



DIAGNOSTIC

**10:00**

1

# MATCH the MEANINGS

Base  
Word:

manage

Highlight the word in each sentence that contains the base word. Read the sentence. Determine which meaning best defines the word you underlined. Drag the letter to each box.

C

He mismanaged his time and was taken off the project.

A

Carlos's outgoing personality made him an excellent manager.

B

She micromanaged her employees and told them exactly what to do and when.

A. A person who manages

B. To manage all the small details of something

C. To manage something wrong or badly

# DAILY DOSE OF EDITING

#6

## 1 EDIT



Draw a line under each of the FIVE mistakes.

Too get readay for picture day Megan brusseed her hair,

## 2 FIX



Rewrite the sentence with the corrections made.

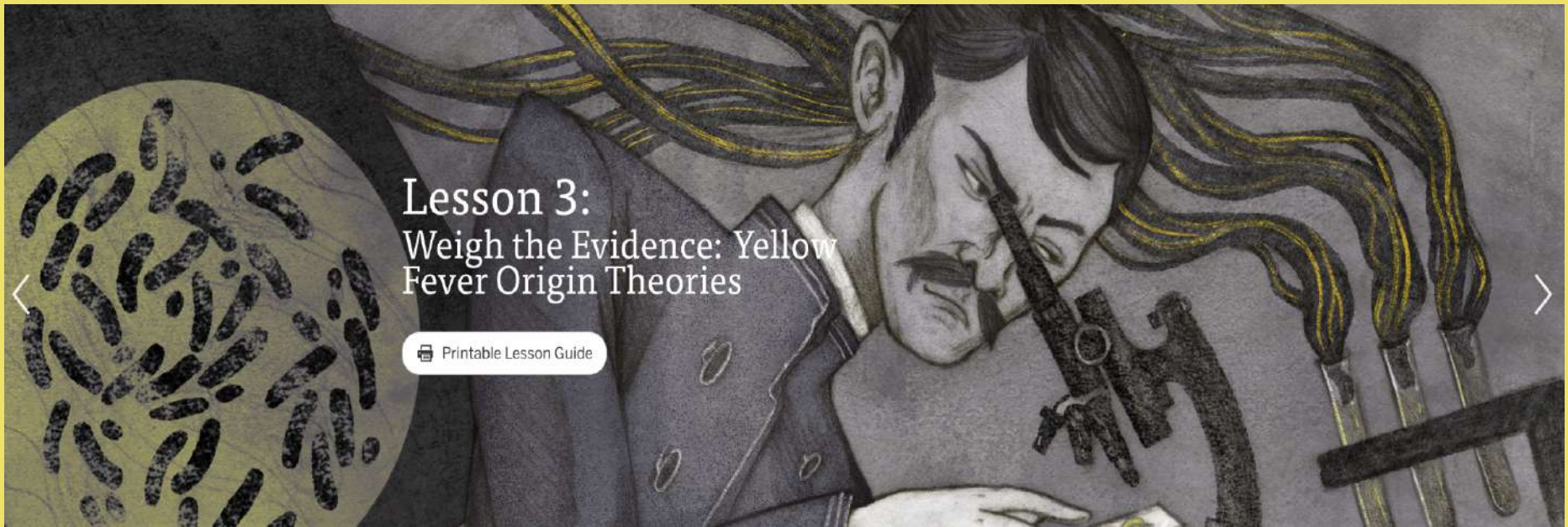
To get ready for picture day, Megan brushed her hair.

## 3 STRENGTHEN & ELABORATE !

Use part of the sentence, but make some changes. Use more detail to make it stronger.

To get ready for picture day, Megan watches a step by step hair tutorial to make her hair beautiful.





