Lesson 20
Analyzing Conflicting Information

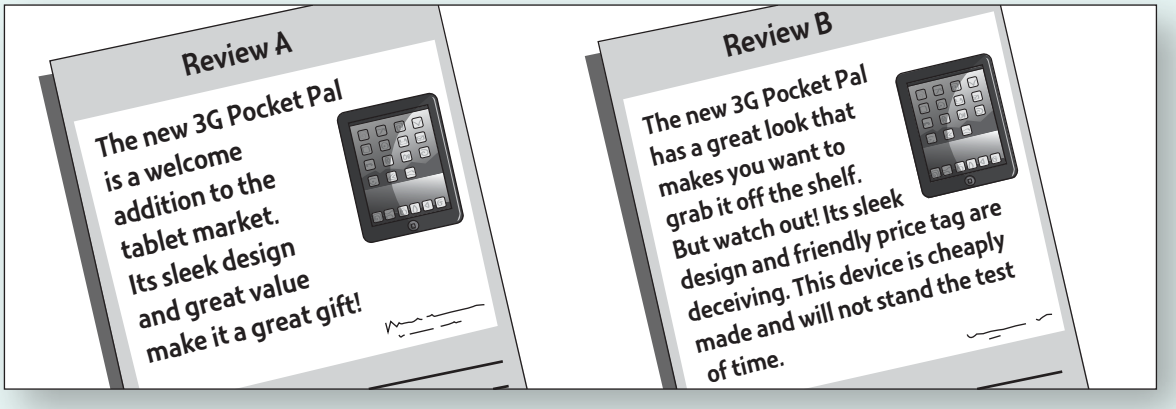
CCLS
RI.8.9: Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Theme: *Innovations: Benefits and Consequences*

Do you ever read movie reviews? One critic may love a movie and give it a glowing review, while other critics give a long list of reasons explaining how awful the movie is. After you've read the reviews, you may even wonder if the critics saw the same movie!

People often draw different, **conflicting,** conclusions based on the same evidence. Authors are no exception to this. Two authors may disagree about the same facts or offer different **interpretations**, or explanations, of what they observe. As a reader, you need to compare texts on the same topic carefully to understand how and why authors' interpretations may differ.

Read the two product reviews below. Circle details that show that the product reviews are about the same topic. Underline details that show conflicting information.



Read the chart below. Note the conflicting information about the same topic.

Ideas in Both Reviews	Review A	Review B
• The Pocket Pal has a sleek, attractive design. • It is inexpensive.	• The Pocket Pal is a welcome addition to the tablet market. • It would make a great gift.	• The Pocket Pal is not well made or durable.

Articles that present conflicting information are valuable because they let readers get a broader understanding of a topic. Analyzing how two authors present the same information will help ensure that you get a more balanced picture of the subject you are learning about.

Read the following scientific account about genetically modified foods.

Genre: **Scientific Account**

Are You Eating GM Food? *by Richard Boylan*

Genetically modified (GM) foods have been slowly entering our diets since the mid-1990s. These are foods that have been altered in laboratories for many beneficial purposes: to thrive in cold conditions, to resist pests and diseases, or to achieve faster growth. Other foods are modified to make them more nutritionally rich. For example, certain types of rice have been engineered so that they provide more of the nutrients needed in countries where rice is the main part of the daily diet.

Although there may be certain benefits of GM foods, we are not entirely sure of the side effects. Some may cause allergic reactions, for example, or increase cholesterol. Unfortunately, there are currently no labeling rules for modified foods, so consumers have no way of knowing which GM foods they may place in their shopping carts as they stroll through store aisles.

The makers of GM foods claim these foods don't differ significantly from natural varieties. They also say they do not want warning labels on their products. However, there are too many unknowns and potential dangers surrounding these foods. More GM research needs to be shared with consumers—they have a right to know exactly what is in the foods they purchase!

Explore how to answer this question: *"How does the author interpret facts about genetically modified foods?"*

The author feels that GM foods may be dangerous and they need to be labeled clearly so that consumers know what they are buying.

Fill in one or more points of interpretation from this account in the second column of the chart below. Complete the third column of the chart after reading the account on the next page.

Ideas in Both Accounts	Are You Eating GM Food?	GM Crops are Superfoods
• Genetically modified foods have been altered to be more resistant to pests and diseases. • Genetically modified foods have benefits.		

Read the scientific account. Use the Close Reading and the Hint to help you answer the question. Then complete the chart on the previous page.

Close Reading

Underline details in this account that are different from those in "Are You Eating GM Food?" **Circle** details in this account that are the same as those in the first account.

