

# BIRDEE Unit 1 Lesson Plans

## 1.5.2. Conceptual Design 2

*Students will integrate their ideas from 1.5.1 into their second conceptual design. They will upload this design to the EDPL and catch-up on any missing work in the EDPL, if needed.*

### Engage: 5 min

#### **View:** [1.5.2. BID Ideation](#)

- You are designing and making a new type of underwater robot that must be able to squeeze into tight spaces. What could you look to in nature for inspiration?
- List three organisms that live underwater, are small, and move in different ways. Give a short description of how each organism moves. How would this inspire a robot?
- **Class Discussion** on what students brainstormed

### Explain: 5 min

With your solutions ideas from 1.5.1, you will complete the [1.5.2. Conceptual Design 2](#) organizer as a group.

### Explore: 25 min (Group)

#### **Conceptual Design 2**

In their groups, students will complete the [1.5.2. Conceptual Design 2](#) organizer.

### Extend: 15 min (Group)

#### **EDPL:** Upload conceptual design 2 to Ideate and EDPL Catch-Up time

- Make sure all your work is uploaded into the EDPL. You can use this time to add Research Notes, etc. from the Thermoregulation Experiment or catch up on other information that needs to be logged in the EDPL.

### Student Handouts:

[1.5.2. Conceptual Design 2](#)

### Student Materials:

N/A

### Instructional PPT's & Materials:

[1.5.2. BID Ideation](#)

### Teacher Resources:

N/A

### Web Resources:

[BIDI Graphic](#)