Coding with Parrot Mini Drones

Terminal Objective 4.2: Design and produce a working mount for space board.

Performance Objective 4.1: Using a 3D printer, Legos, or other means, to design and produce a working mount for the space board to connect to the Mini Drone.

Enabling Objectives:

1. Engineering Design Process
2. Measuring
3. Means of producing mount

Materials and Supplies:

- Rulers and other measuring devices such as dial or digital calipers.
- CAD software or pencil and paper for producing working drawings
- 3D printer and required supplies or
- Assortment of building bricks eg. Legos ©
- Screws or way of fastening Space board to mount

Learning Activities:

1. Video: ROAV mini 4.2 v1
2. *Design Challenge worksheet 4.2*

Formative Assessment:

1. Activity sheet 4.2: *Design Challenge worksheet*

Summative Assessment:

1. Producing a working solution

Supplemental teacher resources:

- Explaination of engineering design process,(good for students) https://www.youtube.com/watch?v=fxJWin195kU&t=52s
- Lego © Brick dimensions https://grabcad.com/tutorials/lego-01-basic-dimensions-bricks-explained

Activity Sheet 4.2: Design Challenge

Name:_____ **Date**_____

Part I: Brainstorm possible solutions

Use the space below to sketch possible designs for the mount.

Part II: Measurements

Use measuring devices to acquire necessary measurements such as overall length, width and height.

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