CREATIVE THINKING—KEY TO SCIENTIFIC THINKING?

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LEARNING OUTCOMES

- Make meaning of creativity and related habits of thinking
- Practice ways of developing creativity
- Create action plans to work on this habit of thinking
CREATIVITY

“Pi chart”—what does creativity look like/sound like/feel like

When is it important to be creative? Why?
EXPLORING DOMAINS OF CREATIVITY

- How many different uses can you think of for this plastic bottle?
- Fluency
- Flexibility
- Originality
THE WONDERS OF THE UNIVERSE—DOES EXPLORING “CREATION” MAKE YOU MORE CREATIVE?
RESPONDING WITH WONDERMENT AND AWE

- How might this habit of thinking relate to creativity?

- Reflect/write/discuss—
  - What value does “responding with wonderment and awe” have for us?
  - How are “wonderment and awe” and creativity related?
How is the habit of productive persistence related to creativity?
Examples?
Write/discuss
MORE CREATIVE PRACTICE

- In teams, create and be prepared to share
- an analogy (a comparison between two things, typically on the basis of their structure and for the purpose of explanation or clarification)
- or a metaphor (a thing regarded as representative or symbolic of something else, especially something abstract)
- For a scientific concept that you commonly use:
  - Protein complementarity
  - Energy balance
  - Gene expression
  - Foam formation by proteins
  - Emulsion formation
  - How botulinum toxin works

https://www.youtube.com/watch?v=g8v6cZ21vlc
CREATIVITY

- Action plan—write down one thing you will do to work on your creativity