



PLTW Virtual Learning

7th and 8th Grade Design and Modeling

May 14, 2020



Lesson 28: Stranded Design Process Day 4

Objective/Learning Target:

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

Warm-Up:

Think back to the lessons from May 6th and 7th when we explored some free online 3D modeling programs.

Which program will be most effective at drawing your escape vehicle?



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:

Today let's create the 3D model of your escape vehicle.

Use any of the programs that we tried last week.

[Tinkercad](#)

[Sketchup](#)

[3D Slash](#)

[BlockCAD](#)

Self-Assessment:

How do you feel about your 3D model?

Does it accurately represent your escape vehicle?

Extend Your Learning/Continued Practice:

Use the 3D model of your escape vehicle to check your isometric view and multiview drawings from yesterday. Make any necessary changes.