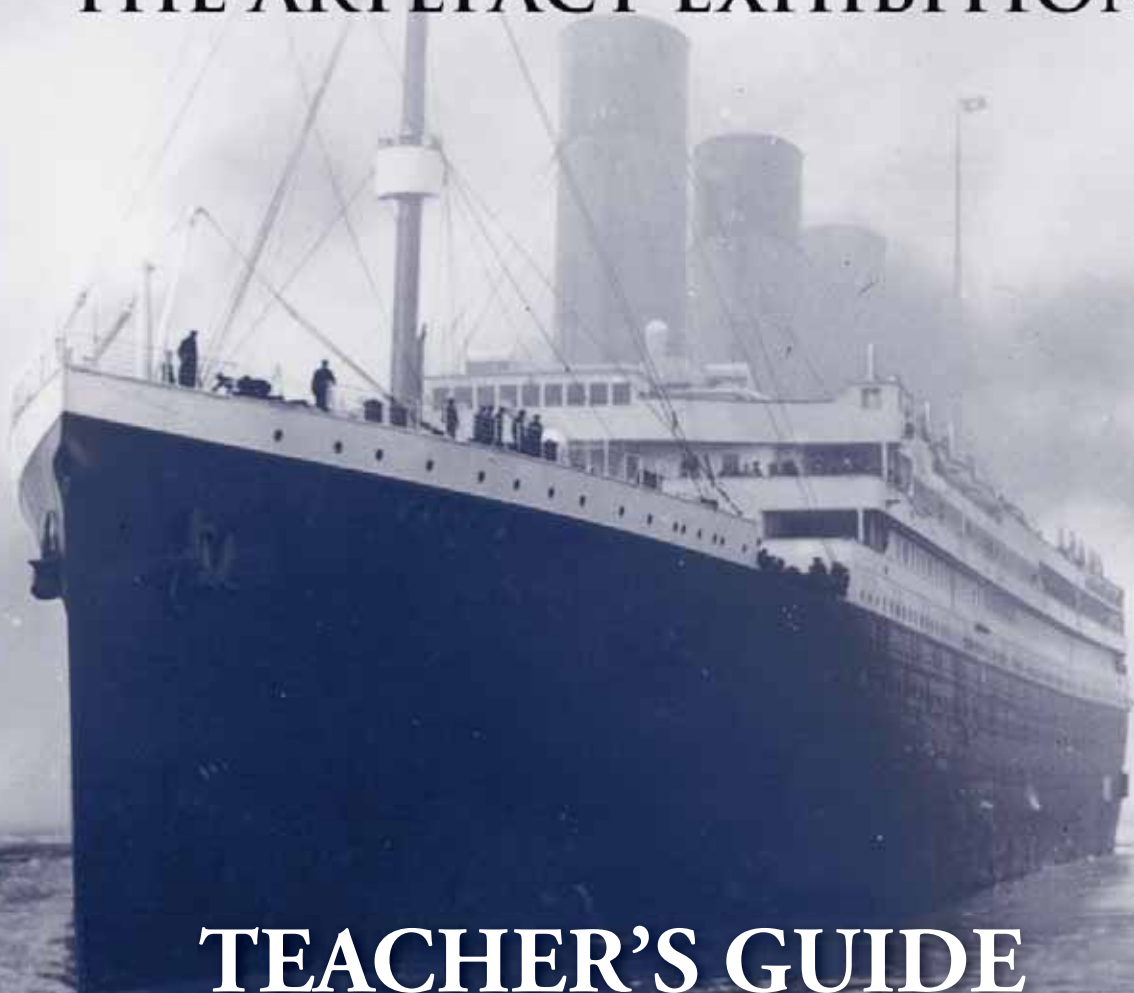




# TITANIC

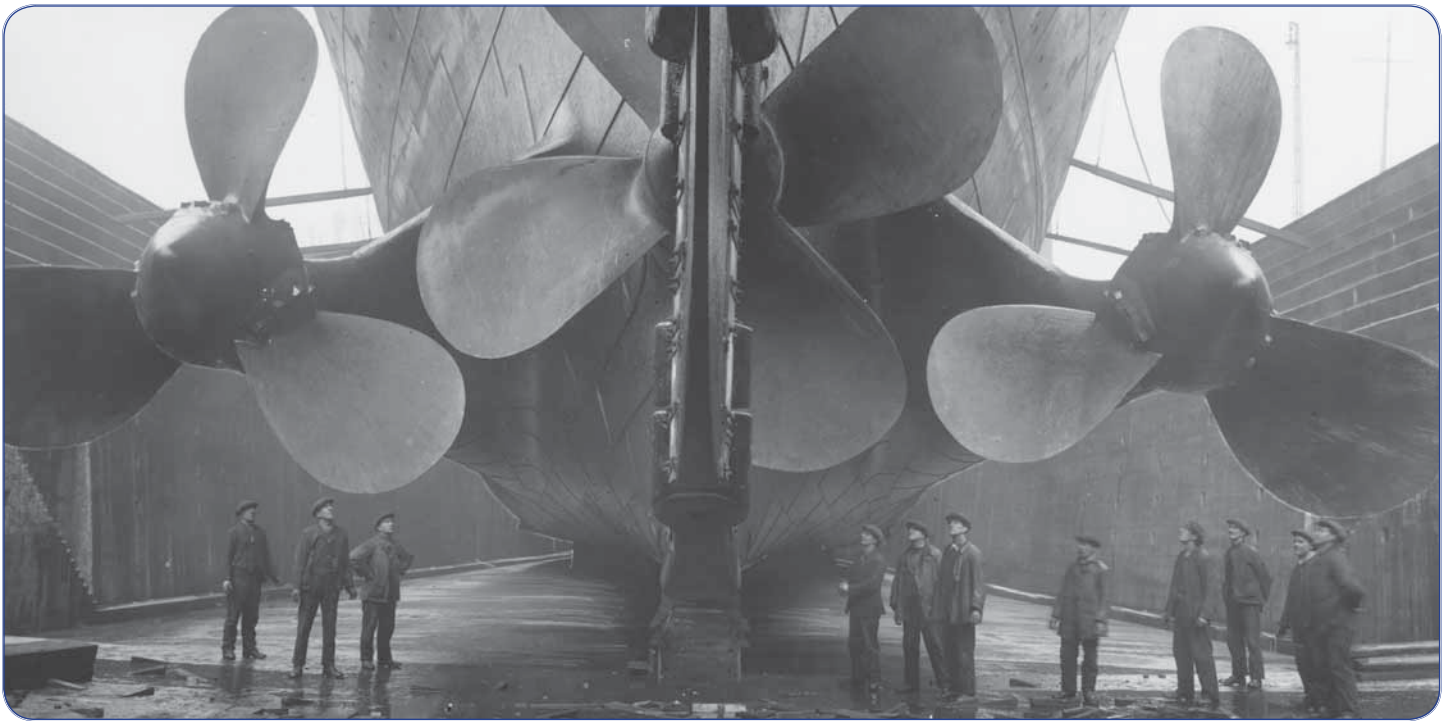
## THE ARTEFACT EXHIBITION



# TEACHER'S GUIDE

CLASSROOM LESSON PLANS AND EDUCATIONAL TOUR ACTIVITIES

Winner of a 2007 NAI Interpretive Media Award for Curriculum



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Winner of a 2007 NAI  
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# TITANIC THE ARTEFACT EXHIBITION

We want your educational tour be a positive experience for your class. Upon your return, please visit: [www.prxi.com/fts](http://www.prxi.com/fts) to complete a brief survey. We value your feedback!

## INTRODUCTION

We invite you and your school group to see *Titanic: The Artefact Exhibition* and take a trip back in time. The galleries in this fascinating Exhibition put you inside the *Titanic* experience like never before. They feature real artefacts recovered from the ocean floor along with room re-creations and personal histories, each highlighting a different chapter in the compelling story of *Titanic*'s maiden voyage. Board *Titanic* using a replica White Star Line ticket belonging to an actual passenger, touch an iceberg, and learn about artefact recovery and conservation.

*...a great catalyst for lessons in Science, History, Geography, English, and Maths.*

*Titanic: The Artefact Exhibition* is a great catalyst for lessons in Science, History, Geography, English, and Maths. Many students are familiar with the compelling story behind the Ship's promised voyage and tragic demise. Innovative educational resources link this innate fascination to classroom-friendly lessons that will generate student interest before your visit and extend student learning beyond your educational tour.

These award-winning lesson plans, which come with ready-to-copy Student Activity Pages, are primarily designed to be used in SESE, English, and Drama classes before, during, and after your educational tour. The Appendix includes suggestions and links for activities in Science and Maths.

This Teacher's Guide features a variety of methods and projects for those educators who strive for differentiated instruction in their classrooms. While learning about *Titanic*, students can analyse primary sources, explore history through music, perform historical reenactments, sharpen their geography skills, and find connections to the Ship's story within their own communities and families.

