

Grade 05: The Making of a Scientist Language Task

All students must read, understand, and express their understanding of complex, grade-level texts. At the heart of being able to read and understand complex texts is the ability to automatically and fluently decode words and determine how they work together in sentences to produce meaning. Having “language sense” combined with other factors, such as having robust background knowledge and a wide vocabulary, are key determining factors in what makes a student able to read and understand complex texts.¹

The language tasks have been developed to support teachers in developing students’ language sense through repeated exploration of how key sentences from the texts of the ELA Guidebooks 2.0 units are put together to produce meaning. This approach reinforces students’ knowledge of language structures and how those structures produce meaning.²

Each language task is made of at least 20 language links. Each language link is designed to take around 10-15 minutes to conduct. The links can be used with the ELA Guidebooks 2.0 units as a beginning activity with a whole class of students or during targeted, small-group instruction or individual instruction with students who need additional support. Each language link contains text to display or project as a stimulus for student work, teacher directions, and student look-fors. The student look-fors include examples of accurate student responses; however they are not inclusive or exclusive of all possible responses.

The language links focus students on the study of mentor sentences from the unit texts. Mentor sentences were selected for their meaning and their structure. The mentor sentences focus on the main ideas or concepts of the unit texts and present opportunities for students to practice with the complex structures of their grade level. Students study each mentor sentence using the same five lesson protocol. The same five language links are then repeated with a new mentor sentence.

¹ Shanahan, T., Fisher, D., & Frey, N. (2012, March). The Challenge of Challenging Text. *Educational Leadership*, 69(6), 58-62. Retrieved from <http://www.ascd.org/publications/educational-leadership/mar12/vol69/num06/The-Challenge-of-Challenging-Text.aspx>

² Fillmore, L. W., & Fillmore, C. J. (n.d.). What Does Text Complexity Mean for English Learners and Language Minority Students? Retrieved November 12, 2016, from http://ell.stanford.edu/sites/default/files/pdf/academic-papers/06-LWF%20CJF%20Text%20Complexity%20FINAL_0.pdf

These language links focus on the study of 4 mentor sentences from the unit texts. Each language link should take around 10-15 minutes to conduct.

Each mentor sentence is used across five language links that each have a different purpose. The same five language links are then repeated with a new mentor sentence.

1. **What does this sentence mean?**
 - a. Purpose: Students make an initial interpretation of the mentor sentence's meaning.
2. **What do I notice about this sentence?**
 - a. Purpose: Students examine the meaning and structure of the mentor sentence.
3. **What do I know this sentence means?**
 - a. Purpose: Students demonstrate their understanding of the sentence's meaning.
4. **What is the structure of this sentence?**
 - a. Purpose: Students create a sentence frame based on the mentor sentence.
5. **Can I write a quality sentence?**
 - a. Purpose: Students emulate the structure of the mentor sentence in their own sentence.

Throughout this section, notes are provided to identify places of additional skills support for students based on previous grade-level standards. Be sure to keep track during these language links of places where students need additional skills support, and use time during small-group or individual instruction to target those skills.

“Modern Science: What’s Changing?”

Mentor Sentence 1: What does this sentence mean?

1. Display or project:

Over the course of many years, scientists have engaged in a process of discovery or inquiry to refine their thinking and to develop an understanding of the world around them.

This sentence means...

2. Prompt students to copy the sentence.
3. Say: “Write and complete the sentence stem underneath the quotation.”

Student Look-Fors:

- The sentence means that scientists discover the world around them.

4. After several minutes, ask a few students to share how they paraphrased or interpreted the quotation. Prompt students to use the following stems to guide the conversation.
 - a. “Another way to say this sentence is...”
 - b. “I made meaning of this sentence by...”
 - c. “I looked at...”
 - d. “I noticed that...”

Note: If students have trouble forming their ideas, remind them that this is day 1 with the mentor sentence, and they will have other opportunities to develop understanding of the sentence over the next few language links.

5. Prompt students to revise or adjust their written responses based on what their peers shared.

“Modern Science: What’s Changing?”

Mentor Sentence 1: What do I notice about this sentence?

1. Display or project:

Over the course of many years, scientists have engaged in a process of discovery or inquiry to refine their thinking and to develop an understanding of the world around them.

- What do you notice about this sentence?
- How does what you notice help you understand the sentence?

2. Direct students to write their answers to the two questions, recording what they notice about the sentence and how that contributes to their understanding.
3. Ask students to share their thoughts with a partner. Prompt them to use the following conversation stems to guide their initial conversations.
 - a. “I noticed...which means...”
 - b. “I knew...so I...”
4. Ask pairs to work together to describe how the sentence is put together. As needed, ask guiding questions to support students:
 - a. “What are the parts of this sentence?”
 - b. “Can we divide this sentence into two more more sentences?”
 - c. “What phrases or clauses do you notice? How do those help you understand this sentence?”
 - d. “Are there any conjunctions in this sentence? What do those conjunctions mean?”
 - e. “What punctuation do you notice? How does the punctuation help you understand the sentence?”
5. Call on 2-3 pairs to share with the class what they notice about the sentence and explain how those ideas contribute to their understanding of the sentence.
6. Prompt them to use the following conversation stems to guide their sharing with the class.
 - a. “We noticed...which means...”
 - b. “We knew...so we...”

As pairs share, mark the grammatical elements students notice on the sentence and record any additional comments or thoughts on the board or chart paper. These will be needed for the next language links. After each pair shares, ask another student to rephrase what the pair shared. Prompt students to use the

following conversation stems to guide their rephrasing.

- a. "They noticed...which meant..."
- b. "They knew...so they..."

