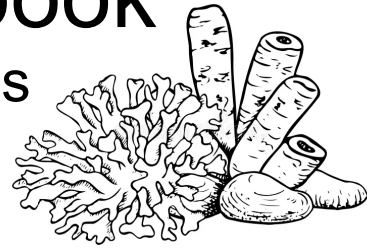


# Captivating Corals: Workbook

February Homeschool Day Activities

6th-12th Grade



- **Homeschool Day Activity Schedule & Marineland Map**
  - **Page Number:** 2-3
  
- **Educational Booth Activity:** Bubble Reef
  - **Description:** Learn about coral anatomy, reproduction, and what affects their survival.
  - **Location:** Education Station in Ambassador Park
  - **Page Number:** 4-5
  
- **Educational Booth Activity:** Coral Conservation
  - **Description:** Build your coral reef and learn how to protect the animal life that calls your reef home.
  - **Location:** Education Station in Whitney Park
  - **Page Number:** 6
  
- **Guided Educational Activity:** Mock Coral Reef Survey
  - **Description:** Learn how to survey the health of a coral reef by building a reef and watching it change with the impact of multiple human generations.
  - **Times:** 10:15 AM, 11:45 AM, & 1:00 PM
  - **Location:** Meet at Whitney Park Education Booth, this will include walking as a group to one of our classrooms
  - **Page Number:** 7-10

**Make sure to see our General Admission Schedule for other talks and tours \*not exclusive\* to Homeschool Day.**

## Homeschool Day ONLY Activities

### Guided Educational Booth Activities

(Available as a walk up activity from **9:30 AM-2:00PM**)