Teachers will find something to engage students of all skill levels and interests. Thank you for sharing this innovative learning experience with your students. We look forward to seeing you at *Titanic: The Artefact Exhibition*.



# GETTING READY

## Preparing to Visit the Exhibition

*Titanic* was conceived in 1907 and met with disaster in 1912. The story has been told and retold, but never more poignantly and passionately than by the artefacts in this Exhibition. Painstakingly recovered from the debris field surrounding the wreck site and artfully conserved, these three-dimensional objects represent the vessel and the 2,228 souls who journeyed with her into history.

The galleries in the Exhibition—featuring real artefacts, room re-creations and personal histories—each highlight a different chapter in the compelling story of *Titanic*'s maiden voyage.

The **Construction Gallery** focuses on the design and invention of *Titanic*. It showcases the shipyards of Harland & Wolff, who hoped to be the most technologically advanced and progressive shipbuilder in the world.

The **Departure Gallery** allows students to feel what it was like to set sail that fateful day, 10 April 1912.

After boarding *Titanic*, students enter the **Passenger Gallery**. Brass railings and a rich carpet runner lead down an elegant hallway and past a series of numbered doors. The focal point of this gallery is the **First Class Stateroom**. This cabin contains re-creations of *Titanic* furniture along with clothing and personal belongings of first-class passengers.



The **Verandah Café Gallery** (above) features first-class china, crystal, dinnerware, and silverware. Menus from the restaurants of *Titanic* are displayed.

In the Passenger Gallery, students learn individual stories and view personal artefacts recovered from the ocean floor. The **Third Class Cabin Gallery** includes a re-creation of the simple accommodations offered to those passengers travelling in steerage. Though basic, these cabins provided much greater comfort than any other ship at that time.

By touching the frigid wall of ice in the **Iceberg Gallery**, students will discover how cold it was in the North Atlantic on the night *Titanic* sank. In -2 degrees Celsius (28 degrees Fahrenheit) water there was little chance for survival. Death from hypothermia came quickly.

The **Discovery Gallery** shows how *Titanic* was found and what lies in her debris field. Students will learn about artefact recovery and conservation efforts.

The **Memorial Gallery** lists over 2,200 names of those who were lost and those who were saved. Students will find the name from their boarding pass on this wall.

## What Students Want To Know

### How are these artefacts recovered from *Titanic*?

*Nautilie* and *MIR* submersibles are used to recover artefacts from the ocean floor. These machines are equipped with mechanical arms capable of scooping, grasping, and recovering the artefacts, which are then either collected in sampling baskets or placed in lifting baskets. The crew compartment of each submersible accommodates three people—a pilot, a co-pilot, and an observer—who each have a 1/3-metre-thick plastic porthole between themselves and the depths. Both submersibles have the capabilities of operating and deploying a remotely operated vehicle, or ROV, from a 33.5-metre tether which is then flown inside the wreck to record images. It takes over two and a half hours to reach the *Titanic* wreck site. Each dive lasts about twelve to fifteen hours with an additional two hours to ascend to the surface.

### How are the artefacts conserved?

The conservation treatment begins once the artefact is exposed to the air, undergoing an immediate stabilization process. Once removed from the water, the artefact is cleaned with a soft brush and placed in a foam-lined tub of water. It then goes to the conservation laboratory where contaminating surface salts are leached out. Metal objects are placed in a desalination bath and undergo the first steps of electrolysis, a process that removes negative ions and salt from the artefact. Electrolysis is used to remove salts from paper, leather, and wood as well. These materials also receive treatments of chemical agents and fungicides that remove rust and fungus.



Once artefacts made of wood and leather begin to dry, they are injected with a water-soluble wax which fills artefact capillaries previously occupied by water and debris. Artefacts made of paper are freeze-dried to remove all the water and then treated to protect against mold. At this point conservation for exhibition is complete. All recovered artefacts are carefully maintained in an environment of controlled temperature, humidity, and light.

### Why did so many third-class passengers die in the sinking?

The forward part of the boat deck was promenade space for first-class passengers and the rear part for second-class passengers. People from these classes had the best chance of getting into a lifeboat simply because they could get to them more quickly and easily than passengers in Third Class, whose cabins and common areas were located on the Ship's lower levels.

### Are there still dead bodies on the bottom of the ocean?

No skeletons remain at the wreck site. Any bodies carried to the seabed with the wreck were eaten by fish and crustaceans.