Student Look-Fors:

- Students may notice a wide variety of things about the sentence, including:
 - It starts with a prepositional phrase that answers the question "When have scientists engaged in a process of discovery or inquiry?"
 - There is a comma after the introductory phrase/element, which helps set off the first phrase from the rest of the sentence. It makes it stand out, so the information in that phrase must be important to the meaning of the sentence.
 - There are two conjunctions--*and* and *or*. *And* adds information, so scientists are doing both, refining their thinking and developing an understanding. *Or* means either. In this sentence, *or* means that either word "discovery" or "inquiry" can be used to mean the same thing in this sentence.
 - The sentence is long, so it is hard to understand unless I break it into parts.
 - It uses "to" twice, like it is repeating itself.
 - There is a long independent clause with lots of parts to it.

7. Ask students to reflect on their learning by completing one of the following sentence stems. Answers can be spoken or written.

- a. To understand this sentence, I had to _____.
- b. Noticing _____ helped me understand the sentence because _____.
- c. Knowing _____ comes in handy when determining the meaning of this sentence.

8. Note: If student responses do not resemble the student look-fors in this language link, conduct a brief mini-lesson to review or reinforce a grammar skill from an earlier grade found in this sentence, such as prepositional phrases or using conjunctions. Focus on a specific skill your students need.³

It is acceptable for students not to understand the full meaning of the sentence on this day.

³ Access the [Grammar Guide](#) to determine the skills students should have coming into grade 5, the skills that need to be reinforced in grade 5, and the skills that need to be explicitly taught in grade 5.

“Modern Science: What’s Changing?”

Mentor Sentence 1: What do I know this sentence means?

1. Display or project:

Over the course of many years, scientists have engaged in a process of discovery or inquiry to refine their thinking and to develop an understanding of the world around them.

This sentence means...

2. Prompt students to read what they wrote in the previous language link about the meaning of the sentence.
3. Say: “We have been analyzing this mentor sentence. Now we are going to look again at its meaning.”
4. Display or project:

- **WHO/WHAT?**
- (Did/will) **DO WHAT?**
- **WHEN** did who do what?
- **WHERE** did who do what?
- **WHY** did who do what?
- **HOW** did who do what?

Summary Sentence: _____

5. Ask the following questions one at a time and prompt students to record their written responses.

WHO/WHAT?

scientists

Did/will **DO WHAT?**

have engaged in discovery

WHEN did who do what?

over the course of many years

WHERE did who do what?

N/A

WHY did who do what?

to refine their thinking and to develop an understanding

HOW did who do what?

N/A

6. Say: "Write a summary of the sentence. Make sure to put the sentence into your own words."

Student Look-Fors:

- Scientists have used the scientific method for many years to think better and to understand the world around them.
7. After several minutes, ask a few students to share their statements with the class.
 8. Prompt students to revise or adjust their written responses based on what their classmates shared.

“Modern Science: What’s Changing?”

Mentor Sentence 1: What is the structure of this sentence?

1. Display or project:

Over the course of many years, scientists have engaged in a process of discovery or inquiry to refine their thinking and to develop an understanding of the world around them.

2. Say: “We have been working with the same mentor sentence to understand what it means. Now we will work together to take it apart so we can write our own quality sentences with a similar structure.”
3. Ask: “What have we learned so far about this mentor sentence?” Conduct a brief discussion to review what was learned in the previous language links. Use the following questions to guide the discussion:
 - a. “What does this sentence mean?”
 - b. “What have you noticed about this sentence?”
 - c. “How is it put together?”

Student Look-Fors:

- This sentence means that scientists have used the scientific method for many years to think better and to understand the world around them.
- Students might say they noticed prepositional phrases, commas, or conjunctions.
- Students should understand that the parts of this sentence are introductory phrase + comma + independent clause + period.
- They should understand that the introductory phrase answers the question “When have scientists engaged in a process of discovery?”

4. Display or project:

After many years of research, scientists demoted Pluto to a dwarf planet.

5. Ask: “How is this sentence similar to the mentor sentence in the way that it is constructed?”

Student Look-Fors:

MENTOR SENTENCES

- Students should identify that the structures are similar--this example, like the mentor sentence, begins with an introductory phrase followed by a comma and then an independent clause.
- They should also identify that the introductory phrase answers the question "When?"

- Say: "Now let's build a quality sentence about the planets using phrases and clauses."
- Write a quality sentence as a class imitating the structure of the mentor sentence. As needed, review the structure of the mentor sentence again and/or ask students to compare the class sentence to the mentor sentence.

Student Look-Fors:

- Before scientists completed their investigation, they thought Neptune and Pluto were the same size.

- Say: "Now let's construct frames to illustrate the structure of the mentor sentence. We will use these frames to write our own sentences and include the subordinating conjunctions below."
- Prompt students to identify other subordinating conjunctions which signal when an event occurred. Record those conjunctions. Then, as a class, create sentence frames that illustrate the structure of the mentor sentence. Reinforce any other grammatical elements or spelling students may need to produce a quality sentence.

Student Look-Fors:

- After _____, _____.
- Before _____, _____.
- Since _____, _____.

- Direct students to reflect on their learning. Ask: "How does breaking down this sentence into its parts support your understanding of the sentence?" Answers can be spoken or written.

“Modern Science: What’s Changing?”

Mentor Sentence 1: Can I write a quality sentence?

1. Display or project:

Over the course of many years, scientists have engaged in a process of discovery or inquiry to refine their thinking and to develop an understanding of the world around them.

After _____,

Before _____,

Since _____,

Explain how scientific investigation has changed over time.

2. Say: “Now we are going to write our own quality sentences.” Remind students of the elements of a quality sentence discussed in previous language links as well as other model sentences.
3. Read aloud the question, “How has scientific investigation changed over time?”
4. Ask students to work independently to write 1-2 quality sentences that answer the question and imitate the structure of the mentor sentence.
5. Remind students they should begin their sentences with prepositional phrases that answer “when.”
6. Encourage students to use the unit texts to ensure they have an accurate response.

