

TITANIC

THE EXHIBITION

Achievement. Romance. Destiny.
The whole story.



Titanic Educator Guide

TITANIC EDUCATOR GUIDE

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INTRODUCTION TO THE EXHIBITION

Imagine yourself setting foot on the world's largest and most luxurious ship's maiden voyage. How would you feel? What would you wonder? Would its size terrify or thrill you? Could you ever imagine such a massive ship sinking or that the captain would be so reckless as to ignore numerous warnings about icebergs ahead? In this immersive exhibition, students experience all aspects of the Titanic, from learning how the ship was designed and built, to witnessing the difference between first and third class accommodations, to seeing the massive boilers that powered the ship. This exhibition engages students and sparks their interest in learning more about how ships are designed, the history of the era, and the lessons people have learned from the sinking of the Titanic.

Visit theitanicexhibition.com for more information.



INCLUDED IN THIS GUIDE

To engage with the exhibition, teachers can choose what will best fit students' needs and interests.

THIS GUIDE CONTAINS:

- 📖 Essential questions to ask students while touring the exhibition.
- 📖 Six lesson plans with hands-on activities, many of which can be completed at school or while visiting the exhibition, including:
 - 👂 Debriefing questions to help students reflect on the lessons
 - 👂 Grade-level adaptations for more or less challenging lessons that allow teachers to modify activities to all levels



NEXT GENERATION SCIENCE STANDARDS

The Next Generation Science Standards (NGSS) were used to structure this guide. **Titanic: The Exhibition** and NGSS both embrace the concepts of 21st century skills and integration. Each activity in this guide is based on NGSS Crosscutting Concepts. The NGSS outlines seven Crosscutting Concepts present at all levels of science. Each of these concepts is clearly reflected within **Titanic: The Exhibition**.

NGSS CROSSCUTTING CONCEPTS

1. PATTERNS

- What are the similarities and differences between the design of the Titanic and modern ships?
- Do you notice any repeating themes or patterns throughout the exhibition? What are they? Why are they repeating?

2. CAUSE AND EFFECT: MECHANISM AND EXPLANATION

- Other than the iceberg, what caused the Titanic to sink? How could have it been prevented? What were the mistakes made before the ship crashed into the iceberg?
- How did the Titanic move? What was its energy source?

3. SCALE, PROPORTION, AND QUANTITY

- Was the Titanic's size a factor in its sinking? How?
- What is the relationship between a ship's size and its shape?
- Are the models and recreations in the exhibition the same size as what was actually on the Titanic? Why or why not?

4. SYSTEMS AND SYSTEM MODELS

- What did the Titanic teach us about ship design and ship systems?
- What models do you see in the exhibition? What do they represent?

5. ENERGY AND MATTER: FLOWS, CYCLES, AND CONSERVATION

- How did energy flow through the Titanic? Where did it come from and where did it go?
- What systems were put in place to conserve resources on the Titanic?

6. STRUCTURE AND FUNCTION

- Why was the Titanic shaped the way it was? What was the purpose behind the design?
- Look at all the design features in the exhibition, from the shape of the propellers to the size of the beds. What was their primary function? How could their shape be redesigned to better suit their function?

7. STABILITY AND CHANGE

- How was life different in 1912 than it is now? How is it the same?
- What impact did the sinking of the Titanic have on society? What changes were made because the Titanic sank? How were people's lives changed?

THE EXHIBITION

Titanic: The Exhibition is an immersive exhibition where visitors experience what it was like to board, sail, and sink on this gigantic ship. Visitors are taken from the ticketing gate through the hallways, into the first and third class cabins, and even through the boiler room to see firsthand what life was like for passengers and workers on the Titanic. This guide provides you with essential questions to ask students as they are touring the exhibition, and hands-on activities that explore and expand on the ideas presented in the exhibition.



ESSENTIAL QUESTIONS

- What are some of the pros and cons of being a large ship as compared to being small ship? What are the advantages and disadvantages of being a large animal versus a small animal?
- The Titanic was gigantic. What were some design features within the Titanic that were used because it was so large?
- Why do you think many of the world's largest animals have gone extinct?

ACTIVITY NAME

THE LARGEST ON EARTH

OVERVIEW

In this activity, students are provided with images and a list of some basic information about the largest animals to ever live on Earth. Using the images and information provided, students should look for features that all of the large animals have in common. Ask students to discuss whether or not these characteristics are advantageous or disadvantageous. Students should then apply these ideas to Titanic by discussing if the ship had any of the common features shared by the gigantic animals.