Genre: **Scientific Account**

GM Crops are Superfoods

by Sharla Silva

With the world's population projected to reach 9.3 billion by 2050, what is everyone going to eat? Genetically modified (GM) superfoods may be part of the answer. These are plants that have been modified to be more resistant to pests, cold, diseases, and drought. The benefits of these genetically modified superfoods are endless, and they could be vital to supporting our growing world.

Some people are concerned about eating foods with altered DNA, fearing that there may be unknown side effects. However, GM foods do not differ significantly from natural foods, and there is no reason for not moving forward with their development.

Hint

Reread the concluding paragraphs of each account and think about each author's message.

Circle the correct answer below.

Which statement best explains how the two authors disagree?

A Boylan thinks that GM foods may cause allergies and should be labeled, but Silva sees only the benefits of these foods.

B Silva believes that GM foods are superfoods, but Boylan thinks GM foods can only cause harm.

C Boylan believes that GM foods may have some important benefits, but Silva believes that the benefits of GM foods are not significant.

D Silva thinks the unknown dangers of GM foods are a major concern, but Boylan feels that GM foods are safe.

Show Your Thinking

Summarize the conflicting information in the two accounts.

With a partner, list facts from each account. Then discuss which account is more convincing.

Read the two scientific accounts about King Tutankhamen. Use the Study Buddies and the Close Readings to guide your reading of the texts.

Based on the title of the account, I know that the author is going to try to prove something. As I read, I am going to look for points the author makes to support his case.

Close Reading

Underline the sentence at the beginning of the account that states the author's view of King Tut's death.

Circle facts in the account that show how technology has been used to help solve Tut's death.

Genre: **Scientific Account**

A Case for Ancient Murder

by Juan Moya

October 7, 2002

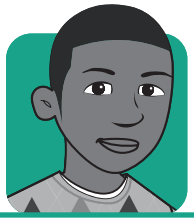
1 Since the 1922 discovery of the tomb of the pharaoh Tutankhamen, better known as King Tut, people have been fascinated by the young ruler, who was just 19 when he died. His tomb and some of its contents suggest that his death was sudden and unexpected. But was it illness, accident . . . or murder? If we look at the evidence, it becomes fairly obvious that the boy king met with foul play.

2 Tut's mummy was damaged during its removal from the coffin and casings, and the first expert to examine it in 1925 found no obvious cause of death. However, when the body was X-rayed in 1968, a key piece of evidence was discovered: a piece of bone floating inside Tut's skull. Experts believed it could be evidence of a fatal blow to the back of the young pharaoh's head.

3 There were certainly people close to Tut who would have benefited from having the king out of the way. Greg Cooper, a former FBI profiler and police chief, and Mike King, head of a police crime-analysis unit, have focused on a few key suspects: Tut's chief treasurer, his military commander, his wife, and his prime minister.

4 Through the use of forensic science, and by studying historical records and evidence from the tomb, Cooper and King were able to rule out all suspects except Tut's prime minister, Ay. Cooper and King concluded that Ay had the most to gain from Tutankhamen's death since Ay went on to rule as pharaoh.

5 Whether or not it was Ay who killed Tut is still being debated, but we can be fairly certain that the young pharaoh was indeed murdered. Further investigations and technological advances will soon prove that the young pharaoh did not succumb to a tragic illness or an unfortunate accident. And even after over 3,000 years, the truth deserves to be known.



Based on the title, I can tell that this account also is about King Tut's mysterious death. I will look for clues that explain this author's interpretation of facts.

Close Reading

Look back at the sentence you underlined in the previous account. Then **underline** phrases that show the interpretation of Tut's death in this account.

Circle facts in this account that show how technology has been used to help solve Tut's death. How do these facts differ from the previous account's facts?

Genre: **Scientific Account**

Tut Mystery Finally Solved?

by Ann Ching

February 16, 2010

1 Ever since scientists discovered a bone fragment in King Tut's skull, there has been speculation that the boy king was murdered. But other, more reliable evidence suggests that he was simply a frail young man who had a severe form of malaria, and suffered a leg fracture, all of which likely combined to cause his death.

2 First of all, Tut most likely had genetic disorders. Researchers have examined the DNA of Tut and several other famous Egyptian mummies. The tests show that Tut's father was the controversial pharaoh Akhenaten. They also confirmed that Akhenaten married his sister, a practice common in the royal family because they believed it preserved their divine status. This pairing was the likely cause of Tut's genetic issues.

3 There is also evidence that Tut suffered from a disorder that weakened areas of the bone. Detailed CT scans of Tut's mummy revealed that he had a cleft palate. The scans also revealed an abnormally curved spine and a toe malformation that would have caused pain and swelling. This sheds new light on the 100 or so canes found in Tut's tomb—he probably needed them to walk.