Bubble Reef

Ambassador Park's  
Educational Booth

Coral Conservation

Whitney Park's  
Educational Booth

**Guided Scheduled  
Activity**

**Timeframe**

**Location**

Coral Reef Survey

10:15 AM - 11:00 AM

Coral Reef Survey

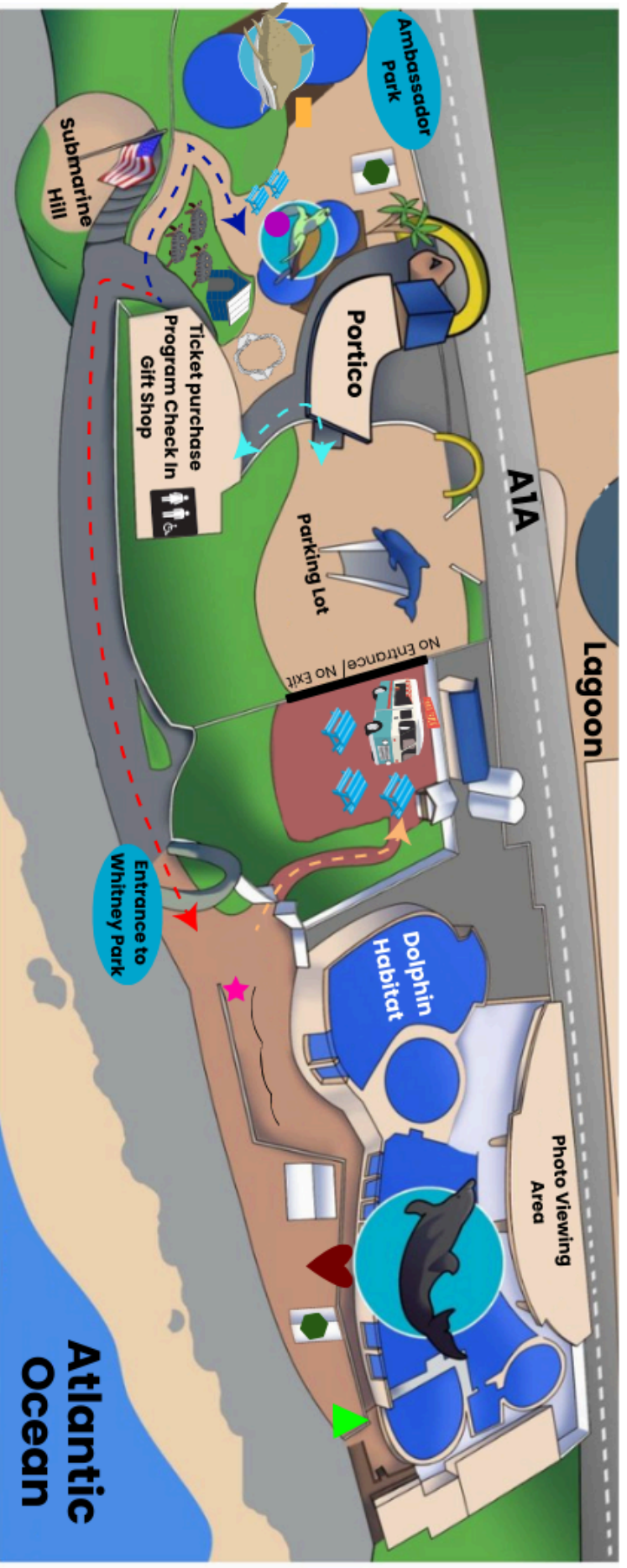
11:45 AM - 12:30 PM

Coral Reef Survey




1:00 PM - 1:45 PM

**Meet at Whitney  
Park Education  
Booth:** We will be  
walking as a group to  
one of our classrooms





**Please see our General Admission Schedule for other talks and  
tours not exclusive to Homeschool Day**



**Things to do in Ambassador Park:**

-  10:30 AM: Shark Talk
-  1:00 PM: Turtle Talk
-  Education Station Activities & Ambassador Program

**Things to do in Whitney Park:**

-  Dolphin Program Pick-Up
-  Dolphin Talk & Program Viewing Area
-  Sea to Shore Aquarium Tour Pick-Up Location
-  Education Station Activities & Ambassador Program

