

### Alabama Objectives – Elementary

**GulfQuest Theater:** This three-screen, multi-media theater presentation, entitled "The Gulf Coast: A Place Like No Other", explores the rich maritime history and culture of the Gulf of Mexico and Mobile Bay from past to present. A tapestry of panoramic images and voices captures what it's like to live and work on the Gulf Coast. Local voices narrate the 16-minute film, which takes GulfQuest visitors from location to location while they explore different aspects of the region, including recent events (Hurricane Katrina and the BP Horizon oil spill).

Social Studies:  
Grade 1: 7

**Steam Engine:** The mechanical propulsion of the steam engine changed maritime travel. Visitors can function as "steamboat operators" and make the paddle wheel go around.

Science:  
Grade K: 1  
Grade 3: 1

Social Studies:  
Grade 5: 10

**Setting Sail:** Visitors will use wind to "sail" a sailboat across a table and see how the wind's ability to propel the boat is affected by the sail's position relative to the wind.

Science:  
Grade K: 1

**Night Skies:** Traditionally, navigating a ship at night requires the ability to "read" the stars. In this interactive program, visitors will learn how ancient mariners used the night sky, including Polaris (or the North Star) and the constellations, to find their way across the high seas.

Science:  
Grade 1: 8

**Propeller Challenge:** Propellers are used to move large ships, but why are their capabilities limited? Visitors will crank a propeller in water and determine how fast they can go. Then they'll see how increasing the speed of the propeller requires an exponential amount of energy.

Science:  
Grade 4: 1

Math:  
Grade 3: 1  
Grade 4: 1

## Exhibit Connections



**Cross Staff and Quadrant and The Sextant:** Early sailors used tools such as the cross staff, the quadrant, and the sextant to determine their ship's latitude. Visitors will use these same tools to measure the angle between Polaris and the horizon, and determine their position north or south of the equator.

Social Studies:

Grade 2: 5

Grade 3: 1

Math:

Grade 1: 17

Grade 3: 7

Grade 4: 23, 24

**Longitude Challenge:** Until the 1770s, mariners were unable to determine longitude because no timepiece could keep accurate time at sea. What if you were "lost at sea"? Through this exercise, visitors will discover how they can use time to tell your longitude on the open water.

Social Studies:

Grade 2: 5

Grade 3: 1

Math:

Grade 1: 17

Grade 3: 7

Grade 4: 23, 24

**Ocean Planet Theater:** A six-foot diameter planet Earth is suspended, rotating on its axis. With stunning visualizations of our amazing "ocean planet", visitors will engage in theater programs on the Gulf of Mexico that utilize real satellite data and other images.

Science:

Grade K: 7, 9

Grade 1: 8

Grade 2: 8, 9

Grade 4: 14, 16

Grade 5: 14, 15

Social Studies:

Grade K: 8, 9

Grade 1: 8

Grade 2: 5, 6

Grade 3: 1, 2

Grade 5: 1

**Beneath the Bay:** Visitors will view over 100 shipwrecks located in Mobile Bay, originating from every period of North American history, from Spanish colonization to modern times. Visitors will explore the locations of the more storied shipwrecks from the area's maritime history.

Social Studies:

Grade K: 8, 9

Grade 2: 6

Grade 3: 1, 8

Grade 4: 8

## Exhibit Connections



**What's Inside?:** In every port, goods headed to market are shipped inside huge stacks of containers. Visitors will explore an interactive, multi-media environment that demonstrates how containers are used to transport products worldwide.

**Social Studies:**

Grade K: 5

**Math:**

Grade K: 14

**Comings and Goings:** This two-story, interactive world map allows visitors to explore historic and current waterborne commerce to and from the Gulf, from the routes of early Spanish, French and British explorers, to modern trade that links Mobile and the Gulf to the world.

**Science:**

Grade 2: 9

Grade 4: 16

**Social Studies:**

Grade 1: 8

Grade 4: 2

Grade 5: 1, 6

**The Hunley:** Visitors will sail onboard the Civil War submarine *H. L. Hunley* on the fateful night it became the first sub to destroy an enemy vessel: the Yankee warship *Housatonic*. Experience this historic event through the eyes of Lt. George Dixon, the Hunley's captain.

**Social Studies:**

Grade 1: 5

Grade 4: 8

**MariTimeline:** The comprehensive maritime history of the Gulf of Mexico and Mobile is displayed in a user-friendly format designed for the casual viewer as well as the history buff. On parallel timelines, visitors will explore early discoveries, inventions, economic events, political upheavals, and social milestones that defined Gulf Coast maritime history. Reproduced engravings, paintings and photographs illuminate fascinating facts from the Gulf's storied past.

**Social Studies:**

Grade 2: 3

Grade 3: 11

**Discovery Hull Theater:** This theater showcases "Port of Victory", a film on the history of the Port of Mobile during World War II, focused on the shipbuilding and shipping industries that helped the nation sustain the war.

**Social Studies:**

Grade 4: 13

## Exhibit Connections



**El Cazador:** Step into a glass-bottom boat and witness the amazing shipwreck of El Cazador, a Spanish galleon that could have changed history had it completed its mission in 1784 to deliver new currency to Spain's struggling Louisiana colony.

**Social Studies:**

Grade 5: 10

**Extreme Storms:** Inside, visitors will encounter a calm beach day that becomes a hurricane, and will be called upon to become "emergency response managers", making decisions based on rapidly-incoming information. Visitors will make choices that affect loss of property and life.

