#### **Underwater Adventure**

#### Introduction

This activity is recommended to use with the Go App with your younger campers grades 1 & 2 and the Blockly App with your older campers grades 3 thru 5.

Campers will be able to learn about science and incorporate Dash on their adventures.

In this lesson campers will name different species that live in the ocean. They will use their background knowledge about what they know and design and draw an underwater maze by using the Blockly or Go application to navigate Dash through this underwater maze. The campers will also be using the voice recorder to record sounds that Dash will make and write a story about their underwater adventure. Use this as an example. This activity can be done with any habitat or scenario using the Underwater Adventure as an example. Ex: space, forest, or anything that your campers have learned in your camp nature program. Consult your nature specialist if necessary.



### **Lesson Objective-**

### Today we will:

Use what we know about an ocean habitat and the Go/Blockly application.

#### So We Can:

Create an adventure for Dash using the Go/Blockly application and voice recorder feature.

#### **Content Vocabulary**

1. **Species-** A group of closely related organisms that are very similar to each other and are usually capable of interbreeding and producing fertile offspring. If you use a different scenario, use the appropriate vocabulary.

### **Materials**

- Sketch Paper
- Mural Paper
- Colored pencils/crayons/markers/ paint
- Pencils
- Writing Paper

(How many locations underwater should Dash visit? How many sounds should Dash make?)

Teacher and camper can create a plan that will be followed for creation of their maze and writing.

#### **Teacher Demonstration**

Estimated Lesson Time: Approx. 20

- 1. Teacher and students will create a chart with different ocean species that they know.
- 2. Campers will list different things they may see under the ocean or any habitat they selected.
- 3. The teacher will model how to record different sounds using the voice recorder feature.
- 4. Teacher will show campers a rough draft of an underwater drawing that Dash will navigate through so campers can visualize what they are supposed to do.

### **Extension Activity**

## **Camper Grouping:** Pairs

(Recommended to group high/low camper together.)

- 1. Campers will be given sketch paper to make a rough draft of their underwater habitat. They will have the rough draft approved by the teacher.
- 2. Campers will be given mural paper and markers to start and create their underwater habitat that was approved from their rough draft. Have campers refer to created plan if teacher decides to use it.

- 3. Once the mural is completed the campers will use the "Go/Blockly" application to program Dash to navigate through the maze that they designed.
- 4. Campers will use the voice recorder feature and program Dash to narrate or make sounds as it navigates through the maze. Have campers use the created plan if teacher decides to use it.
- 5. After Dash has made it through the maze the campers will write a story about the underwater adventure Dash went on.
  Campers should refer to plan that was created if teacher decides to use it.
- 6. Campers will present their mural and story to the class.

#### **Lesson Closure**

How were we able to use the Go or the Blockly application today in creating this maze for Dash?

### Possible responses:

"We drove Dash and took it on an adventure."

#### **LESSON 15**

"We dragged and dropped and programmed where Dash would travel."

"We were able to create an underwater adventure for Dash by using what we know about underwater habitat and the species that live there."+.....

# **Higher Order Thinking (H.O.T)**

"What could you have done in your programming today to have made the adventure for Dash more difficult?"