

# Evaluate Information

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## WHAT'S COVERED

In this lesson, you will learn how to determine whether information is credible. Specifically, this lesson will cover:

## 1. Terms Used In Properly Evaluating Scientific Information

We're going to start by defining three terms that will help you to understand how to properly evaluate scientific information.

Term	Definition	Example
<b>Fact</b>	A fact is verifiable information. A fact is something that you know is true and that you can verify.	It is 100 degrees Fahrenheit outside today. That is something that you can prove is true and that you can verify with, for example, a thermometer.
<b>Opinion</b>	An opinion is something that is based on personal judgment and might not be based on fact. It's something that a person herself is judging.	An opinion based on that fact that it is 100 degrees might be that it is hot outside. This is based on personal judgment, and it could vary from person to person. One person might think that 100 degrees Fahrenheit is hot, but another person might not.
<b>Bias</b>	A bias is a swayed opinion. It's based off an opinion but is swayed due to someone's personal experience.	If you live in Minnesota, your opinion may be that Minnesota is the best state. This is a swayed opinion based on your personal experience because that's where you live.



## TERMS TO KNOW

### Fact

A piece of information known to be true and that can be verified.

### Opinion

A piece of information that involves personal judgment.

## Bias

An opinion swayed by personal experience.

# 2. Ensuring Credible Information

When you're evaluating information and trying to figure out if that information is credible, you need to look at a few key points. Credible information should always be:

- Peer-reviewed
- Thoroughly checked with a reliable source
- Backed by scientific evidence



### THINK ABOUT IT

**QUESTION:** How do you know if a source is reliable or not?

**ANSWER:** When you're trying to figure out if the information is credible, you should always think critically about that information, or about the source of the information. Thinking critically means using systematic strategies to help judge that information.



### THINK ABOUT IT

**QUESTION:** If you were looking up information, what source would be more credible? Would a scientific journal be more credible, or would Wikipedia be more credible?

**ANSWER:** We know it would be the scientific journal because that has been peer-reviewed, thoroughly checked and backed by scientific evidence. Wikipedia is more of a public domain area.



### THINK ABOUT IT

**QUESTION:** If you're looking up information on cancer, would you get credible information by going to a friend, or do you think that information would be more credible coming from the American Cancer Society website?

**ANSWER:** It would be the American Cancer Society website. Again, we know that information is peer-reviewed, thoroughly checked, and backed by scientific evidence. Your friend's information might involve some opinion or some bias, whereas the American Cancer Society website is based strictly on facts. That's the difference between finding credible information and information that might not be as credible.



## SUMMARY

This lesson has been an overview of **evaluating scientific information**. Credible information should be based on facts—things that we know are true and we can verify. Credible information is not based on opinions or bias. Remembering that **credible information** is always peer-reviewed, thoroughly checked with a reliable source and backed by scientific evidence will help you to determine if the information is credible.

Keep up the learning and have a great day!



## TERMS TO KNOW

**Bias**

An opinion swayed by personal experience.

**Fact**

A piece of information known to be true and can be verified.

**Opinion**

A piece of information that involves personal judgment.