CROSSCUTTING CONCEPT

Scale, proportion, and quantity

MATERIALS LIST

The Largest Animals on Earth Worksheet

(Continued on page 6)

PROCEDURE

- ☐ Tell students that when it was constructed, the Titanic was the largest ship ever built and had some of the world's most advanced design features. However, it clearly also had some flaws.
- ☐ Ask students to discuss some of the advantages and disadvantages of being an enormous ship.
Ask students if their responses also apply to gigantic animals.
- ☐ Ask students to discuss the largest animals currently living and the largest animals that have ever lived.
- ☐ Pass out The Largest Animals on Earth Worksheet. Tell students that listed on their worksheet are the largest animals to ever live; the largest bird, the largest living terrestrial animal, the largest reptile, and the largest dinosaur.
- ☐ Have students read through the information, observing each animal and answering the Probing Questions.
When students are done, have them complete the table listing the pros and cons of being a gigantic animal.

DEBRIEF

1. Have students compare their notes and generate a master list of the pros and cons of being gigantic as a class.
2. Compare the lists to the features of the Titanic. Ask students if there are any similarities or differences.
If so, ask, "What are they? How could this information have been used when designing the Titanic?"

GRADE LEVEL ADAPTATIONS

MORE CHALLENGING


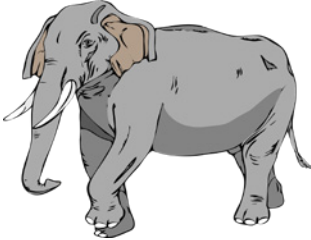



Turn this into a classroom assignment and collect more data on the animals. Have students look up and compare factors such as speed, ratio of mass to length, and food (energy) needed each day. Students can then make better comparisons between the Titanic and the large animals.

LESS CHALLENGING

Do the activity as a class and have students share their ideas about each animal in order. Together, come up with a list of traits that the large animals and the Titanic share.



NAME: _____

	AVERAGE LENGTH AND MASS	ADVANTAGES OF THEIR SIZE	DISADVANTAGES OF THEIR SIZE	OTHER NOTES OR OBSERVATIONS
	24 meters (79 feet) 10,000 kg (22,046 lb)			
Animal: Blue Whale				
	6 meters (20 feet) 4,445 kg (9,800 lb)			
Terrestrial Animal: African Bush Elephant				
	4.5 meters (15 feet) 450 kg (992 lb)			
Reptile: Saltwater Crocodile				
	2.1 meters (7 feet) 104 kg (230 lb)			
Bird: Common Ostrich				
	12 meter (39 feet) 35,000 kg (77,162 lb)			
Dinosaur: Sauropods				

(Continued on page 8)

NAME: _____

PROBING QUESTIONS:

1. How does the animal's head size compare to the rest of its body? What about its tail length?
2. Do you think these animals are fast or slow? Are they predators or plant eaters?
3. Do these animals travel in packs or alone?
4. Do these animals seem smart? Meaning, do they use tools or care for their young, or are they more primitive?

COMMON ADVANTAGES OF LARGE SIZE

COMMON DISADVANTAGES OF LARGE SIZE

DEBRIEF QUESTIONS:

1. Compare your list to what you have learned or observed about the Titanic. Do you see similarities or differences?
2. Are there any common design or evolutionary features that the Titanic has with any of the animals?
3. Is there an optimal size for a ship? An animal? Anything? Discuss.



ESSENTIAL QUESTIONS

- *What are the essential design features in a ship?*
- *How does the shape of a ship influence the size of the load it can carry or how fast it can travel?*
- *When you are designing a ship, what are the tradeoffs for speed and for safety?*

ACTIVITY NAME

SHIP CONSTRUCTION

OVERVIEW

The Titanic was world famous before it ever set sail because it was considered, at the time, the pinnacle of ship design. The world's leading ship architects designed the Titanic and 30,000 people worked on its construction. It was not only the largest ship of that time, it was also the most technologically advanced. In this activity, students will design their own ships using common classroom supplies. Their designs will be judged on how heavy a load the ship can carry, its manufacturing cost, and the attractiveness of its design.

CROSSCUTTING CONCEPT

Structure and function

MATERIALS LIST

- | | |
|---|--|
| <input type="checkbox"/> Aluminum foil | <input type="checkbox"/> Straws and pipe cleaners |
| <input type="checkbox"/> Construction paper | <input type="checkbox"/> Popsicle sticks |
| <input type="checkbox"/> Glue | <input type="checkbox"/> Pennies |
| <input type="checkbox"/> Corks | <input type="checkbox"/> Large tub or sink filled with water |

PROCEDURE

- ☐ Tell students that they are going to be in charge of designing their own Titanic and that they will be challenged to make it aesthetically pleasing, economical to construct, and able to carry a heavy load.