### Class Teacher/Adult Supervisor Responsibilities

As a teacher, you need to stay with your assigned group of students throughout your visit. If you leave a gallery, they leave a gallery. Please supervise your students in the retail area and in the toilets as well. Some of the more popular items in the retail store for students include *Titanic* pencils, models, and t-shirts; and for teachers you will find *Titanic* books, DVDs, and posters.

While your students are busy learning, discovering, questioning and reflecting, we ask that you help us reinforce some basic rules of museum etiquette. Keep your voices low. Do not gather at the entrances or exits to the galleries. Do not lean against walls or block the flow of traffic for our other patrons. We have a very strict policy of no photography or mobile phone use in the Exhibition. Some teachers may have assigned activities for students to complete as they move through the galleries. Please remind them not to lean on the glass cases or on the walls to write. They should use a notebook or a clipboard to fill out their papers.

We know that this is a fascinating Exhibition to view, but please remember that a main priority is to monitor your students.

We greatly appreciate your participation in making this a memorable educational tour for everyone from your school. Thank you!



# HISTORY OF *TITANIC*

There are many books and online sources available for further information on *Titanic*. It is worth noting that even the factual information about *Titanic* varies widely between the different sources. For all that is known and theorised about *Titanic*, it is in many ways still a mystery.

*Titanic's* accommodations were the most modern and luxurious on any ocean and included:

- Electric light and heat in every room
- Electric elevators
- Swimming pool and Turkish Bath
- Squash court
- Two barber shops
- Gymnasium with mechanical horse and camel
- A six-story, glass-domed grand staircase
- Two musical ensembles
- Two libraries

## The Plan

The intensely competitive trans-Atlantic steamship business had seen recent major advances in ship design, size and speed at the onset of the 20<sup>th</sup> century. White Star Line, one of the leaders, determined to focus on size and elegance rather than pure speed. In 1907, White Star Line's Managing Director J. Bruce Ismay and Lord James Pirrie, a partner in Harland & Wolff (White Star Line's shipbuilder) conceived of three magnificent steam ships which would set a new standard for comfort, elegance, and safety. The first two were to be named *Olympic* and *Titanic*, the latter name chosen by Ismay to convey a sense of overwhelming size and strength. The third would be named *Britannic*.

Construction of *Titanic* started in March 1909. Harland & Wolff's Belfast shipyards had to be redesigned to accommodate the immense projects while White Star's pier in New York had to be lengthened to enable the ships to dock. The "launch" of the completed steel hull in May 1911, was a heavily publicised spectacle. She was then taken for "fitting out" which involved the construction of the Ship's many facilities and systems, her elaborate woodwork and fine decor.

## The Voyage

The maiden voyage lured the "very best people": British nobility, American industrialists, the cream of New York and Philadelphia society. It also attracted many poor emigrants, hoping to start a new life in America or Canada. The journey began at Southampton on Wednesday 10 April 1912, at noon. By sundown, *Titanic* had stopped in Cherbourg, France, to pick up additional passengers. That evening she sailed for Queenstown, Ireland, and at 1:30 PM on Thursday, 11 April, she headed out into the Atlantic.

The winter of 1912 had been unusually mild, and unprecedented amounts of ice had broken loose from the arctic regions. *Titanic* was equipped with Marconi's new wireless telegraph system and her two Marconi operators kept the wireless room running 24 hours a day. On Sunday, 14 April, the fifth day at sea, *Titanic* received five different ice-warnings, but the captain was not overly concerned. The Ship steamed ahead at 22 knots and the line's Managing Director J. Bruce Ismay relished the idea of arriving in New York a day ahead of schedule.

## The Night

On the night of 14 April, wireless operator Jack Phillips was busy sending chatty passengers' messages to Cape Race, Newfoundland, where they could be relayed inland to friends and relatives. He received a sixth ice-warning that night and put that message under a paperweight at his elbow. It never reached Captain Edward J. Smith or the officer on the bridge. By all accounts, the night was uncommonly clear and dark, moonless but faintly glowing with an incredible sky full of stars. The sea was, likewise, unusually calm and flat; "like glass" said many survivors. The lack of waves made it even more difficult to spot icebergs since there was no telltale white water breaking at the edges of the bergs.

At 11:40, Frederick Fleet, the lookout in the crow's nest, spotted an iceberg dead ahead. First Officer William Murdoch ordered the Ship turned hard to port. The Ship turned slightly, but it was much too large, moving much too fast, and the iceberg was much too close: 37 seconds later, the greatest maritime disaster in history began. During that night of heroism, terror, and tragedy, 705 lives were saved, 1502 lives were lost, and many legends were born.