Student Look-Fors:

- An exemplar should follow the sentence frame. For example:
 - After the invention of the telescope, scientific investigation became more precise.
 - Before scientists read the work of others, they often had theories that were similar.
 - After gaining data, scientists determined there were 13 planets.
- The introductory prepositional phrase should have a clear relationship with the clause that follows it. For example in the first look-for above, the introductory prepositional phrase explains what led to the improvement of scientific investigation.

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Note: More complete sentence stems may be provided, as needed, as a method of additional support. For example, "After the invention of the telescope, _____."

“The Making of a Scientist”

Mentor Sentence 2: What does this sentence mean?

1. Display or project:

“The general principle is that things which are moving tend to keep on moving, and things which are standing still tend to stand still unless you push them hard.”

From “The Making of a Scientist”

This sentence means...

2. Prompt students to copy the sentence.
3. Say: “Write and complete the sentence stem underneath the quotation.”

Student Look-Fors:

- The sentence means that things move or stop when you push them hard.

4. After several minutes, ask a few students to share how they paraphrased or interpreted the quotation. Prompt students to use the following stems to guide the conversation.
 - a. “Another way to say this sentence is...”
 - b. “I made meaning of this sentence by...”
 - c. “I looked at...”
 - d. “I noticed that...”

Note: If students have trouble forming their ideas, remind them that this is day 1 with the mentor sentence, and they will have other opportunities to develop understanding of the sentence over the next few language links.

5. Prompt students to revise or adjust their written responses based on what their peers shared.

"The Making of a Scientist"

Mentor Sentence 2: What do I notice about this sentence?

1. Display or project:

"The general principle is that things which are moving tend to keep on moving, and things which are standing still tend to stand still unless you push them hard."

From "The Making of a Scientist"

- What do you notice about this sentence?
- How does what you notice help you understand the sentence?

2. Direct students to write their answers to the two questions, recording what they notice about the sentence and how that contributes to their understanding.
3. Ask students to share their thoughts with a partner. Prompt them to use the following conversation stems to guide their initial conversations.
 - a. "I noticed...which means..."
 - b. "I knew...so I..."
4. Ask pairs to work together to describe how the sentence is put together. As needed, ask guiding questions to support students:
 - f. "What are the parts of this sentence?"
 - g. "Can we divide this sentence into two or more sentences? What do we have to remove or change?"
 - h. "What phrases or clauses do you notice? How do those help you understand this sentence?"
 - i. "Are there any conjunctions in this sentence? What do those conjunctions mean?"
 - j. "What punctuation do you notice? How does the punctuation help you understand the sentence?"
5. Call on 2-3 pairs to share with the class what they notice about the sentence and explain how those ideas contribute to their understanding of the sentence.
6. Prompt them to use the following conversation stems to guide their sharing with the class.
 - a. "We noticed...which means..."
 - b. "We knew...so we..."

As pairs share, mark the grammatical elements students notice on the sentence and record any additional comments or thoughts on the board or chart paper. These will be needed for the next language links.

MENTOR SENTENCES

After each pair shares, ask another student to rephrase what the pair shared. Prompt students to use the following conversation stems to guide their rephrasing.

- c. "They noticed...which meant..."
- d. "They knew...so they..."

Student Look-Fors:

- Students may notice a wide variety of things about the sentence, including:
 - This sentence explains one of Newton's laws.
 - "Unless you push them hard" describes the force that one would exert on an object in motion or a still object.
 - There are two complete sentences joined by a conjunction, *and*. *And* joins two ideas together. In this sentence, *and* joins the two principles together.
 - There is a comma before *and*.
 - There is another conjunction, *unless*, but there is no comma before *unless*.
 - After the first conjunction there is an independent clause ("things which are standing still tend to stand still" and a dependent clause ("unless you push them hard").
 - This is a compound-complex sentence because it is made up of a compound sentence (two independent clauses joined by a conjunction) and a complex sentence (an independent and dependent clause).

7. Ask students to reflect on their learning by completing one of the following sentence stems. Answers can be spoken or written.
 - a. To understand this sentence, I had to _____.
 - b. Noticing _____ helped me understand the sentence because _____.
 - c. Knowing _____ comes in handy when determining the meaning of this sentence.
8. Note: If student responses do not resemble the student look-fors in this language link, conduct a brief mini-lesson to review or reinforce a grammar skill from an earlier grade found in this sentence, such as writing simple, compound, or complex sentences, or how and when to use punctuation with conjunctions. Focus on a specific skill your students need.⁴ It is acceptable for students not to understand the full meaning of the sentence on this day.

⁴ Access the [Grammar Guide](#) to determine the skills students should have coming into grade 5, the skills that need to be reinforced in grade 5, and the skills that need to be explicitly taught in grade 5.

"The Making of a Scientist"

Mentor Sentence 2: What do I know this sentence means?

1. Display or project:

"The general principle is that things which are moving tend to keep on moving, and things which are standing still tend to stand still unless you push them hard."

From "The Making of a Scientist"

This sentence means...

2. Prompt students to read what they wrote in the previous language link about the meaning of the sentence.
3. Say: "We have been analyzing this mentor sentence. Now we are going to look again at its meaning."
4. Display or project:

- **WHO/WHAT?**
- (Did/will) **DO WHAT?**
- **WHEN** did who do what?
- **WHERE** did who do what?
- **WHY** did who do what?
- **HOW** did who do what?

Summary Sentence: _____

5. Ask the following questions one at a time and prompt students to record their written responses.

WHO/WHAT?

(Did/will) **DO WHAT?**

WHEN did who do what?