(Continued on page 10)

PROCEDURE | (CONTINUED FROM PAGE 9)

- ☐ Have the students work in teams of three or four. Ask them to choose team names, then show them the materials they have to work with and the materials' costs. Tell them they will be judged on 3 categories:
 - A. Cost of materials (list them on the board)
 - i. Popsicle sticks = \$50 each
 - ii. Aluminum foil = \$25/sheet
 - iii. Glue = \$50/bottle
 - iv. Straws and pipe cleaners = \$35 each
 - v. Corks = \$50 each
 - vi. Tape = \$10/inch
 - vii. Paper = \$25/sheet
 - B. Aesthetic of Ship
 - C. Amount of weight it can hold
- ☐ Have each team make a blueprint of their ship, list out the materials they need, and calculate their cost. Remind students they want to keep their costs as low as possible while still building a reliable ship.
- ☐ Place all teams' boats around the room and have a group vote on which is most aesthetically pleasing. You may consider anonymous voting.
- ☐ Partially fill a large tub or sink with water and have teams draw numbers to assign the order in which the teams will complete the challenge.
- ☐ Have each team, in order, place their boat in the water and add pennies to the boat until it begins to sink but does not become submerged. Count the pennies as they are being added to the boat, then have the teams record the number of pennies that their boats could hold before they became submerged..
- ☐ Write the results of the all three challenges (cost, aesthetics, and weight carried) on the board next to the name of each team.

DEBRIEF

1. There most likely will not be a clear "winner" in that the boat that looked the best may not hold the most weight or the most expensive boat might also be the most attractive. Have students discuss which boat(s) they think won the challenge and why.
2. Ask the students why they believe one boat could hold more pennies than another. What were the design features of the boats that held the most pennies?
3. Was the method of placing the pennies in the boat an influential variable in how much weight each could hold? Are there ways to place the pennies on the boats that are better than others?
4. Ask students to discuss the term "surface area" and ask them if there is a correlation between the surface area of the bottom of the boat and how much weight it can carry.

GRADE LEVEL ADAPTATIONS

MORE CHALLENGING

Have students conduct research on various types of boats so they can use their findings to improve their designs. Add in speed as an additional variable to the challenge.

LESS CHALLENGING

Eliminate the cost and/or the aesthetic aspects of the challenge. Have student focus on designing a boat that can hold the most pennies.



ESSENTIAL QUESTIONS

- Why do hierarchies develop in so many human societies?
*Is this hierarchy also seen in the animal kingdom?
Where and why does this happen?*
- What are some of the methods humans and animals use
to climb the social ladder? Are there any similarities
between them?
- What is the purpose of social hierarchy?
How does it help or hinder society?

ACTIVITY NAME

FIRST AND THIRD CLASS

OVERVIEW

In one of the most powerful scenes from James Cameron's movie *Titanic*, the third class passengers are locked below decks behind an iron gate (a replica of the gate is featured in **Titanic: The Exhibition**) while the first class passengers are boarding the lifeboats. All across the globe, humans have formed social hierarchical societies. Some societies, like the caste system in India, are very clearly defined and it's very hard to move up or down the ladder. Other societies, like in the United States and other Western countries, are less clearly defined and allow for more mobility between classes. However, this is not just a human phenomenon. Many other social animals have developed these systems. In this activity, groups of students will research different animals and determine how these animal groups compare to humans.

CROSSCUTTING CONCEPT

Patterns

MATERIALS LIST

- ☐ Access to library or internet
- ☐ Whiteboard
- ☐ Three markers (red, yellow, and green)

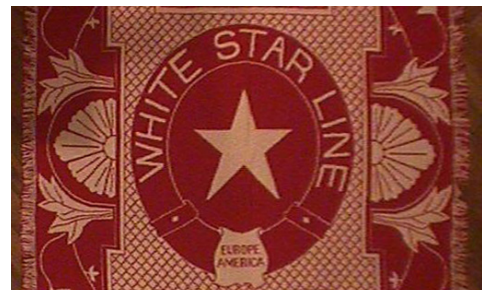
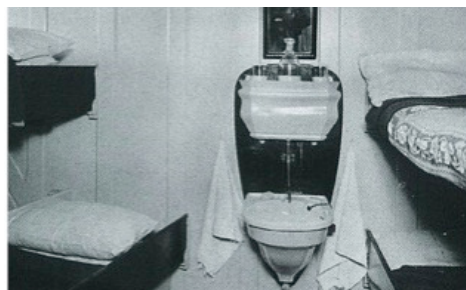
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PROCEDURE