**Science:**

Grade K: 9, 10

**Math:**

Grade 1: 9, 13

**Cargo Handler:** Visitors will use block and tackle like stevedores to hoist heavy goods (36 pounds of weight). See how the right combination of pulleys can make the job easier.

**Science:**

Grade K: 2

**Math:**

Grade 3: 2, 5

Grade 4: 1

**Stream of Time:** This exhibit focuses on the diversity of early Gulf residents viewed through the archeological evidence they left behind. An exposed riverbank reveals objects from the past. Open a door and learn about the object's history. Visitors can view artifacts from the University of South Alabama from the region's Prehistoric, French, Spanish, English and American periods.

**Science:**

Grade 3: 9

**Social Studies:**

Grade 2: 3

**Ocean Today:** At this media kiosk, visitors can view selections from the latest video feeds issued by NOAA (National Oceanic and Atmospheric Administration) relative to maritime research and events that are affecting our ocean environment.

**Science:**

Grade 3: 15

Grade 4: 16, 17

**Social Studies:**

Grade 3: 7

**Sound Signals:** Visitors can listen to various sound signals from ships and learn to identify their correct meanings. Sound signals allow ships to let others know what they're doing at all times.

**Science:**

Grade 4: 7

## Exhibit Connections



**"Take the Helm" Theater:** This simulator is identical to those used to train professional boat pilots. In this theater, visitors will get the chance to navigate vessels around the Port of Mobile, Mobile Bay and the Tombigbee River. During each show, "captains" will be selected, then take the controls and test their skills with the help of a GulfQuest staff member or volunteer. Simulations are based on models of real downtown Mobile, Mobile Bay and river locations.

### Social Studies:

Grade 3: 8

**Hidden Highways:** See how you can ship goods on the nation's river system, from a variety of Gulf ports to destinations far north. Watch the route your goods would take on the inland waterways as well as the number of miles traveled and the change in elevation as you go.

### Social Science:

Grade 3: 8

Grade 5: 10

### Math:

Grade K: 15

Grade 2: 5

### Alabama Objectives – Middle School

**Propeller Challenge:** Propellers are used to move large ships, but why are their capabilities limited? Visitors will crank a propeller in water and determine how fast they can go. Then they'll see how increasing the speed of the propeller requires an exponential amount of energy.

Math:

Grade 8: 3

**Ocean Planet Theater:** A six-foot diameter planet Earth is suspended, rotating on its axis. With stunning visualizations of our amazing "ocean planet", visitors will engage in theater programs on the Gulf of Mexico that utilize real satellite data and other images.

Science:

Grade 6: 5, 7, 12, 14

Social Studies:

Grade 6: 11, 12

Grade 7G: 1, 2, 3,

**Beneath the Bay:** Visitors will view over 100 shipwrecks located in Mobile Bay, originating from every period of North American history, from Spanish colonization to modern times. Visitors will explore the locations of the more storied shipwrecks from the area's maritime history.

Social Studies:

Grade 7G: 1

**Comings and Goings:** This two-story, interactive world map allows visitors to explore historic and current waterborne commerce to and from the Gulf, from the routes of early Spanish, French and British explorers, to modern trade that links Mobile and the Gulf to the world.

Social Studies:

Grade 6: 12

Grade 7G: 1, 2

**Discovery Hull Theater:** This theater showcases "Port of Victory", a film on the history of the Port of Mobile during World War II, focused on the shipbuilding and shipping industries that helped the nation sustain the war.

Social Studies:

Grade 6: 7

## Exhibit Connections



**Cargo Handler**: Visitors will use block and tackle like stevedores to hoist heavy goods (36 pounds of weight). See how the right combination of pulleys can make the job easier.

**Math**:

Grade 6: 1

### Alabama Objectives – High School

**Ocean Planet Theater:** A six-foot diameter planet Earth is suspended, rotating on its axis. With stunning visualizations of our amazing "ocean planet", visitors will engage in theater programs on the Gulf of Mexico that utilize real satellite data and other images.

Science:

Physics: 9

Earth and Space: 7, 9, 13

**Beneath the Bay:** Visitors will view over 100 shipwrecks located in Mobile Bay, originating from every period of North American history, from Spanish colonization to modern times. Visitors will explore the locations of the more storied shipwrecks from the area's maritime history.

Social Studies:

Grade 10: 14

**Comings and Goings:** This two-story, interactive world map allows visitors to explore historic and current waterborne commerce to and from the Gulf, from the routes of early Spanish, French and British explorers, to modern trade that links Mobile and the Gulf to the world.

Social Studies:

Grade 10: 1

**Discovery Hull Theater:** This theater showcases "Port of Victory", a film on the history of the Port of Mobile during World War II, focused on the shipbuilding and shipping industries that helped the nation sustain the war.

Social Studies:

Grade 11: 10

**El Cazador:** Step into a glass-bottom boat and witness the amazing shipwreck of El Cazador, a Spanish galleon that could have changed history had it completed its mission in 1784 to deliver new currency to Spain's struggling Louisiana colony.

Social Studies:

Grade 10: 13



## Exhibit Connections



**The Hunley:** Visitors will sail onboard the Civil War submarine *H. L. Hunley* on the fateful night it became the first sub to destroy an enemy vessel: the Yankee warship *Housatonic*. Experience this historic event through the eyes of Lt. George Dixon, the Hunley's captain.

**Social Studies:**

Grade 10: 14

**Ocean Today:** At this media kiosk, visitors can view selections from the latest video feeds issued by NOAA (National Oceanic and Atmospheric Administration) relative to maritime research and events that are affecting our ocean environment.

**Science:**

Environmental: 11, 13