WHERE did who do what?

General principle

states things in motion will continue to move and things at rest will remain at rest unless acted upon by an outside force

N/A

N/A

MENTOR SENTENCES

WHY did who do what? N/A
HOW did who do what? N/A

6. Encourage students to expand their summary sentence. Prompt them to use information from the unit texts to answer questions not provided in the original sentence.

WHO/WHAT? General principle
 (Did/will) **DO WHAT?** states things in motion will continue to move and things at rest will remain at rest unless acted upon by an outside force
WHEN did who do what? N/A
WHERE did who do what? N/A
WHY did who do what? the principle is a law of motion
HOW did who do what? Newton studied

7. Say: "Write a summary of the sentence underneath the quotation. Make sure to put the sentence into your own words."

Student Look-Fors:

- Newton's study of the laws of motion led to the general principle that things in motion will continue to move and things at rest will remain at rest unless acted upon by an outside force.

8. After several minutes, ask a few students to share their statements with the class.
9. Prompt students to revise or adjust their written responses based on what their classmates shared.

“The Making of a Scientist”

Mentor Sentence 2: What is the structure of this sentence?

1. Display or project:

“The general principle is that things which are moving tend to keep on moving, and things which are standing still tend to stand still unless you push them hard.”

From “The Making of a Scientist”

2. Say: “We have been working with the same mentor sentence to understand what it means. Now we will work together to take it apart so we can write our own quality sentences with a similar structure.”
3. Ask: “What have we learned so far about this mentor sentence?” Conduct a brief discussion to review what was learned in the previous language links. Use the following questions to guide the discussion:
 - a. “What does this sentence mean?”
 - b. “What have you noticed about this sentence?”
 - c. “How is it put together?”

Student Look-Fors:

- This sentence means that things that are moving will continue to move and objects at rest will remain at rest unless acted upon by an outside force.
- Students might say they noticed prepositional phrases, commas, or conjunctions.
- Students should understand that the parts of this sentence are independent clause + comma + coordinating conjunction + independent clause + subordinating conjunction + dependent clause + period.
- Students should understand that each independent clause has an independent idea that could stand alone. The subordinating conjunction helps the reader to connect the ideas.

4. Ask: “What word in this sentence connects two complete sentences?”

Student Look-Fors:

- Students should understand that *and* connects two complete sentences (“The general principle is that things which are moving tend to keep on moving” and “Things which are standing still tend to stand still unless you push them hard.”).

5. Ask: “Where else is there a conjunction that connects words, phrases, or clauses in this sentence? What does it mean?”

Student Look-Fors:

- The other conjunction is *unless* before “you push them hard.” *Unless* is used to tell the readers when or under what conditions things that are still will move. *Unless* means “except if,” so it tells the reader when something will be different.

6. Say: “Remember, conjunctions connect words, phrases, or clauses in a sentence and signal different relationships between ideas. Sometimes conjunctions add on ideas and sometimes conjunctions signal a change or contrast in ideas. They show how ideas relate in a sentence, so as we read, we better understand what a writer means. When we write, we use conjunctions to expand our sentences and make sure our meaning is clear to the reader.”
7. Display or project:

A planet is a large space object which revolves around a star, and the planet reflects the star’s light as the planet revolves around the star.

This artwork shows the relative sizes of the 13 planets, but the artwork does not show the distances between the planets since the distances between the planets are too large at scale to fit on a single page.

8. Ask: “How are these sentences similar to the mentor sentence?”

Student Look-Fors:

- Students should identify that the structures are similar--these examples, like the mentor sentence, are compound-complex sentences.
- Students should explain that the function of the conjunction in the sentences is to show how the ideas on each side of the conjunction connect. For example, in the first example, the second independent clause provides additional information about a planet, so the conjunction “and” is used to signal information is being added. In the second sentence, the first clause describes what the artwork includes and the phrase after the conjunction says what the artwork doesn’t include. The conjunction “but” is used to indicate they are saying the opposite things.

9. Say: “Now let’s build a quality sentence about the planets using conjunctions.”
10. Write a quality sentence as a class imitating the structure of the mentor sentence. As needed, review the structure of the mentor sentence again and/or ask students to compare the class sentence to the mentor sentence.

Student Look-Fors:

- Scientists thought Pluto was a planet, but they gathered data until they determined that Pluto is a dwarf planet.

11. Say: “Now let’s build a sentence frame to illustrate the structure of the mentor sentence. We will use these frames to write our own sentences.”

12. Display an anchor chart, or provide students with a list, of coordinating and subordinating conjunctions and guide students to identify the relationships they signal. Then, as a class, create sentence frames that illustrate the structure of the mentor sentence. Reinforce any other grammatical elements or spelling students may need to produce a quality sentence.

Student Look-Fors:

- _____ , and _____ as _____
but since
so unless
or that
because
until
when

What relationships do these conjunctions signal?

Cause and effect	Sequence	Under certain conditions	Comparison (Addition)	Contrast
so as because that since	after until when	unless that or	and as	but

13. Direct students to reflect on their learning. Ask: “How does breaking down this sentence into its parts support your understanding of the sentence?” Answers can be spoken or written.

"The Making of a Scientist"

Mentor Sentence 2: Can I write a quality sentence?

1. Display or project:

"The general principle is that things which are moving tend to keep on moving, and things which are standing still tend to stand still, unless you push them hard."

From "The Making of a Scientist"

_____, and _____ as _____.
 but _____ since _____
 so _____ unless _____
 or _____ that _____
 because _____
 until _____
 when _____

Explain how scientists use scientific inquiry to learn more about Pluto.

2. Say, "Now we are going to write our own quality sentences." Remind students of the elements of a quality sentence discussed in previous language links as well as other model sentences.