4 DNA tests on the mummy have also shown that disease may have been a third factor contributing to Tut's demise. The tests revealed signs of a parasite that causes a severe form of malaria. This indicates that Tut suffered from this terrible disease.

5 Put together, the evidence paints a clear picture of a young man weakened by genetic disorders and disease. So, despite the more intriguing idea that Tut was murdered, it's much more likely that he was just a very sick boy who died of natural causes. Science and technology will confirm this sad tale and finally solve this fascinating mystery.

Hints

Which key fact appears in both accounts but means something different in each?

Look closely at the text you underlined in each account. What information is in both accounts but is interpreted differently?

What facts did you circle in each account?

Use the Hints on this page to help you answer the questions.

1 Which fact about Tutankhamen do the two accounts agree on, but interpret differently?

A He broke his leg not long before he died.

B He died when he was only 19 years old.

C He had damage to the back of his skull.

D His tomb was discovered in Egypt in 1922.

2 Which statement best summarizes how Moya's and Ching's ideas conflict?

A They disagree on who gained from Tut's death.

B They disagree on the timing of Tut's death.

C They disagree on the best experts to consult about Tut's death.

D They disagree on the cause of Tut's death.

3 Explain how technological innovations have led to discoveries about King Tut's death. Describe how technology led the authors to draw conflicting conclusions about King Tut's death. Use details from each account in your response.

Read these passages about technology and the human brain. Then answer the questions.

Your Brain on Technology

by Annabelle Jordan

December 3, 2010

1 How many things do you do at once when you are in front of a computer? Do you think of yourself as a multitasker? As computer and Internet use grows, allowing us access anywhere to multiple sources of information and entertainment, so too do concerns about its impact on our lives. Technology isn't just changing the way we do things; studies show that it's changing our brains. But for better or for worse?

2 There is no doubt that Internet-connected devices give us access to more information than ever before. If you want to know the news of the day, check what your friends are doing, watch a music video or a movie, or look for a great deal on a product, it's all instantly available. While the Internet is a powerful tool, allowing us to quickly access all sorts of useful facts, keeping up with all of the available information can also be distracting and overwhelming. Academic and professional achievement still requires the ability to focus for extended periods on complex tasks. However, some research shows that the distractions of the modern world are impairing this ability.

3 Have you ever been working on something and thought, "I'll just quickly check if I have any messages"? How long did it take you to get back to your original task? People who multitask, or do more than one thing at a time, often feel they are being more productive by doing so, but studies show that is not the case. Researchers have found that heavy multitaskers actually take longer to switch between tasks, are not as good as non-multitaskers at ignoring distracting information, and actually feel more stress. Despite this, people are multitasking more. Studies indicate that computer users at work change windows or switch to other programs such as email almost 37 times every hour. That's more than once every two minutes.

4 All this multitasking seems to be actually changing our brains. When users juggle information, it provides stimulation that triggers the release of dopamine, a chemical that activates the pleasure centers in the brain. In other words, their brains reward them for switching between activities. Evidence shows that doing this on a regular basis retrains the brain to prefer switching activities. This can cause problems in situations in which people need to focus on one thing for more than a few minutes, such as working on longer tasks or in social situations. Heavy technology users report getting distracted even when they don't want to be, such as when spending time with their families. Without the constant release of dopamine, they feel bored.

5 Dopamine is also the brain chemical associated with addiction, leading to the worry that excessive technology use may cause dysfunctional behavior similar to other addictions. And given the effects on adult brains, experts worry that this will be even more pronounced in the still-developing brains of children and teenagers. The lives of countless young people are intertwined with technology; many youths send hundreds of text messages a day, not to mention the time spent on social networking, video games, or browsing the Internet. Students admit that their use of technology takes time away and distracts them from schoolwork. How can you not check your phone if a text comes in while you're doing homework? And then you have to reply, right?

6 The loss of focus during a task isn't the only way technology impairs learning. One study tracked how well 12- to 14-year-old boys remembered vocabulary words after two different activities. They either watched TV or played video games for two hours between studying the words and going to sleep. The results showed that playing video games both reduced the quality of sleep and significantly reduced their ability to remember the vocabulary words the next day. Researchers believe the intense stimulation of a video game after learning may have kept the brain from remembering the words. Evidence indicates that the brain needs a time of lower activity to process information. If we are always online, our brains are not getting that downtime.

7 Technology isn't all bad, of course. Research also shows that the brains of people who use the Internet find information more efficiently, and video games can improve the brain's ability to process images. Technology is here to stay, so it's not a question of should we use it, but of how we manage it. We can only do that effectively if we understand how it affects us, especially our brains. As with many things, finding a balance may be the key to maximizing the potential of our brains on technology.

from "The New Literacy"

by Clive Thompson, Wired Magazine

August 24, 2009

1 As the school year begins, be ready to hear pundits fretting once again about how kids today can't write—and technology is to blame. An age of illiteracy is at hand, right?

