

## WHAT DO YOU KNOW?

### AN EXERCISE ABOUT WHAT KNOWLEDGE IS

X X X ... X X ? ... ? ! ? ... √ √ ? ... √ √ √

Notes for teachers:

Our whole education is organized around “buckets” of knowledge: “ $2+2 = 4$ ” (math bucket); “Hydrogen is an element but water isn’t” (chemistry bucket); “Abraham Lincoln was born in 1809” (history bucket). But philosophy (and especially epistemology, the study of knowledge) isn’t another bucket... it’s *about the buckets*. Which ones are reliable? Why? How do they relate? How do we put new things into them or throw things out of them?

Our task in this exercise is to create a sketch map of *all* knowledge, starting with a wide array of statements that can begin “I know that...” and then discussing how they relate to one another. I include below a list of possible examples, but I encourage you to pick a few of these most suitable to the interests and age range of your students and then get students to generate more — perhaps one example per student of an “I know that...” statement they definitely agree with, and one that they definitely disagree with.

Notice that some of the claims are very “factual” and some very general or “theoretical”; some are common sense, some “scientific,” some evaluative, some mathematical or logical; also (beware!) some look obviously right but aren’t - aside from the really obvious curveballs, look carefully at e.g. 5, 7, 21, and 24!

This lesson can take many forms, and be any length from half an hour or (preferably) an hour to multiple sessions. (With HS students I have spent a full hour just discussing #29 in the list below; they then insisted on continuing that discussion in the *next* class.) A lot depends on how you pick from the list.

**Objective: help students think about what it means to claim that we *know* something, and to develop a more sophisticated sense of how complicated and varied that claim is.**

Let me know what works and what doesn’t!

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- (1) Hand out a list of six to twelve knowledge claims similar to those listed.
- (2) Ask students to pick two at random. (Or assign them each two numbers at random and tell them to consider those claims.)
- (3) Ask students to make a private note assessing what their gut tells them about each claim. (“Is your reaction NO WAY! or YES WAY! Or maybe it’s I THINK SO... or I DON’T THINK SO...?”)
- (Remind them that “DUNNO!” is an important category too, and there’s more than one reason to choose it. Perhaps they don’t have the relevant information, or just can’t make up their mind, or they think the claim is too vague, or they think it confuses two different claims, or they just don’t understand it, etc. All of those are perfectly reasonable responses.)
- (4) Ask them to try to note down a reason for their assessment in each case. (“How would you *justify* your reaction, to someone else? *Why* do you think you know what you know (or don’t know what you don’t know) about each claim?” What factor makes you unsure how to answer?)
- (5) Ask them to share the claim they find most interesting or puzzling, and be prepared to say why they picked it.
- (6) As they do this, take a “roll call” of the claims to be discussed. If possible, have students write “their” claim in block caps on a whole sheet of paper, and pin it where they think it belongs on the wall, with NO WAY! at one end of the wall and YES WAY! (i.e. I know that’s true for sure) at the other.
- (7) The disagreement and discussion can go on for a long time. Good questions to bring up are many, but include: Is there a consensus on claims we should move to a different part of the wall? Why? Is knowledge the same as being certain? Which of these claims are, or depend on, theories? Are facts more important than theories, or the other way around? Is *scientific* knowledge different from, say, historical knowledge, or mathematical knowledge? (What’s similar (and different) about “I know that iron is a metal,” “I know that bullying is wrong,” “I know that chocolate ice cream is better than eggplant casserole,” and “I know that ghosts can walk through walls.”)
- (8) Finish by asking: Can we now define knowledge? You are unlikely to be done with *that* when the bell rings...

1. I know that President Abraham Lincoln was born in 1809.
2. I know that iron is a metal.
3. I know that chocolate ice cream is better than eggplant casserole.
4. I know that hydrogen and oxygen are elements but water is not.
5. I know that Los Angeles, on the coast of California, is west of Reno, a city 200 miles inland in the Nevada desert.
6. I know that living things are made from cells.
7. I know that whales are very big fish.
8. I know that plane triangle has internal angles that add up to 360 degrees.
9. I know that the Moon's orbit is an ellipse, not a circle.
10. I know that all planets and other satellites orbit in ellipses, not circles. [This is Johannes Kepler's "first law" of planetary motion, 1609.]
11. I know that ghosts can walk through walls.
12. I know that bullying is wrong.
13. I know that  $2 + 2 = 4$ .
14. I know thunder is caused by invisible sky-elephants moving rocks.
15. I know that if Seattle is in England, then if you live in Seattle you live in England.
16. I know that Neanderthals were aliens from another planet.
17. I know that the Loch Ness monster is a myth.
18. I know that it's better to have a hundred chairs than just one.
19. I know that witches can cast dangerous spells on you.
20. I know that 13 is an unlucky number.
21. I know that people only use 10% of their brains.
22. I know that we're all being brainwashed by advertising.
23. I know that we're all being brainwashed by aliens.
24. I know that the First Amendment to the US Constitution says people should always be free to say what they want.
25. I know that *The Empire Strikes Back* [or insert your favorite movie or book] is better than *Attack of the Clones* [or insert any movie or book you liked less].
26. I know that there's no such thing as coincidence.
27. I know that wind is caused by differences in atmospheric pressure.
28. I know that standing on one foot, facing southwest, and shouting "Cease!" eleven times can stop the wind so long as you really believe it.

29. I know that if you pinch my arm, I say “Ow!” because it hurts, and if I pinch your arm, you say “Ow!” because it hurts, but when I pinch my “DomestiDave 9000” robot’s arm, and he says “Ow!” he’s only *pretending* it hurts.
30. I know that nothing is more important than kindness, and a vacuum is nothing, so a vacuum is more important than kindness.