Note: As needed, provide additional support to students by assigning a coordinating and subordinating conjunction to students and/or provide them with a sentence frame, such as

_____, but _____ because _____.

3. Read the prompt aloud, "Explain how scientists use scientific inquiry to learn more about Pluto."
4. Ask students to work independently to write 1-2 quality sentences that answer the question and imitate the structure of the mentor sentence.
5. Remind students to select a coordinating and subordinating conjunction to signal the appropriate connection of ideas in their sentences.

6. Encourage students to refer to unit texts to ensure their responses are correct.

Student Look-Fors:

- Scientists observed the solar system, and they learned a lot about the planets because they engaged in scientific inquiry.
- Scientists observed the solar system, so they learned a lot about the planets since they engaged in scientific inquiry.
- Pluto used to be considered one of the 9 main planets; however, it is now considered a dwarf planet since it is too small to clear its orbit of other objects.

“Galileo Galilei: Biography, Inventions & Other Facts”

Mentor Sentence 3: What does this sentence mean?

1. Display or project:

Galileo could neither teach nor write about his controversial theory that the Earth and other planets circle the sun.

This sentence means...

2. Prompt students to copy the sentence.⁵
3. Say: “Write and complete sentence stem underneath the sentence.”

Student Look-Fors:

- The sentence means that Galileo could not teach or write about his work.

4. After several minutes, ask a few students to share how they paraphrased or interpreted the quotation. Prompt students to use the following stems to guide the conversation.
 - a. “Another way to say this sentence is...”
 - b. “I made meaning of this sentence by...”
 - c. “I looked at...”
 - d. “I noticed that...”

Note: If students have trouble forming their ideas, remind them that this is day 1 with the mentor sentence, and they will have other opportunities to develop understanding of the sentence over the next few language links.

5. Prompt students to revise or adjust their written responses based on what their peers shared.

⁵ Theory should be explained or defined within the context of the Making of a Scientist unit before this language link. If needed, remind students that a theory is a set of ideas presumed as true but not yet proven as such.

"Galileo Galilei: Biography, Inventions & Other Facts"

Mentor Sentence 3: What do I notice about this sentence?

1. Display or project:

Galileo could neither teach nor write about his controversial theory that the Earth and other planets circle the sun.

- What do you notice about this sentence?
- How does what you notice help you understand the sentence?

2. Direct students to write their answers to the two questions, recording what they notice about the sentence and how that contributes to their understanding.
3. Ask students to share their thoughts with a partner. Prompt them to use the following conversation stems to guide their initial conversations.
 - a. "I noticed...which means..."
 - b. "I knew...so I..."
4. Ask pairs to work together to describe how the sentence is put together. As needed, ask guiding questions to support students:
 - k. "What are the parts of this sentence?"
 - l. "What phrases or clauses do you notice? How do those help you understand this sentence?"
 - m. "Are there any conjunctions in this sentence? What do those conjunctions mean?"
 - n. "What punctuation do you notice? How does the punctuation help you understand the sentence?"
5. Call on 2-3 pairs to share with the class what they notice about the sentence and explain how those ideas contribute to their understanding of the sentence.
6. Prompt them to use the following conversation stems to guide their sharing with the class.
 - a. "We noticed...which means..."
 - b. "We knew...so we..."

As pairs share, mark the grammatical elements students notice on the sentence and record any additional comments or thoughts on the board or chart paper. These will be needed for the next language links.

After each pair shares, ask another student to rephrase what the pair shared. Prompt students to use the following conversation stems to guide their rephrasing.

- e. "They noticed...which meant..."
- f. "They knew...so they..."

Student Look-Fors:

- Students may notice a wide variety of things about the sentence, including:
 - It says *neither* and *nor*. Galileo could not teach about his theory. Galileo could not write about his theory.
 - This is a complex sentence. It has an independent clause ("Galileo could neither teach nor write about his controversial theory") and a dependent clause ("that the Earth and other planets circle the sun").
 - *That* is a conjunction in this sentence. Galileo's theory was that the Earth and other planets circle the sun.
 - There is only end punctuation.

7. Ask students to reflect on their learning by completing one of the following sentence stems. Answers can be spoken or written.

- a. To understand this sentence, I had to _____.
- b. Noticing _____ helped me understand the sentence because _____.
- c. Knowing _____ comes in handy when determining the meaning of this sentence.

8. Note: If student responses do not resemble the student look-fors in this language link, conduct a brief mini-lesson to review or reinforce a grammar skill from an earlier grade found in this sentence, such as writing simple, compound, or complex sentences. Focus on a specific skill your students need.⁶ It is acceptable for students not to understand the full meaning of the sentence on this day.

⁶ Access the [Grammar Guide](#) to determine the skills students should have coming into grade 5, the skills that need to be reinforced in grade 5, and the skills that need to be explicitly taught in grade 5.

“Galileo Galilei: Biography, Inventions & Other Facts”

Mentor Sentence 3: What do I know this sentence means?

1. Display or project:

Galileo could neither teach nor write about his controversial theory that the Earth and other planets circle the sun.

This sentence means...

2. Prompt students to read what they wrote in the previous language link about the meaning of the sentence.
3. Say: “We have been analyzing this mentor sentence. Now we are going to look again at its meaning.”
4. Display or project:

- **WHO/WHAT?**
- (Did/will) **DO WHAT?**
- **WHEN** did who do what?
- **WHERE** did who do what?
- **WHY** did who do what?
- **HOW** did who do what?

Summary Sentence: _____

5. Ask the following questions one at a time and prompt students to record their written responses.

WHO/WHAT?

Galileo

(Did/will) **DO WHAT?**

could neither teach nor write about his theory

WHEN did who do what?

N/A

WHERE did who do what?