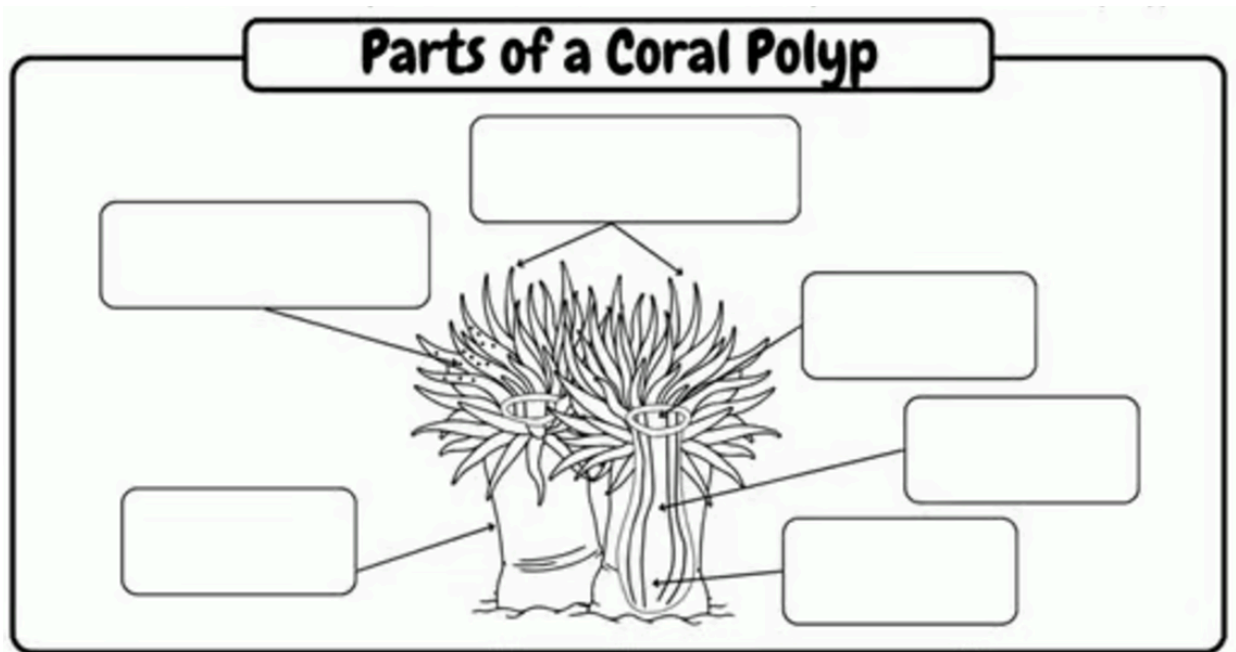
Only Entrance & Exit

Flipperz Food Truck  
Food Designated Area of the Facility

**No food allowed in Whitney Park for Dolphin Safety**

# Guided Activity: Bubble Reef

Before we can learn what makes a coral reef, we have to learn what makes a coral! In this short activity, you will learn basic coral polyp anatomy by matching the word bank to the anatomy diagram. Once you have your guesses, try them with an educator on our fabric coral, and match the answer here!



Mouth	Located in the center of the tentacles, used to intake nutrients
Tentacles	Used for defense, capturing food, and to clear debris
Body	Provides structural support
Stomach	Located inside the polyp, used to consume nutrients
Throat	Pathway from mouth to the stomach
Nematocysts	Stinging cells located in the tentacles, are used for defense and to capture food

# Guided Activity: Bubble Reef Cont...

A single coral is called a Polyp. One way coral reproduces is by releasing little coral larvae that float through the water and eventually settle on the ocean floor to grow and develop. Throughout this process, there are predators and other factors that can keep the coral larvae from surviving.

In this activity, participants will use bubbles to represent coral larvae and watch as they face predators and other harmful factors.

After participating in the activity, answer the following questions:

1. When you blew the bubbles where did all the corals go?	
2. What happens to the coral if there are too many predators?	
3. What happened to the corals if there were no predators?	
4. What was the best place for the coral larvae to land and grow?	

# Guided Activity: Coral Conservation

Coral reefs are some of the most diverse ecosystems in the world! They protect coastlines from storms and erosion, provide jobs for local communities, and offer opportunities for recreation. Reefs are also very important because they provide safe places for fish to live and hide from bigger predators.

Today you are going to create your own coral reef! While you build your reef, you have to hide a few fish somewhere on your reef to protect them from predators. When you're done building your reef, we will see how many of your fish found a safe hiding spot!

After participating in the activity, answer the following questions:

1. How many of your fish found a safe hiding spot?	
2. How did you hide your fish? Ex: Under the reef, with camouflage, etc.	
3. What is one way we can help preserve coral reefs?	

# Guided Activity: Mock Coral Reef Survey

In this guided activity, you will take on the role of a marine biologist by conducting a mock coral reef survey using proper field techniques and equipment. These surveys are used to determine the health of coral reefs over time while combating human impact.

Use the data sheets below to write down your findings.

Untouched Reef						
Transect #	Number of Animals	Type of Sediment				Notes
		Sand	Coral	Algae	Rock	
1						
2						
3						
1						
2						
3						

# Guided Activity: Mock Coral Reef Survey

## After moderate human Impacts

Transect #	Number of fish	Type of Sediment			Coral Size	Notes
		Sand	Coral	Algae		
1						
1						
2						
2						
3						
3						

## After Severe Human Impacts

Transect #	Number of fish	Type of Sediment			Coral Size	Notes
		Sand	Coral	Algae		
1						
1						
2						
2						
3						
3						



# Guided Activity: Mock Coral Reef Survey

Now that you've completed your coral reef survey, answer the questions below!

1. Do you think we started with a healthy reef?	
2. Did you think humans had this much impact on coral reefs?	
3. What event impacted your reef the most?	
4. What challenges did you face while surveying?	
5. Would it be harder to survey in the real ocean? (Consider that animals are constantly moving around and you cannot step on corals.)	

<p>6. Do you think you truly got a random survey? (Consider subconscious decisions of what areas were chosen.)</p>	
<p>7. What can we do to protect our reefs from the events we saw here?</p>	
<p>8. What is one way we can help protect the ocean in our everyday lives?</p>	