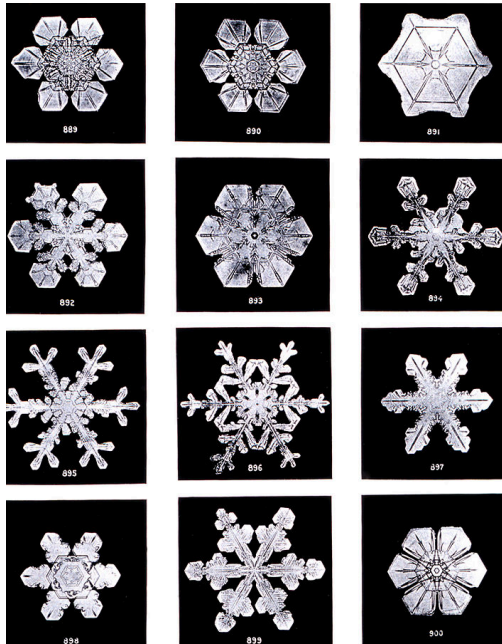


Knowing and Believing

Format: In-person or online



Snowflakes by [Wilson Bentley](#) (1902)

Authors: Sydney Quinn Chizmeshya & Katherine E. Brent

Time needed: 20-40 minutes

Learning Objectives

- Recognize and differentiate scientific fact from different ways of knowing.
- Articulate the importance of differentiating between belief and knowledge without discounting alternative ways of knowing or acquiring beliefs

Supplies Needed

- Activity sheet for each student (attached), or statements projected on a screen for the class to see
- Writing utensil
- Textbook

Readings

- Nelson, Katie, et al. 2019. Chapter 1: Introduction to Biological Anthropology. *Explorations*

Introduction

The learning goal of this activity is for students to become comfortable recognizing and differentiating scientific fact from different ways of knowing. Additionally, students should acknowledge the importance of differentiating between belief and knowledge without discounting alternative ways of knowing or acquiring beliefs in hopes of maintaining cultural relativity.

Procedure

- Distribute one activity page to each student, or project the statements listed below onto a screen. This activity can be done individually, in groups, or as a class. There is also an opportunity to start the activity individually, and to consequently take up answers in a pair-and-share or class discussion.
- Before beginning the activity, students should write the definitions of 'knowledge' and 'belief' in their own words. Subsequently, they should compare these with the definitions put forth in the textbook. Putting class concepts into one's own words helps to solidify concepts for students.
- Next, students should be instructed to read each of the following statements and indicate on the activity sheet, adjacent to each example phrase, whether the statement reflects knowledge or belief.

Statements

1. The sun rises in the East and sets in the West.
 2. All living things need water to survive.
 3. God is real.
 4. No two snowflakes are identical.
 5. Lord of the Flies is the best novel ever written.
 6. Ottawa is the capital of Canada.
 7. The Mona Lisa is the most beautiful painting in the world.
 8. Broccoli is delicious.
 9. Carbon monoxide is dangerous to humans in large quantities.
 10. Dr. G is the best professor.
- After responding to the given statements, each student should write a statement of belief and a statement of knowledge on the activity sheet.
 - Once students have labeled each statement accordingly, and written their own statements, discuss in groups, or as a class.
 - Ensure that you bring forth any discussions as to why students labeled statements

as belief or knowledge into a classroom discussion. Students should use the textbook definitions of “knowledge” and “belief” to aid in justifying their answer.

- Instructors can further engage the class by discussing why it is important for anthropologists to be cognizant of both knowledge and beliefs-- this can introduce the idea of anthropologists as both scientists and cultural relativists.
- Additionally, the idea that knowledge and beliefs can sometimes become ‘tangled’ should be addressed. For instance, it is not uncommon to see scientific knowledge (e.g. that climate change is real) as a belief, or a belief (e.g. that race is biologically founded) as knowledge. As such, differentiation is important.

Statement Answer Key

Statement	Belief or Knowledge?
The sun rises in the East and sets in the West.	Knowledge
All living things need water to survive.	Knowledge
God is real.	Belief
No two snowflakes are identical.	Knowledge
Lord of the Flies is the best novel ever written.	Belief
Ottawa is the capital of Canada.	Knowledge
The Mona Lisa is the most beautiful painting in the world.	Belief
Broccoli is delicious.	Belief
Carbon monoxide is dangerous to humans in large quantities.	Knowledge
Dr. G is the best professor.	Belief
Write your own statement of belief.	<i>To be evaluated</i>
Write your own statement of knowledge.	<i>To be evaluated</i>

Adapting for Online Learning

1 Not adaptable

2 Possible to adapt

3 Easy to adapt

This activity could be using various online programs such as Quizlet, Kahoot, or as an activity completed and submitted through the school's respective online Learning Management System. Creating an online discussion board to articulate the reasoning behind answers as well as follow up questions is highly recommended. This activity may also be used as an iClicker activity.

References

Nelson, Katie, Lara Braff, Beth Shook, and Kelsie Aguilera. 2019. "Chapter 1: Introduction to Biological Anthropology" In *Explorations: An Open Invitation to Biological Anthropology*, edited by Beth Shook, Katie Nelson, Kelsie Aguilera, and Lara Braff. Arlington, VA: American Anthropological Association. <http://explorations.americananthro.org/>

Image Attributions

[SnowflakesWilsonBentley](#) by [Wilson Bentley](#) is marked as [public domain](#).

Knowing and Believing: Worksheet

Step One

In Chapter 1 of *Explorations*, we learned the difference between knowledge and beliefs. Before we begin, answer the following questions in your own words:

1. What is knowledge?
2. What is a belief?
3. What is the difference between these two concepts?

Compare your definitions to those in the textbook.

Step Two

Read the following statements. Using the definition of “belief” and “knowledge” discussed in Chapter 1 of the *Explorations* textbook, fill in the chart to identify which statements are statements of belief or statements of knowledge. Compare results with classroom peers.

Statement	Belief or Knowledge?
The sun rises in the East and sets in the West.	
All living things need water to survive.	

God is real.	
No two snowflakes are identical.	
Lord of the Flies is the best novel ever written.	
Ottawa is the capital of Canada.	
The Mona Lisa is the most beautiful painting in the world.	
Broccoli is delicious.	
Carbon monoxide is dangerous to humans in large quantities.	
Dr. G is the best professor.	

Write Your Own	
Write your own statement of belief.	
Write your own statement of knowledge.	