N/A

WHY did who do what?

because his theory was controversial

HOW did who do what?

N/A

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- Encourage students to expand their summary sentence. Prompt them to use information from the unit texts to answer questions not provided in the original sentence.

WHO/WHAT?

(Did/will) **DO WHAT?**

WHEN did who do what?

WHERE did who do what?

WHY did who do what?

HOW did who do what?

Galileo

could neither teach nor write about his theory

the 1600s

In Italy

because his theory was controversial

N/A

- Say: "Write and complete the sentence stem underneath the sentence. Make sure to put the sentence into your own words."

Student Look-Fors:

- The sentence means that In Italy in the 1600s, Galileo's theory was controversial and not accepted by the church, so he could not openly teach or write about it. This led to Galileo being charged for a crime.

- After several minutes, ask a few students to share their statements with the class.
- Prompt students to revise or adjust their written responses based on what their classmates shared.

"Galileo Galilei: Biography, Inventions & Other Facts"

Mentor Sentence 3: What is the structure of this sentence?

1. Display or project:

Galileo could neither teach nor write about his controversial theory that the Earth and other planets circle the sun.

2. Say: "We have been working with the same mentor sentence to understand what it means. Now we will work together to take it apart so we can write our own quality sentences with a similar structure."
3. Ask: "What have we learned so far about this mentor sentence?" Conduct a brief discussion to review what was learned in the previous language links. Use the following questions to guide the discussion:
 - a. "What does this sentence mean?"
 - b. "What have you noticed about this sentence?"
 - c. "How is it put together?"

Student Look-Fors:

- This sentence means that In Italy in the 1600s, Galileo's theory was controversial and not accepted by the church, so he could not openly teach or write about it. This led to Galileo being charged for a crime.
- Students might say they noticed prepositional phrases, commas, or conjunctions.
- Students should understand that the mentor sentence begins with an independent clause ("Galileo could neither teach nor write about his controversial theory") and ends with a dependent clause ("that the Earth and planets circle the sun"). *That* is a conjunction in this sentence because it combines two clauses together. That connects the term "theory" with a description of the specific theory that is being referred to.

4. Ask: "What couldn't Galileo do? How do you know?"

Student Look-Fors:

- Galileo couldn't teach nor write about his theory. I know this because it says he could *neither* teacher *nor* write about his theory, which means he could not do either.
5. Say: "Neither/nor is a correlative conjunction. Correlative conjunctions connect two equal parts (i.e., clauses, phrases, or words) together. Unlike the conjunction *and* or *but*, correlative conjunctions work together. Some examples of correlative conjunctions are *neither/nor*, *either/or*, *not/only*, or *both/and*. Take the example, 'Either the boys or the girls will go to lunch first today.' In this example, the correlative conjunction connects the boys and the girls together saying that they both have equal chance of going to lunch first today, but only one will

end up being the first to go.”

6. Ask: “In the mentor sentence, what words connect *teach* and *write* together to tell us that Galileo couldn’t do either?”

Student Look-Fors:

- Students should identify *neither/nor* as the correlative conjunction in the sentence.⁷ The mentor sentence uses the correlative conjunction to tell the reader two things Galileo could not do.

5. Display or project:

In the 1600s, people agreed with either Aristotle or Galileo’s theory of mass and acceleration.

Galileo’s experiments proved that both Aristotle’s theory of mass and acceleration and the church’s teachings of astronomy were incorrect.

6. Ask: “How are these sentences similar to the mentor sentence?”

Student Look-Fors:

- Students should identify that similar to the mentor sentence, the example sentences contain a correlative conjunction (*either/or* and *both/and*).

7. Say: “Now let’s build a quality sentence about Galileo and the telescope using a correlative conjunction.”
8. Guide the whole class to write a shared quality sentence imitating the mentor sentence. As needed, review the structure of the mentor sentence again and/or ask students to compare the class sentence to the mentor sentence. Provide a sentence frame for students to refer to during the whole class discussion, if needed.

Student Look-Fors:

- Galileo can be labeled as either a scientist or an astronomer because he invented things and studied the skies.

9. Say: “Now let’s build a sentence frame to illustrate the structure of the mentor sentence. We will use these frames to write our own sentences.”
10. Provide students with other correlative conjunctions and prompt them to identify the relationships they signal. Record those correlative conjunctions on the board or chart paper. Because correlative conjunctions are a

⁷ L.5.1e: Use correlative conjunctions (e.g., *either/or*, *neither/nor*).

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standard that is introduced in 5th grade, students may need additional support using these conjunctions properly.⁸ Based on the students in your class, provide additional examples, as needed. Then, as a class, create sentence frames that illustrate the structure of the mentor sentence. Reinforce any other grammatical elements or spelling students may need to produce a quality sentence.

Student Look-Fors:

- What relationships do these conjunctions signal?

Cause and effect	Sequence	Under certain conditions	Comparison (Addition)	Contrast
so as because that since	after until when no sooner/than	unless that or whether/or either/or	and as both/and not only/but also neither/nor as/as	but

- Students should create sentence frames such as:

Neither	_____	nor	_____	because	_____.
Either	_____	or	_____	so	_____.
Both	_____	and	_____	since	_____.
Not only	_____	but also	_____	unless	_____.
Whether	_____	or	_____	because	_____.
No sooner	_____	than	_____	because	_____.

11. Direct students to reflect on their learning. Ask: “How does breaking down this sentence into its parts support your understanding of the sentence?” Answers can be spoken or written.

⁸ <http://www.chompchomp.com/terms/correlativeconjunction.htm>

"Galileo Galilei: Biography, Inventions & Other Facts"

Mentor Sentence 3:: Can I write a quality sentence?

1. Display or project:

Galileo could neither teach, nor write, about his controversial theory that the Earth and other planets circle the sun.