### Lesson 3: Weigh the Evidence: Yellow Fever Origin Theories

 Printable Lesson Guide

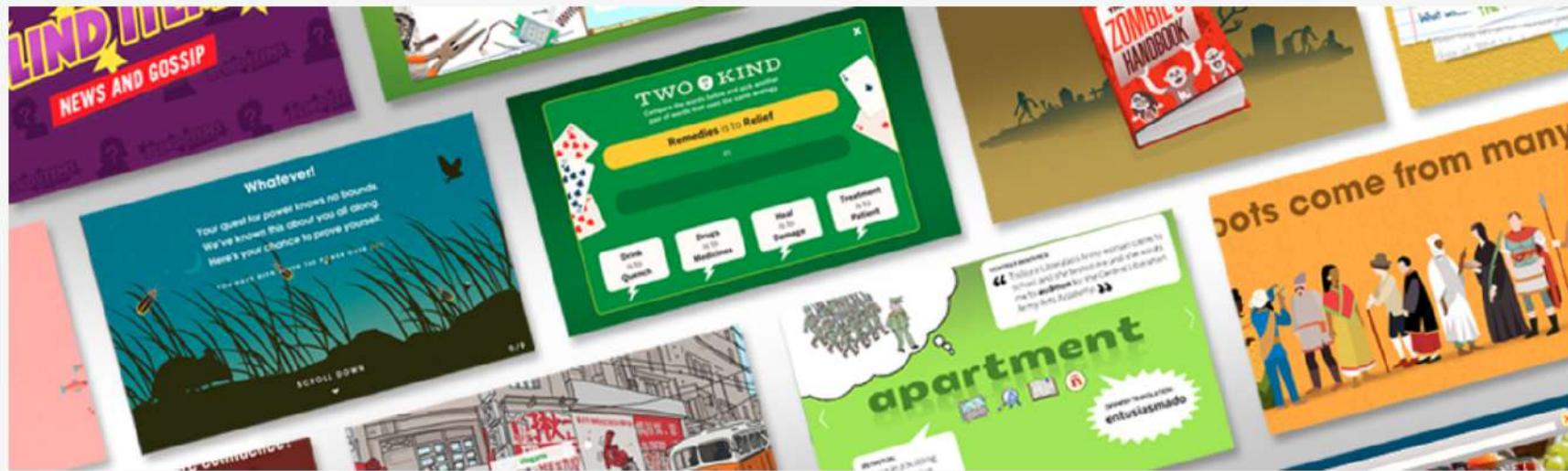


Read to identify details and  
evaluate the evidence  
presented to support/oppose  
a claim.



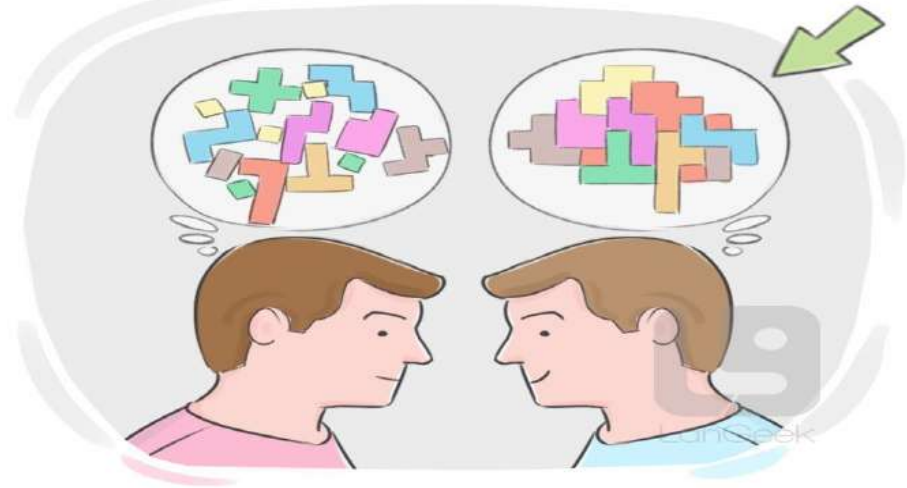
05:00

Open the Vocab App.



Sensible- Most sensible scientists did think the mosquito theory sounded pretty flaky.

She was a sensible girl, and did not panic when she saw the fire. Instead, she calmly dialed 911 and ran to get the fire extinguisher.



What is something sensible YOU can do to make sure you have a successful 6th grade year?



Kill us faster? Oh, now I can relax!



As members of a medical investigation team, scientists often begin their research by evaluating the theories that already exist about the cause of the disease.

As we know from our reading, humans were aware of this monstrous disease for hundreds of years, and, although no one knew its origin, many theories already existed.



