

STEM Ahoy! Submarine Simple Machine Challenge

Directions

Challenge:

Create your own bug with new body adaptations using household items!

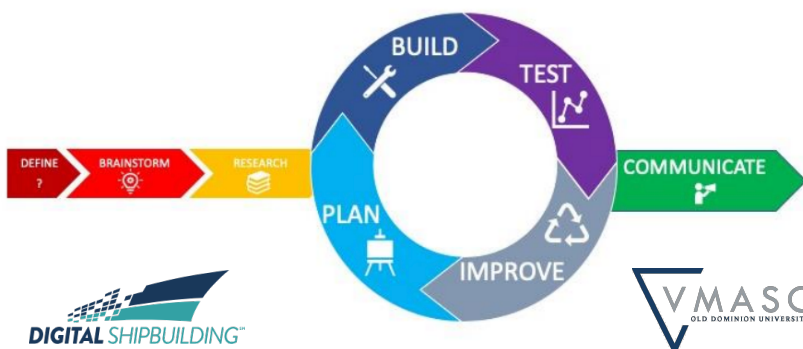
Directions

In this challenge you are designing 2 things: Your new habitat & creature!!!

*To increase level of complexity- separate your family into 2 teams! (One team will design the habitat & the other team will design the creature!)

1. Research and brainstorm Earth's different habitats.
2. Sketch your prototype/design of key aspects within the habitat (weather, land, water, etc.)
3. Use research and sketches from habitat to start brainstorming your bug prototype (what will the body look like? Will it have legs, wings, etc.?)
4. Plan your creature prototype: draw or sketch the design. Go outside and observe insects/bugs in nature!
5. Use your household materials you chose to help with the ideas.
6. Make a model of your creature!
7. Test your design outside! Will your creature survive in the habitat you live in?
8. Send a picture of you completing your challenge on Twitter and tag @classr00mrescue to be entered into the Tech Prize drawing!

VDOE Engineering Design Process:



Materials:

- *Suggested Items*
- Model Magic/Play Dough/Legos
- *Pipe Cleaners
- *Tape/Hot Glue
- *Feathers
- *Googly Eyes
- *Empty Toilet Paper Rolls
- *Macaroni Noodles
- *String
- *Tissue Paper
- *ANY household item!
- Your Imagination!!!