



FUZZY MUD VIDEO DISCUSSION QUESTIONS

Talking Turtles at the Midwest Museum of Natural History

1. Cold blooded means that the temperature of the organism relies on the temperature of its environment. The video tells us that turtles are cold blooded, but besides from turtles what are some other animals that are cold blooded?
2. Turtles do not grow out of or change shells at any point in their lives. List the pros and cons of not being able to switch shells.
3. Turtles are able to live both on land and in the water. What are some other animals that share this trait?

Fuzzy Mud and Alternative Fuels with Argonne National Laboratory

1. Although Biolene is not real, scientists are working hard every day to find a clean, renewable energy source for vehicles. What do you think will be the next big energy source?
2. Day to day temperatures can have a major impact on a vehicle's efficiency. To avoid any possible tampering with their experiments, Argonne's scientists keep their vehicles in an environment controlled by a thermostat. What are some other variables that have an impact on a vehicles efficiency?
3. Dr. Jehlik explains that he never imagined himself as a scientist. Instead, he wanted to race motorcycles. What are your career goals? Now, imagine you have to go into science. What kind of research would you like to do?
4. Surprisingly, solar cars are not yet a feasible option for driving. Dr. Jehlik provides a list of possible variables that would need to be considered in order for a solar powered car to be a reality. Listen to his description and then design a solar powered car on the back of this sheet of paper.
5. Science fiction helps drive real life science every day. Hover boards, cell phones, and invisibility cloaks are just a handful of concepts that appeared in sci-fi before they appeared in modern day science laboratories. Pick your favorite science fiction novel or television show. What is one concept from your choice that you would love to see in real life?

Ergonyms and Microbiology: Fuzzy Mud The STEM Read Experience

1. Bacteria not only contributes to the creation of yogurt, but also the creation of bread. Expand this research further and find 3 other ways humans benefit from bacteria.
2. There are over 10,000 variations of micro-organisms that can be found in or on your body. What are some examples of these microbes?
3. In your own words, describe slime mold.
4. Describe the precautions taken for each level of biosafety.
One:
Two:
Three:
Four:

STEM Read and SmartSpace@NIU are part of Northern Illinois University's STEAM Works Initiative.

