



Island STYLE



Oh, the Places We Will Go!



SUBJECT:

Interdisciplinary

GRADE LEVEL:

6th

TIMEFRAME:

45 minutes

MATERIALS:

- Whiteboard
- Dry erase markers



ACTIVITY SUMMARY:

In this lesson, we will take the *Driving Question* that the students created and decide what kind of *Student-Selected Adventure* the class should go on in order to gain further insight into their questions.

LEARNING OBJECTIVES:

- Open students' eyes to the many hidden wonders of Galveston Island
- Connect students firsthand to leading experts and professional scientists in the field
- Allow for students to gain insight and collect data in order to answer their *Driving Question*

VOCABULARY:

- **Adventure** - An unusual and exciting experience or activity
- **Adventure Learning** - The promotion of learning through adventure centered experiences
- **Experiential Education** - A teaching philosophy based on challenge and experience followed by reflection leading to growth
- **Field Trip** - A trip made by students or research workers to study something at first hand
- **Place-Based Learning** - Engages students in their community, including their physical environment, local culture, or people
- **Student-Selected Adventure** - An intrinsically engaging, student chosen, elevated field trip experience that is rooted in the child's natural curiosity and interests; the adventure experience directly connects the student to an expert/professional in the field that can help address the student's *Driving Question*
- **Outdoor Education** - Experiential learning in, for, or about the outdoors

BACKGROUND INFORMATION:



Meet the Experts!

Now that your class has established a *Driving Question*, the next step is to determine *Student-Selected Adventure* location to visit and connect with an *Expert* in order to discover more about their chosen topic.

What is the class's Driving Question?
Which organizations or specific people are already doing the work related to this Driving Question?

For this Island STYLE Project, a team of *Exceptional Experts* was created in order to help connect your students to many different potential experts and places. If your students choose a Driving Question that is better addressed by an *Additional Expert* or someone else that isn't listed below, that is okay too!

Exceptional Experts:

- NOAA Marine Debris Program
- NOAA Southeast Fisheries Science Center
- NOAA Mesophotic & Deep Benthic Communities
- NOAA Flower Garden Banks National Marine Sanctuary
- NOAA Office of Habitat Conservation
- Texas Marine Mammal Stranding Network
- Moody Gardens
- Artist Boat's Coastal Heritage Preserve

Additional Experts:

- Galveston Island Nature Tourism
- City of Galveston Waste Water Treatment Plant
- Galveston Island Park Board
- Galveston County Emergency Management
- Coast Guard
- Texas Parks and Wildlife Department
- City of Galveston Recycling Center
- And more...!

BACKGROUND INFORMATION:



Meaningful Watershed Educational Experience

Field Experiences - Student Actions
Locally Relevant Connections
Classroom Work
Teacher Training



PREPARATION:

This project is to encourage the students to create their own learning experience and in such we want them to be involved as much as possible. We all know we can't just ask 25 students where they want to go. You would get 25 answers. However, we can help them narrow down some ideas by asking leading questions.

Remember - the goal of the Student-Selected Adventure is for them to gain insight into their Driving Question, as well as generate inspiration and excitement so that the students are motivated for the next step: their Environmental Action Projects!

INTRODUCTION:

Revisit the *Driving Question* and ask the students where they might need to go in order to learn more about this topic. It can be a "popcorn activity," give each child a marker to write on the board, or even have them write you a sentence or two and collect the answers. Narrow down their ideas and compare it to the list above. Is there a perfect student adventure on the list already? Is there something close that we could potentially modify? Do we need to work together to find a different partner?

GUIDED PRACTICE:

Advise your students about their options and allow them to vote.

Once your class has made a decision, contact Artist Boat and we will assist you with the rest!



EXCEPTIONAL EXPERTS

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



1. To **understand** and **predict** changes in climate, weather, ocean, and the coasts
2. To **share** that **knowledge** and **information** with others
3. To **conserve** and **manage** coastal and marine **ecosystems** and **resources**



NOAA MARINE DEBRIS PROGRAM



**Prevention - Removal - Research Monitoring - Education
Emergency Response**



**International
Collaboration**

**Marine Debris
Clearinghouse**

**Interagency Marine
Debris Coordinating
Committee**



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EXCEPTIONAL EXPERTS

NOAA SOUTHEAST FISHERIES SCIENCE CENTER



Provides the **scientific advice** and **data** needed to **effectively manage the living marine resources** of the Southeast region and Atlantic high seas.

Fisheries management councils, fisheries commissions, and **federal, state and local agencies** depend on our science to make decisions that protect and conserve the region's living marine resources.

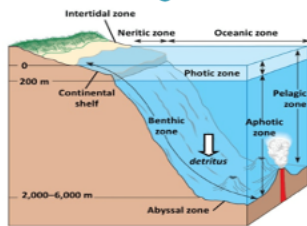


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NOAA GULF OF MEXICO MESOPHOTIC & DEEP BENTHIC COMMUNITIES

The term **mesophotic** comes from the Greek words for "**middle**" and "**light**," and refers to the fact that this zone doesn't have as much light as waters near the surface of the ocean, but it's also **not completely dark**. This is evidenced by the presence of some **light-dependent organisms** such as **stony** (reef-building) corals and **algae**.

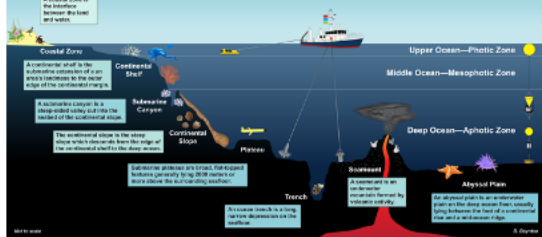


Vital seafloor habitats were damaged by the 2010 **Deepwater Horizon** oil spill. NOAA and partners are building a network of experts and resources to **restore** this underexplored area in the Gulf of Mexico.