Read through card 1,  
then match the theory  
to its explanation

2

CLASS

Review: Three Theories of  
Yellow Fever Transmission



Review the three most promising theories for the cause of yellow fever in 1900.

Match the theory to its explanation.

*Bacillus  
icteroides*

Contaminated  
material

Mosquito  
bites

⚬ A. Yellow fever is carried by mosquitoes.

⚬  
B. Yellow fever spreads through items used  
by patients.

⚬  
C. Yellow fever is caused by a particular  
bacteria, *Bacillus icteroides*.

- Dr. Reed needs to test each theory.
- Dr. Reed needs to prove and disprove each theory based on facts, not opinions.
- Scientific theories are proven by finding the best evidence (facts or information that supports an assertion or theory).



A scientific theory is an explanation for how things work or why things happen. Scientists develop theories based on their observations of the world around them. Theories are based on ideas and evidence that can be tested.

05:00

### Directions

1. Reread paragraphs 8 and 9.
2. Explain what the author means when she writes, "But, of course, what Reed *thought* didn't matter."

Why is  
thought  
italicized?

3. What did matter to Dr. Reed?

2

2

CLASS

Review: Three Theories of  
Yellow Fever Transmission





**Evidence:** Material presented to support (or counter) a claim or theory

## Types of Evidence

### Fact/data

Something that can be proven to be true, or to have happened. Numbers that relate to a piece of information, obtained through research.

### Expert opinion

A belief or judgment about something given by an expert on the subject.

### Individual stories/examples

Personal experience or observation by you or others; anecdotes.



- How credible is the source of this information?
- Is the information based on facts or opinions?
- How important is this information to “prove” this idea?

## Evidence: Material presented to support (or counter) a claim or theory

### Types of Evidence

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Personal experience or observation by you or others; anecdotes.

Imagine that you are investigating the following theory: Washing your hands prevents illness.

Which of these pieces of evidence provides the strongest support for this claim? Evaluate and arrange the evidence from strongest to weakest.

Strongest Support			Weakest Support

⋮

A. Using a microscope, you observe that hands have less bacteria after washing than before.

⋮

B. Your mother always makes you wash your hands before you eat.

⋮

C. A research study published in a famous medical journal showed that children whose families received soap and handwashing directions had a 50% lower incidence of certain illnesses than children whose families did not receive soap and directions.\*

⋮

D. A doctor friend says he thinks that his patients who wash their hands regularly need fewer medical visits.

To begin, match up each piece of evidence (A,B,C,D) with what TYPE of evidence it may be.

What is one reason you used to order and evaluate this evidence from strongest to weakest?

Now click [here](#) to open the Evidence app to practice identifying and evaluating evidence.

CLAIM

1

Washing your hands prevents illness.

OPPOSING EVIDENCE

SUPPORTING EVIDENCE

### Why Should I Wash My Hands?

Growing up, I always heard that washing your hands prevents illness. As a child, my mother made me wash my hands before I ate—which seemed unfair because she never made our dog, Porter, wash his paws before he ate and he's never been sick once. I told my pediatrician, Dr. Lindemann, about this and he told me he thinks that patients who wash their hands regularly need fewer medical visits.

During science class, my teacher allowed me to test this idea with some of the science equipment we had in the classroom. Using a microscope, I observed that hands have less bacteria after washing than before. Later, I went to the library to do some more research. A study published in a respected medical journal showed that children who were educated about soap handwashing practices had a 50% lower incidence of certain illnesses than controls who did not receive that information.

🗨️ I'm going to show you how to use the Evidence app to evaluate claims based on evidence. Throughout this investigation, you will use the Evidence app to collect and evaluate evidence to help you uncover the keys to this mystery. Today, we will use the app to enter and evaluate the evidence for the three existing theories of yellow fever.

🗨️ First, I will add/find the theory: Yellow fever is caused by *Bacillus icteroides*.

🗨️ I read: "...this Italian researcher [Dr. Sanarelli] had announced that a type of bacteria called *Bacillus icteroides* was the cause of yellow fever." So now I will add this to my evidence app.

