

CLAIM TESTING – AUTHORITY

Directions: For each of the claims below, decide which person from the table has the most authority to make or test that claim and why.

Person	Authority
School nurse	<ul style="list-style-type: none"> • Nursing license and training • College or advanced degree in nursing
Galileo Galilei	<ul style="list-style-type: none"> • Prominent mathematician • Professor at respected universities and was awarded full tenure • He advanced telescope technology • Was imprisoned by the Roman Catholic Church
Stephen Hawking	<ul style="list-style-type: none"> • Famous theoretical physicist, cosmologist, and author • Professor of mathematics at Cambridge • Received numerous awards and honors for his work
Heart Surgeon	<ul style="list-style-type: none"> • Completed medical school and residency • Works in a hospital
Walter Alvarez	<ul style="list-style-type: none"> • Professor of Earth and Planetary science at University of California, Berkeley • Well known for his theory that an asteroid impact caused the dinosaur extinction, developed in collaboration with his Nobel prize winning father • Published in peer-reviewed journals
Gerta Keller	<ul style="list-style-type: none"> • Professor of Paleontology and Geology at Princeton University • Not as well known for her theory that a series of volcanic eruptions caused the dinosaur extinction • Published in peer-reviewed journals

1. The best way to treat a cold is by resting and eating well.

Sample answer: Most students will likely say heart surgeon because of the knowledge of the medical field. However, others might argue that a school nurse knows more about how to treat a cold because they encounter them all the time. Even though heart surgeons have extensive training and knowledge, they generally deal with heart related illness and not simple colds.

2. The next major extinction event on Earth will be due to climate change.

Sample answer: Walter Alvarez or Gerta Keller. In terms of their education and backgrounds, they are both well-educated and professor's in well-respected places. Both of them study and know about the earth. However, Alvarez's theory is more well-known, and therefore people might say he has more authority due to his popularity.



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3. The sun is the brightest star in the Universe. (Hint: think about attributed versus achieved authority here)

Sample answer: Stephen Hawking or Galileo Galilei. Hawking arguably has more authority given the scientific discoveries made since Galileo's time. And, even if all things were equal, Hawking would still likely be deemed as having more authority since Galileo was not liked by the Church and Hawking is generally well-revered. In other words, Hawking has more attributed authority than Galileo.

4. As you've likely noticed, there is often more to authority and meets the eye. Moving forward, how will you decide if an authority should be believed?

Sample answer: Answers will vary, but students should touch on the idea that it's really important to find out more about the authority. Do they have actual experience related to the claim they are making? Are their arguments logical and credible? Is their reputation a part of why they are considered an authority? Be sure to talk about this with your students and how these practices are tied to sourcing, and they should think about this when conducting research or even just when reading websites for fun!



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Purpose

Authority is one of the claim testers that helps us decide what to believe, so it can be puzzling when two authorities disagree. In this activity, which is part of the claim testing series, you'll dig into the concept of authority to gain a better understanding of what it means, how it's used, and how its meaning can change over time.

Process

In this lesson, you'll spend a lot of time thinking about how our understanding of the Universe has changed over time. You'll dig into the idea of authority, which can be an important influence on how people's thinking changes over time. What makes someone an authority? *Achieved* authority is when someone has earned their authority. It usually means a person has worked to earn that status. So, for example, someone becomes licensed to practice law or medicine – they have studied to achieve their status. If someone has *attributed* authority, it's usually based on something they can't control, like their gender, race, age, or how popular they are.

Talk about achieved versus attributed authority with your class, and how logical, credible, and reliable arguments can bolster a person's authority. Consider how achieved authorities are often cited by other people in their field or have a license or credential that deems them an authority.

When someone is consistently logical, credible, and reliable, we generally trust them to be a good source of information. In history, we engage in "sourcing" all the time. Do you know what sourcing is? How do you engage in sourcing in everyday life? Discuss your answers with your class.

Now that you have a good sense of the elements that go into someone being deemed an authority, you are going to decide the "best" authority to either make or test a variety of claims.

Take out the Claim Testing—Authority Worksheet and read about the scientists, and then answer the questions. Be prepared to discuss your answers with your class!



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