2 Andrea Lunsford isn't so sure. Lunsford is a professor of writing and rhetoric at Stanford University, where she has organized a mammoth project called the Stanford Study of Writing to scrutinize college students' prose. From 2001 to 2006, she collected 14,672 student writing samples—everything from in-class assignments, formal essays, and journal entries to emails, blog posts, and chat sessions. Her conclusions are stirring.

3 "I think we're in the midst of a literacy revolution the likes of which we haven't seen since Greek civilization," she says. For Lunsford, technology isn't killing our ability to write. It's reviving it—and pushing our literacy in bold new directions.

4 The first thing she found is that young people today write far more than any generation before them. That's because so much socializing takes place online, and it almost always involves text. Of all the writing that the Stanford students did, a stunning 38 percent of it took place out of the classroom—life writing, as Lunsford calls it. Those [online] updates and lists of 25 things about yourself add up.

5 It's almost hard to remember how big a paradigm[1] shift this is. Before the Internet came along, most Americans never wrote anything, ever, that wasn't a school assignment. Unless they got a job that required producing text (like in law, advertising, or media), they'd leave school and virtually never construct a paragraph again.

[1] **paradigm:** an example or framework

6 But is this explosion of prose good, on a technical level? Yes. Lunsford's team found that the students were remarkably adept at what rhetoricians call *kairos*—assessing their audience and adapting their tone and technique to best get their point across. The modern world of online writing, particularly in chat and on discussion threads, is conversational and public, which makes it closer to the Greek tradition of argument than the asynchronous[2] letter and essay writing of 50 years ago.

7 The fact that students today almost always write for an audience (something virtually no one in my generation did) gives them a different sense of what constitutes good writing. In interviews, they defined good prose as something that had an effect on the world. For them, writing is about persuading and organizing and debating, even if it's over something as quotidian[3] as what movie to go see. The Stanford students were almost always less enthusiastic about their in-class writing because it had no audience but the professor: It didn't serve any purpose other than to get them a grade. As for those texting short-forms and smileys defiling *serious* academic writing? Another myth. When Lunsford examined the work of first-year students, she didn't find a single example of texting speak in an academic paper.

8 Of course, good teaching is always going to be crucial, as is the mastering of formal academic prose. But it's also becoming clear that online media are pushing literacy into cool directions. The brevity of texting and status updating teaches young people to deploy haiku-like concision. At the same time, the proliferation[4] of new forms of online pop-cultural exegesis[5]—from sprawling TV-show recaps to 15,000-word videogame walkthroughs—has given them a chance to write enormously long and complex pieces of prose, often while working collaboratively with others.

9 We think of writing as either good or bad. What today's young people know is that knowing who you're writing for and why you're writing might be the most crucial factor of all.

[2] **asynchronous:** occurring at a different time

[3] **quotidian:** everyday, ordinary

[4] **proliferation:** an increase

[5] **exegesis:** an explanation or interpretation

Answer Form

1 Ⓐ Ⓑ Ⓒ Ⓓ
2 Ⓐ Ⓑ Ⓒ Ⓓ
3 Ⓐ Ⓑ Ⓒ Ⓓ

Number Correct ___/3

1 Which **best** describes Jordan's interpretation of the uses of technology?

A Students shouldn't text while doing their homework.

B We must learn to manage the harmful effects of technology.

C We must find a way to stop using technology so much.

D We should stop using technology that is damaging our brains.

2 Which fact do the two passages agree on, but interpret differently?

A Technology is responsible for young people today writing more than any generation before them.

B Computer users change windows or switch programs more than once every two minutes.

C Technology affects young people because they spend so much time engaging with it.

D Video games can improve the brain's ability to process images.

3 Reread this sentence from Thompson's passage.

> Lunsford's team found that the students were remarkably adept at . . . adapting their tone and technique to best get their point across.

Which of the following from Jordan's passage conflicts **most** with this?

A "All this multitasking seems to be actually changing our brains."

B "Researchers have found that heavy multitaskers actually take longer to switch between tasks, are not as good at ignoring distracting information, and actually feel more stress."

C "The lives of countless young people are intertwined with technology; many youths send hundreds of text messages a day."

D "Students admit that their use of technology takes time away and distracts them from schoolwork."

4 Explain how the facts the authors choose shape their conflicting interpretations of the effect of technology. Use at least **one** detail from each text in your response.

✓ Self Check *Go back and see what you can check off on the Self Check on page 187.*