

What to Do With All These Clues? Call the Garbage Detective!

Observations and Inferences

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Grade Level	5th – 6th Grade	**Time Frame**	1-2 class period(s)
Subject	English/Language Arts	**Duration**	120 minutes

Essential Question

How does "reading between the lines" help with drawing conclusions?

Summary

In this lesson, students play the role of a nosy detective, digging through a mysterious neighbor's garbage to make observations and inferences in order to solve a case. Using images and "artifacts," students create a character profile to show how their observations and inferences help them come to conclusions. This lesson includes optional modifications for distance learning. Resources for use in Google Classroom are included.

Snapshot

Engage

Students examine a photograph and make observations and inferences.

Explore

Students are introduced to a case to investigate—specifically, the case of a mysterious neighbor—where they must play the role of a detective to gather clues.

Explain

Students examine pictures of garbage to investigate and determine what inferences can be drawn from their observations.

Extend

Students develop a character profile in Padlet using their observations and inferences from the Explain activity.

Evaluate

Students present their character profiles in a virtual Gallery Walk.

Standards

Oklahoma Academic Standards for English Language Arts (Grade 5)

5.3.R.2: Students will determine the point of view and describe how it affects grade-level literary and/or informational text.
5.3.R.6: Students will distinguish the structures of texts (e.g., description, compare/contrast, sequential, problem/solution, cause/effect) and content by making inferences about texts and use textual evidence to support understanding.

Oklahoma Academic Standards for English Language Arts (Grade 5)

6.4.R.3: Students will use context clues to determine or clarify the meaning of words or distinguish among multiple-meaning words.

Attachments

- Garbage-Detective-Clues-Handout-What-to-Do-With-All-These-Clues - Spanish.docx
- Garbage-Detective-Clues-Handout-What-to-Do-With-All-These-Clues - Spanish.pdf
- Garbage-Detective-Clues-Handout-What-to-Do-With-All-These-Clues.docx
- Garbage-Detective-Clues-Handout-What-to-Do-With-All-These-Clues.pdf
- Garbage-Detective-Observations-and-Inferences-Handout-What-to-Do-With-All-These-Clues - Spanish.docx
- Garbage-Detective-Observations-and-Inferences-Handout-What-to-Do-With-All-These-Clues - Spanish.pdf
- Garbage-Detective-Observations-and-Inferences-Handout-What-to-Do-With-All-These-Clues.docx
- Garbage-Detective-Observations-and-Inferences-Handout-What-to-Do-With-All-These-Clues.pdf
- Garbage-Detective-Printable-Objects-What-to-Do-With-All-These-Clues - Spanish.docx
- Garbage-Detective-Printable-Objects-What-to-Do-With-All-These-Clues - Spanish.pdf
- Garbage-Detective-Printable-Objects-What-to-Do-With-All-These-Clues.docx
- Garbage-Detective-Printable-Objects-What-to-Do-With-All-These-Clues.pdf
- Lesson-Slides-What-to-Do-With-All-These-Clues.pptx

Materials

- Lesson Slides (attached)
- Garbage Detective Observations and Inferences handout (attached, one per student)
- Garbage Detective Clues handout (attached, one per student)
- Garbage Detective Printable Objects (attached, one per student)
- Plain paper
- Pens, colored pencils, or markers
- Sticky notes (about one pad per pair or small group of students)

Engage

To begin, display the photo of a detective character on **slide 3** of the attached **Lesson Slides.** Ask students to look at the photo for a few moments, taking in what they see. After enough time has passed, tell students that when they were looking at the photo they were "observing" it. Ask, *"What does it mean to make an observation?"*

Teacher's Note: Gauging Student Understanding Through Questioning

After discussing observations, ask students, *"Who is this character? Where are they going? Where have they been?"* As their imaginations wander and they share their responses, ask yourself, *"Which seems easier for my students, making observations or making inferences?"* Students might share inferences, such as, *"He's about to cross the street to go follow someone."* When these responses are shared, take time to pause and talk through the inferences being made. Ask, *"Can we see that he's following someone? Can we see where he's coming from or where he's going?"*

Explain that **inferences are made based on context clues that we put together to elaborate on observations we've made**. In other words, to say that this character is a detective is to make an inference. What is actually observed is that it is a figure dressed in a hat, overcoat, and glasses.

