



DARK LIFE VIDEO DISCUSSION QUESTIONS

Pettee Guerrero: Engineering Under the Sea

1. Pettee showed signs of wanting to become an engineer at a young age! She used to take electronics apart to investigate how things worked. What do you enjoy doing in your free time? How might that influence your future career?
2. Pettee's students are tasked with building boats that can then be motorized and travel in water. They do this using Legos. If you got to build a boat and it needed to pass Pettee's test, what would you build your boat out of? Why?
3. In order to build houses underwater like those in Kat Fall's *Dark Life* one needs a strong grip on engineering concepts. If you were attempting to build an underwater society, what are some other sciences that would be beneficial for you to understand? Please explain your choice(s).
4. Pettee's specialized class allows students to gain a deep understanding of engineering as a potential career choice. If you were going to take an engineering class or attend a STEM engineering summer camp, what would you want to learn from the experience? Why?
5. Underwater homes are able to stay underwater thanks to tons of sand housed under their flooring. When work needs to be done on the homes, the sand is removed and the house floats right back up to the surface. What do you imagine the experience of floating back up to the surface would be like? What factors would affect the experience?

STEMfest 2013: Author Kat Falls

1. Kat Falls, author of *Dark Life*, says she finds science fiction inspiration from real science happenings. She says when something makes her uncomfortable or could go horribly wrong she stores it away. If you had to write a story, based on the inspiration method Kat Falls uses, what would you write about?
2. Although live-animal DNA splicing is not legal in the United States, it has been proven possible by Korea. If you were to mash-up two animals, which two would you like to see combined. Why?
3. Kat Falls uses image collages to keep her motivated to write. What are some tricks that you use in order to motivate yourself?

4. Kat Falls touches briefly on ethical research in relation to viral transmission in plants as well as DNA splicing. Why do you think we have scientific ethics in place? What is your opinion on the ethics you do know about?
5. In *Inhuman*, society uses a large wall to keep the feral beings away. In the event that there was a colossal virus outbreak like that seen in *Inhuman* what do you believe society's reaction will be? The governments? The CDC?

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