Neither	_____	nor	_____	because	_____.
Either	_____	or	_____	so	_____.
Both	_____	and	_____	since	_____.
Not only	_____	but also	_____	unless	_____.
Whether	_____	or	_____	because	_____.
No sooner	_____	than	_____	because	_____.

What happened as a result of Galileo not agreeing with the church's teaching of the solar system?

2. Say, "Now we are going to write our own quality sentences." Remind students of the elements of a quality sentence discussed in previous language links as well as other model sentences.
3. Read aloud the question: "What happened as a result of Galileo not agreeing with the church's teaching of the solar system?"
4. Ask students to work independently to write 1-2 quality sentences that answer the question and imitate the structure of the mentor sentence.
5. Remind students to use an appropriate correlative conjunction to connect the ideas in their sentences.
6. Encourage students to use the unit texts to ensure they have an accurate response.

Student Look-Fors:

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- Galileo's research supported the Copernican system which stated that not only the Earth but also the other planets orbited the sun.
- Whether Galileo was right or wrong did not matter to the church.
- No sooner did Galileo publish a mathematical proposition than he was arrested.

“New Theory: Galileo Discovered Neptune”

Mentor Sentence 4: What does this sentence mean?

1. Provide student pairs or groups with the following sentence chunks on individual strips of paper.

in the mid to late 1600s

Galileo observed Neptune

noted the position of other stars

and recorded changes in the planet’s location

2. Direct pairs or groups to determine the meaning of each chunk and arrange the chunks into a complete sentence. As students work together, ask guiding questions and prompts to support students:
 - a. “What does each phrase mean?”
 - b. “What phrase sets the scene for the sentence?”
 - c. “What did Galileo do?”
2. Prompt the pairs or groups to write the sentence they created. This can be done in individual reading logs, on chart paper, or using technology.
3. After several minutes, ask a few pairs or groups to share the sentence they created.
4. Ask: “What does the sentence mean?” Prompt students to use the following stems to guide the conversation.
 - a. “Another way to say this sentence is...”
 - b. “I made meaning of this sentence by...”
 - c. “I looked at...”
 - d. “I noticed that...”
5. Ask students to share the similarities and differences they notice among the sentences and interpretations provided by their peers and reflect on how they would revise their original sentence or interpretation.

“New Theory: Galileo Discovered Neptune”

Mentor Sentence 4: What do I notice about this sentence?

1. Display or project:

In the mid to late 1600s, Galileo observed Neptune, noted the position of other stars, and recorded changes in the planet’s location.

- What do you notice about this sentence?
- How does what you notice help you to understand the sentence?

2. Provide student pairs or groups with the following sentence chunks on individual strips of paper.

in the mid to late 1600s

Galileo observed Neptune

noted the position of other stars

and recorded changes in the planet’s location

3. Direct pairs or groups to use the sentence chunks to explore the answers to the projected questions. As students work together, ask guiding questions and prompts to support students:
 - a. “How many ways can you rearrange this sentence and it still make sense?”
 - b. “How did you choose where to begin the sentence?”
 - c. “How would you punctuate this sentence? Why?”
 - d. “What phrases or clauses do you notice? How do those help you understand this sentence?”
 - e. “Are there any conjunctions in this sentence? What do those conjunctions mean?”
4. Call on 2-3 pairs or groups to share with the class what they notice about the sentence and explain how those ideas contribute to their understanding of the sentence.
5. Prompt students to use the following conversation stems to guide their sharing with the class.

- a. "We noticed...which means..."
- b. "We knew...so we..."

As pairs share, mark the grammatical elements students notice on the sentence and record any additional comments or thoughts on the board or chart paper. These will be needed for the next language links.

After each pair shares, ask another student to rephrase what the pair shared. Prompt students to use the following conversation stems to guide their rephrasing.

- a. "They noticed...which meant..."
- b. "They knew...so they..."

Student Look-Fors:

- Students may notice a wide variety of things about the sentence, including:
 - This sentence begins with a prepositional phrase that tells me when Galileo did his work.
 - The prepositional phrase at the beginning answers the question "When did Galileo do all of these things?"
 - There is a conjunction, *and*. It connects the items together--Galileo observed, noted, and recorded, so *and* joins them together.
 - The commas in a series tell us that Galileo did three things: Galileo observed, Galileo noted, and Galileo recorded.
 - There is an apostrophe in "planet's" because the planet owns its location.
 - There are three commas. The commas in a series help us to understand what Galileo did.

6. Ask students to reflect on their learning by completing one of the following sentence stems. Answers can be spoken or written.

- a. To understand this sentence, I had to _____.
- b. Noticing _____ helped me understand the sentence because _____.
- c. Knowing _____ comes in handy when determining the meaning of this sentence.

7. Note: If student responses do not resemble the student look-fors in this language link, conduct a brief mini-lesson to review or reinforce a grammar skill from an earlier grade found in this sentence, such as using apostrophes or writing different sentence types. Focus on a specific skill your students need.⁹ It is acceptable for students not to understand the full meaning of the sentence on this day.

⁹ Access the [Grammar Guide](#) to determine the skills students should have coming into grade 5, the skills that need to be reinforced in grade 5, and the skills that need to be explicitly taught in grade 5.

“New Theory: Galileo Discovered Neptune”

Mentor Sentence 4: What do I know this sentence means?

1. Display or project:

In the mid to late 1600s, Galileo observed Neptune, noted the position of other stars, and recorded changes in the planet’s location.

This sentence means...

2. Prompt students to read what they wrote in the previous language link about the meaning of the sentence.
3. Say: “We have been analyzing this mentor sentence. Now we are going to look again at its meaning.”
4. Display or project:

- **WHO/WHAT?**
- (Did/will) **DO WHAT?**
- **WHEN** did who do what?
- **WHERE** did who do what?
- **WHY** did who do what?
- **HOW** did who do what?

