

PLTW Virtual Learning

7th and 8th Grade Design and Modeling

May 13, 2020



Lesson 27: Stranded Design Process Day 3

Objective/Learning Target:

Students will use the engineering design process to design, model, test, and present a floating escape vehicle.

Warm-Up:

Quickwrite:

Write about your experience building and testing yesterday. Here are some questions to help guide you: What materials did you use? How well did they work? What struggles did you face while completing your design? How effective was it when placed in water? What happened when you added weight? What changes did you have to make to your design throughout the process?

Lesson Introduction/Background Information:

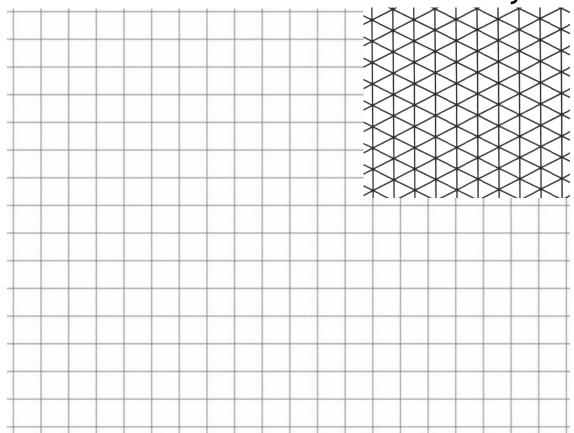
Congratulations!! You made it safely home. When you arrived the newspaper heard about your quick thinking and the miraculous escape from the island. They are wanting to do a cover story to tell the world about your amazing problem solving skills.

They have asked that you provide a narrative of your experience (the warm-up quickwrite), the schematics of the escape vehicle, and a 3D model representation.

Practice:

Draw the isometric and multiview sketches of your escape

vehicle.



Self-Assessment:

How do you feel about your drawings?

Do they accurately represent your escape vehicle?

Extend Your Learning/Continued Practice:

Grab a ruler and dimension your multiview drawing.

How to dimension and multiview