Optional: More Practice

If students need more practice with observations and inferences, use simple photos and examples. For instance, you could use a photo of a domestic cat. We can OBSERVE a cat. We can INFER that the cat is a female, is someone's pet, and loves to play.

Display **slide 4** and share the lesson's essential question: *"How does 'reading between the lines' help with drawing conclusions?"*

Display **slide 5** and share the lesson objectives. Tell students that by the end of this lesson they will be able to:

1. Evaluate how our perspective affects our understanding of information.
2. Analyze information and make observations and inferences about a person.
3. Use evidence to support understanding.

Explore

After students have practiced making observations and inferences, ask them, *"Did you know that there are jobs where you need to know how to make observations and inferences?"* Sometimes, making an observation and then inferring what it means is like finding clues. Ask if students know of a job where someone has to gather clues.

Display **slide 6** and give students time to discuss and share their responses. Consider using a structure like Think, Pair, Share for this activity, where students first think on their own, then turn to a partner to discuss which jobs might involve the gathering of clues. Once they have finished their discussion, call on pairs to share their thoughts. It is likely that at least one pair will respond that detectives have a job where they would need to gather clues. If not, display **slide 7** and explain that a detective **has to make observations and inferences**.

Tell students that their next task is to play the role of a detective in a case that needs their help to be solved. Encourage students to get comfortable and listen carefully to the details of the case.

Teacher's Note: Just in "Case"

If students are not familiar with the term "case," take a moment to explain what it means before proceeding.

Display **slide 8** and read the prompt:

"You are in charge of your neighborhood watch, which means that you are responsible for making sure that your neighbors are safe and nothing suspicious is going on. A new neighbor has moved in down the street and has been acting mysterious. The neighborhood group has decided that you should dig through the garbage to see what you can learn. You will need to look for clues, and the way to do this is to make observations and inferences.

Teacher's Note: Student Engagement

Students will likely have a reaction to the task of looking for clues in the garbage. Play off of their engagement by asking questions such as, *"Who is excited to do some dirty work to solve this case?"* and *"Who would rather watch and help your friend find clues instead of getting too close to the garbage?"* This is also a great time to remind students that this scenario is a special case, and fictional besides—looking through a neighbor's garbage in real life is not a good idea.

Display **slide 9** and pass out copies of the **Garbage Detective Clues Handout**. Go over the clues with the class:

1. This person has never been seen during the day.
2. An eyewitness next door has seen a tall figure with dark brown or red hair leave at around 8 p.m. most nights.
3. This person drives a dark SUV with an out-of-state license plate.
4. The shutters on the windows are always closed during the day.

Ask students whether these are observations or inferences and how they can tell.

Share the definitions of *observation* and *inference* on **slides 10 and 11**.

Give students time to look at their clues and chat about what they think they might mean.

Ask students whether the ideas they have just discussed are observations or inferences. How can they tell?

Preferred Student Response

Students should answer that their ideas are all observations because these details can be seen. When we start to give meaning and interpretation to what these observations mean, then we are making inferences.

Tell students that they still have some more work to do to look for clues.

Explain

Teacher's Note: Another Reminder

Before continuing with the lesson, remind students again that they are playing the role of a detective in this scenario, but they should not do this type of investigation in their own neighborhoods. Consider offering a gentle reminder to students such as, *"You have a case to solve! In this lesson, it is your task to make observations and inferences about the individual items and the big picture of the neighbor's garbage. Of course, in real life, doing this would be a violation of privacy, so please don't try it at home."*

Tell students that you are going to show them a picture of their mysterious neighbor's garbage. This is where they start to play the role of garbage detective. Tell them that they will start by making observations but should refrain from making any inferences yet.

Display **slide 12** to reveal the photo of the mysterious neighbor's garbage.



The Mysterious Neighbor's Garbage

Ask students to flip to the next page of their **Garbage Detective Clues** handout to see the items in the picture in isolation.

Optional: Lesson Modifications

In lieu of students viewing their neighbor's garbage in the collective picture, consider printing copies of the **Garbage Detective: Printable Objects** handout, cutting out the objects, and placing them in envelopes for students to investigate.