Summary Sentence: _____

5. Ask the following questions one at a time and prompt students to record their written responses.

WHO/WHAT?

Galileo

(Did/will) **DO WHAT?**

observed Neptune, noted the position of other stars, and recorded Neptune’s location changes

WHEN did who do what?

in the mid to late 1600s

WHERE did who do what?

In Italy

WHY did who do what?

he was an astronomer

HOW did who do what?

studying and research

6. Say: "Write and complete the sentence stem underneath the quotation. Make sure to put the sentence into your own words."

Student Look-Fors:

- The sentence means that Galileo observed Neptune, noted its position in relation to other stars in the sky, and recorded changes in Neptune's location. Galileo, an Italian astronomer, may have been the first to discover Neptune in the mid to late 1600s, but kept the notes hidden in his journal.
7. After several minutes, ask a few students to share their statements with the class.
 8. Prompt students to revise or adjust their written responses based on what their classmates shared.

“New Theory: Galileo Discovered Neptune”

Mentor Sentence 4: What is the structure of this sentence?

1. Display or project:

In the mid to late 1600s, Galileo observed Neptune, noted the position of other stars, and recorded changes in the planet’s location.

2. Say: “We have been working with the same mentor sentence to understand what it means. Now we will work together to take it apart so we can write our own quality sentences with a similar structure.”
3. Ask: “What have we learned so far about this mentor sentence?” Conduct a brief discussion to review what was learned in the previous language links. Use the following questions to guide the discussion:
 - a. “What does this sentence mean?”
 - b. “What have you noticed about this sentence?”
 - c. “How is it put together?”

Student Look-Fors:

- This sentence means that Galileo observed Neptune, noted its position in relation to other stars in the sky, and recorded changes in Neptune’s location. Galileo, an Italian astronomer, may have been the first to discover Neptune in the mid to late 1600s, but kept the notes hidden in his journal.
- Students might say they noticed prepositional phrases, commas, or conjunctions.
- Students should understand that the parts of this sentence are introductory phrase + comma + items in a series separated by commas and joined by the conjunction *and* + period.
- They should understand that the introductory sets the scene for the sentence.

4. Ask “What does the comma do in this sentence?”

Student Look-Fors:

- Students should identify two roles: (1) to set off the introductory phrase¹⁰ and (2) to separate the list of Galileo’s actions.¹¹

5. Say: “We use a comma to set off the longer introductory phrase from the rest of the sentence and to separate items in a series. In this sentence, the comma is separating Galileo’s actions. We can use commas to show a series of nouns, verbs, phrases, and clauses.”

¹⁰ L.5.2b: Use a comma to separate an introductory element from the rest of the sentence.

¹¹ L.5.2a: Use punctuation to separate items in a series.

6. Note: According to the [Grammar Guide](#), students learned how to use commas in a series to separate single words in grade 1. In grade 5, the skill should progress to include phrases or clauses in a series, and students should use appropriate agreement and parallelism. As needed, provide small-group instruction for students who need additional support with this skill.
7. Display or project:

After Galileo published his theory, he was accused of a crime, sentenced for heresy, and punished for the rest of his life.

Newton was not liked because he was mean, he stole work from others, and he did not communicate well.

7. Ask: “How are these sentences similar to the mentor sentence?”

Student Look-Fors:

- Students should identify that similar to the mentor sentence, these examples contain a series of phrases or clauses separated by commas and joined by the conjunction *and*.
- Students may also identify that the first sentence has an introductory element followed by a comma, but unlike the mentor sentence that has an introductory prepositional phrase, the introductory element in this sentence is a dependent clause.

8. Say: “Now let’s build a quality sentence about Galileo’s theory of Neptune using a comma to separate items in a series.”
9. Write a quality sentence as a class imitating the structure of the mentor sentence. As needed, review the structure of the mentor sentence again and/or ask students to compare the class sentence to the mentor sentence.

Student Look-Fors:

- Galileo formed a hypotheses, discovered phases of Venus, and sent a secret message to his colleagues to inform them.

10. Say: “Now let’s build a sentence frame to illustrate the structure of the mentor sentence. We will use these frames to write our own sentences.”
11. Prompt students to identify possible sentence structures for items in a series. As a class, create sentence frames

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that illustrate the structure of the mentor sentence. Reinforce any other grammatical elements or spelling students may need to produce a quality sentence.

Student Look-Fors:

- Since he loved science, Richard Feynman's father _____, _____, and _____.
- In the mid to late 1600s, Galileo _____, _____, and _____.
- Because Newton was not sociable, he _____, _____, and _____.

12. Direct students to reflect on their learning. Ask: "How does breaking down this sentence into its parts support your understanding of the sentence?" Answers can be spoken or written.

“New Theory: Galileo Discovered Neptune”

Mentor Sentence 4: Can I write a quality sentence?

1. Display or project:

In the 1600s, Galileo observed Neptune, noted the position of other stars, and recorded changes in the planet’s location.

Why was Newton often alone and without friends?

2. Say, “Now we are going to write our own quality sentences.” Remind students of the elements of a quality sentence discussed in previous language links as well as other model sentences.
3. Read aloud the question: “Why was Newton often alone and without friends?”
4. Ask students to work independently to write a quality sentence that answers the question and imitates the structure of the mentor sentence.
5. Remind students to use items in a series to provide two or more reasons that Newton did not have friends.
6. Encourage students to use the unit texts to ensure they have an accurate response.

Student Look-Fors:

- A cross recluse, Newton neither had many friends nor was he close to his family because he was unsocial, argumentative, and secretive about his ideas.