat, centuries before its time. In modern times, we have all the tools, technology, and know-how to build tall buildings quickly.)

Review (1 minute)

- You just combined the clues I gave you with your own reasoning power to draw a conclusion.
- Drawing conclusions when you're reading is a matter of combining text clues with your background knowledge to take away new ideas.∑

INDEPENDENT READING (25–30 minutes) Tell students that when they're finished reading today, they should write in their Journals a list of related facts that were stated in the book, then write a conclusion they could draw from these facts. Underneath that, students should write one or two sentences explaining the thinking that led them to that conclusion.

SHARE (10 minutes) (Whole Class) Let students know that although there are no right or wrong conclusions, some are more logical than others. Ask volunteers to share the facts and prior knowledge they used to draw a conclusion about today's reading. Have other volunteers say if the conclusion seems logical. If it does not, ask these students to draw another conclusion from the facts, and then explain why they made it. Give students feedback on their conclusions.