To make the activity accessible for distance learners, consider asking students to print and cut out their own images or to analyze them using a digital platform, such as Google Classroom.

Display **slide 13** and pass out copies of the **Garbage Detective Observations and Inferences Handout**. Instruct students to start by filling out only the "What can I OBSERVE?" column, listing the items that they see in the garbage.

Possible Student Responses

Students will likely want to jump straight into making inferences, but challenge them to stick just to observations at first. Examples of items that they might identify include coffee cups, a pizza box, shoes, and a sleep mask.

After students have had enough time to list their observations, display **slide 14.** Give them time, working either independently or with a partner, write in the “What can I INFER?” column, making inferences about each of the items. Here is where students can get creative, but remind them to make sure to keep their inferences realistic so that the lesson does not get too off-track.

	What do I OBSERVE?	What can I INFER?
Item 1	Shoes. The shoes have green on them.	Maybe these shoes have been in toxic slime.

Example of an item from the Garbage Detective Observations and Inferences handout

Give students time to wrap up their inferences, and then tell them they will be examining even *more* evidence.

Display **slide 15**, which shows some receipts found in their mysterious neighbor’s garbage, and have students turn their attention to the individual items on the back of their Observations and Inferences handout.

As students examine the items, tell them to consider what can be inferred by these objects. As they draw inferences from the observations, they should add those details to the "What can I INFER?" column of the handout.

Extend

Now that students have had the experience of looking for observations and making inferences using multiple image sources, it is time to put all the information from their charts together. Display **slide 16,** and tell students that they, the detectives, are now ready to identify who they think the mysterious neighbor is.

To do this, have students work either in pairs or small groups to create a character profile for their mysterious neighbor. This profile should include:

1. A picture illustrating what the neighbor might look like.
2. A summary of what they know about the neighbor based on their observations and inferences. The summary should address:

- The neighbor's occupation.
- What kind of life the neighbor leads.
- Details about the neighbor's schedule.

In this character profile, students should reference some of the items they identified and how they support the inferences they made to help them arrive at conclusions about the mysterious neighbor. Their character profiles should include a column or separate space for each element, photos to support their conclusions, and text to explain their position. Remind students to reference their Garbage Detective Observations and Inferences handout as they develop their character profiles.

Optional Modification for Distance Learning

You may have students complete the above activity in Padlet, a free web-based visual organizational tool. If you choose to do so, you can create a Padlet board for your class and add new columns for pictures, text, and other multimedia. Students can log in using a Google, Microsoft, or Apple account and can create their own entries for the class board. Download all attachments to use this lesson in Google Classroom.

Evaluate

Display **slide 17,** and give each group a pad of sticky notes. Have students hang their completed profiles around the room for a Gallery Walk. As students visit each of their classmates' character profiles, have them leave constructive feedback on a sticky note. When groups return to their own profile, give them an opportunity to review and address the feedback left by their peers.

Optional Modification For Distance Learning

For online or distance learning, consider having students create digital posters using Popplet, Piktochart, Canva, or a similar tool. Once they have completed their posters, have students upload them to a site such as VoiceThread where peers can choose whether to make a quick video, a voice memo, or a written note to give feedback on other students' posters.

Resources

- K20 Center. (n.d.). Canva. Tech Tools. https://learn.k20center.ou.edu/tech-tool/612
- K20 Center. (n.d.). Gallery Walk/Carousel. Strategies. https://learn.k20center.ou.edu/strategy/118
- K20 Center. (n.d.). Google Classroom. Tech Tools. https://learn.k20center.ou.edu/tech-tool/628
- K20 Center. (n.d.). Padlet. Tech Tools. https://learn.k20center.ou.edu/tech-tool/1077
- K20 Center. (n.d.). Piktochart. Tech Tools. https://learn.k20center.ou.edu/tech-tool/2394
- K20 Center. (n.d.). Popplet. Tech Tools. https://learn.k20center.ou.edu/tech-tool/663
- K20 Center. (n.d.). Think-Pair-Share. Strategies. https://learn.k20center.ou.edu/strategy/139