Ocean Research

The U.S. Geological Survey conducts research in many parts of the ocean from our coasts to the deep sea. Learn more at www.usgs.gov/ocean

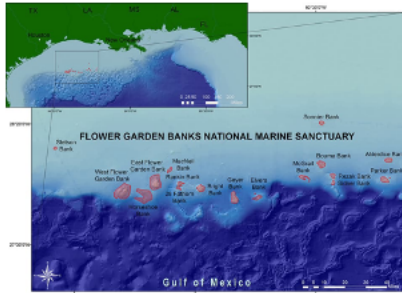


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EXCEPTIONAL EXPERTS

NOAA FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY



Flower Garden Banks
National Marine Sanctuary is
**one of 15 national marine
sanctuaries and two marine
national monuments**
protected by NOAA's **Office
of National Marine
Sanctuaries**.

It is the **only** sanctuary site
located in the **Gulf of Mexico**
and the sanctuary protects
portions of **17 separate reefs
and banks** in the
northwestern Gulf of Mexico.

**Research
Vessel -
R/V
MANTA**



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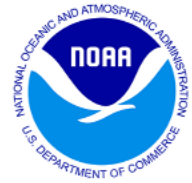


NOAA OFFICE OF HABITAT CONSERVATION



Protecting and restoring habitat to **sustain fisheries**, recover **protected species**, and maintain **resilient coastal communities and ecosystems**

1. Conserve habitat for **managed fisheries** and protected resources
2. Restore fisheries and protected resources **impacted by oil and chemical spills**
3. Increase the resilience of coastal ecosystems, communities, and economies through **habitat conservation**



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EXCEPTIONAL EXPERTS

MOODY GARDENS



Public non-profit educational destination utilizing nature in the advancement of Rehabilitation, Conservation, Recreation, and Research



Aquarium Pyramid
Rainforest Pyramid
Animal Encounters
Coral Reefs Lab



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TEXAS MARINE MAMMAL STRANDING NETWORK



Dedicated to the Conservation of Marine Mammals through Rescue and Rehabilitation, Research and Education

TMMSN is a [non-profit 501\(c\)\(3\) organization](#) created in [1980](#) to further the [understanding](#) and [conservation](#) of [marine mammals](#) through [rescue](#) and [rehabilitation](#), [research](#) and [education](#)

The TMMSN consists of [six regions](#) along the Texas coast, which provide a coordinated response to [all](#) marine mammal strandings along the Texas coastline



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INDEPENDENT / GROUP PRACTICE:

BIG QUESTION

"How does the Gulf of Mexico, Galveston Bay, and Galveston Island add value to the quality of life for people?"



"Island Style" will be designed to create systemic change in the way students view themselves as scientists, creators, and problem solvers through the lens of exploring Galveston Island, Galveston Bay, and the Gulf of Mexico with their teachers/experts, in/out of the classroom, and through their leadership in the environment creating actions based on student-led questions and concerns



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Before Adventure Day:

Continue to "wonder" about your Driving Question so your students are keeping it in the forefronts of their brains. Perhaps recreate your "I Wonder" Board with the Driving Question as a central topic and prompt the students to develop supporting questions that they would like to ask the "Expert" that they will meet on their Student-Selected Adventure.

Day of Adventure:

Prepare for your Student-Selected Adventure with all the necessary forms, buses, subs, and lunch requests based on your school's needs. Ready the students for their adventure by reminding them of the Driving Question and the questions they still want to know more about. Ready students for the space they are headed into by explaining behavior expectations that are appropriate to where they will be going. Many places might require inside voices, respectful listening, raised hands, quiet walking feet, hands to themselves, and no electronics whatsoever.

After the Adventure:

Debrief the Student-Selected Adventure experience with your class. This could be done in the afternoon directly after their adventure or sometime during the following day. What did the students learn? What did they see, hear, smell? Could they tell someone else about their Driving Question based on what they experienced? Did they answer their Driving Question? What could they do to learn more? What could they do to change behaviors or make a difference in their communities?

ASSESSMENT OF LEARNING:

Encourage the students to select an Adventure Site that will allow for them to experience something new for the first time. For instance, many students in Galveston will probably have already been to Moody Gardens with family or on another field trip, but very few students will have had the opportunity to have an exclusive, private tour of the jellyfish propagation laboratory with a trained Aquarist. Many students might feel compelled to clean up the litter found on the Galveston beaches, but very few students have ever had the opportunity to see for themselves seen the sheer magnitude of the landfill and the extensive, complete journey our trash undergoes once it is “thrown away.” Open their eyes to seeing Galveston in a new light - perhaps, when they are older, they might find themselves in the career field of their selected Adventure Site!

CLOSING:

Allow time for a debrief activity at the end of the Student-Selected Adventure or during the next time that you see this class. It is important to debrief while the experience is still fresh in their minds.

The debrief can take place as a group discussion or as an individual reflection activity.

Some questions to ask could include:

- What was our Driving Question?
- What answers did we discover?
- What additional questions did we think of?
- How did we investigate our Driving Question?
- Where did we go?
- Who did we meet?
- Why did we choose to explore outside of the classroom to answer our Driving Question?

NOTES:



ASKING QUESTIONS AND PLANNING INVESTIGATIONS

Name: _____ Class: _____

Driving question:

What do we want to know?	How can we investigate it?	Where can we investigate it?

MWEE THINK CLOUD