🗨️ I'll ask myself "How credible is the source of this information? What makes it credible?" (*Dr. Sanarelli is a researcher and a doctor, so it is an expert opinion.*)

🗨️ Then, I will ask myself "Does this information support the claim that yellow fever is caused by this bacteria?" (*If Dr. Sanarelli's early research can be repeated by other scientists, it would be very significant.*)

🗨️ I'll ask myself "Is the information based on facts or opinions?" (*The text says the idea was "suggested" by Dr. Sanarelli, but Dr. Reed's recent research does not support Dr. Sanarelli's earlier announcement.*)



## Directions

1. Reread paragraph 5.
2. Highlight in green the details or information that supports the theory that *Bacillus icteroides* causes the spread of yellow fever.
3. Highlight in yellow the details or information that counters (does not support) the theory of *Bacillus icteroides*.

Now review and evaluate the evidence you highlighted to determine how credible it is.



## Assessing Evidence

- How credible is the source of this information?
- Is the information based on facts or opinions?
- How important is this information to add support for this idea?

4. Evidence: The *Bacillus icteroides* theory was announced by an Italian researcher, Dr. Giuseppe Sanarelli.

Evidence strength: This piece of evidence related to the *Bacillus icteroides* theory is

5. Evidence: *Bacillus icteroides* causes hog cholera.

Evidence strength: This piece of evidence related to the *Bacillus icteroides* theory is



A. credible.

B. not credible.

First was an idea suggested by Dr Giuseppe Sanarelli. A few years earlier this Italian researcher had announced that a type of bacteria called *Bacillus icteroides* was the cause of yellow fever. That sounded good. But Reed's recent experiments had shown that *Bacillus icteroides* actually caused a pig disease called hog cholera. Now scientists were arguing about which research results were right, and Walter Reed knew that his team would have to find a way of settling the issue. That was a big project, and it was only the beginning.



## Assessing Evidence

- How credible is the source of this information?
- Is the information based on facts or opinions?
- How important is this information to add support for this idea?

## Directions

Launch the [Evidence app](#) to evaluate the theory that *Bacillus icteroides* causes yellow fever. Use evidence that either supports or opposes (does not support) the claim.

Now that you have a sense of the Evidence app, work with your partner to complete the task for the remaining theories:

- Yellow fever spreads through items used by patients.
- Yellow fever is carried by mosquitoes.



## Directions

1. Locate one theory (claim) in the text.
2. Highlight evidence that supports that theory in green.
3. Highlight evidence that does not support that theory in yellow.
4. **Launch the Evidence app** and evaluate the strength of the evidence you find that either supports or opposes (does not support) the theory.
5. Repeat steps 1–4 for the remaining theory.

When you are finished, you should have claims and evidence for all three theories.

## Assessing Evidence

- How credible is the source of this information?
- Is the information based on facts or opinions?
- How important is this information to add support for this idea?



If you finish early, go to the exit ticket on tab 7!

5

PARTNER  
Evaluate the Evidence:  
Remaining Theories



## Directions

Read each piece of evidence below and determine:

1. Does this piece of evidence support the theory?
2. What type of evidence is this? (Facts/data, Expert opinion, Individual story/example)

1. Claim: Mosquito bites cause yellow fever.

Evidence:

"For almost twenty years, in more than one hundred experiments, a Cuban doctor named Carlos Finlay had tried to prove that mosquito bites caused yellow fever...but none of Finlay's patients ever developed a clear-cut case of yellow fever from the bites." (2, 7)

This evidence  the claim.

A. supports

B. does not support

What type of evidence is this?

A

Facts/data

B

Expert opinion

C

Individual story/example



2. Claim: *Bacillus icteroides* causes yellow fever.

Evidence: "A few years earlier this Italian researcher had announced that a type of bacteria called *Bacillus icteroides* was the cause of yellow fever." (2, 5)

This evidence  the claim.



A. supports

B. does not support

What type of evidence is this?

A

Facts/data

B

Expert opinion

C

Individual story/example

3. Claim: Healthy people get yellow fever by touching clothing, bedding, or furniture that has been used by yellow fever patients.

Evidence:

One mother claimed that her son became sick after playing with a stuffed animal that had belonged to a child with yellow fever.

This evidence  the claim.

What type of evidence is this?

☐ A Facts/data

☐ B Expert opinion

☐ C Individual story/example