- ☐ After visiting **Titanic: The Exhibition**, ask students to discuss what they saw and noticed about human behavior. Be sure to discuss the differences between the first and third class cabins and how it was decided who got to get off of the sinking boat first.
- ☐ Ask students why they think humans began creating separated first, second, and third classes. Have students discuss the root cause for this social strata and discuss its purpose. Ask students if they have seen or know about this kind of social hierarchy anywhere else in the world.
- ☐ Ask students if they see this same type of behavior in animals. Ask students to share which animals and to describe how their hierarchy manifests.
- ☐ Discuss how humans are social creatures just like many other animals. Have students research various species to determine how similar or different their social hierarchies are compared to humans.
- ☐ As a class, generate a list of questions about human and animal social hierarchies. The questions should be yes-no questions so it will be easier to compare them later. The list should include (but is not limited to):
 - Does this group have alpha's?
 - Does this group have omega's?
 - Does this group share food?
 - Does this group raise its young?
 - Does this group have family loyalty?
 - Does this group mate for life?
 - Does this group use teamwork and cooperation?
- ☐ Make a table on the whiteboard and ask students to answer the questions they generated about humans. Color code the table: Green = yes. Yellow = sometimes/sort of. Red = no.

EXAMPLE		ALPHA	OMEGA	SHARE FOOD	RAISE YOUNG	LIFELONG MATE	COOPERATIVE
	HUMANS						

- ☐ Assign each group an animal and have them conduct research to answer the questions they generated. As they are researching, students should take additional notes to help with the group discussion they will have later. Below is a list of suggested animal species to research:
 - Lion
 - Elephant Seal
 - Hyenas
 - Wolves
 - Chimpanzee
 - Bees
- ☐ After groups have completed their research, have them add their findings to the table on the board using the same color-coding. Compare and contrast their animal species with humans as each group writes their results.



(Continued on page 13)



DEBRIEF

1. Ask students to make observations about what they notice on the chart.
Are there any patterns (e.g., columns that are all in one color)?
2. Discuss how animals in each group are or are not able to move up and down their social strata.
3. Ask students to imagine that their animal species was in charge of the Titanic when it crashed.
Would they have responded differently than humans did? Have students explain their reasoning.

GRADE LEVEL ADAPTATIONS

MORE CHALLENGING

Have students dive deeper into their species by creating a presentation about their group to the class. After the presentations, have students compare and contrast the social norms of each species.

LESS CHALLENGING

Give all groups the same species to research. This will allow the class to learn more about a single species and will enhance the student discussion by going more in-depth about just one species.





ESSENTIAL QUESTIONS

- *How did the Titanic move through the ocean?*
- *What was the original source of energy for the Titanic's engines?*
- *How does the generation of energy in the Titanic relate to the generation of electricity?*

ACTIVITY NAME

ENERGY AND THE BOILER

OVERVIEW

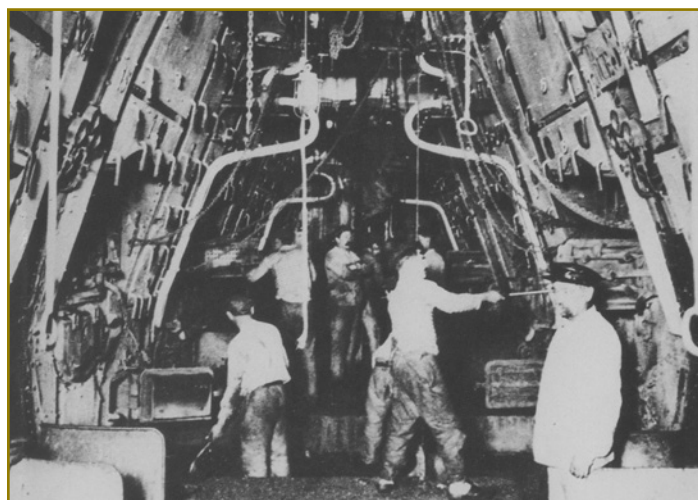
As the largest ship ever built, the Titanic had to use a lot of energy to move. Where did all that energy come from? How was that energy harnessed to propel the ship? While visiting the exhibition, students observed a replica of one of the boilers used to power the Titanic and learned about the firemen who shoveled coal into the boilers 24 hours a day. In this lesson, students will learn about the source of energy for the boilers, understand how the boilers work and relate this process to modern day electrical generation. The debrief section is essential for this activity.

CROSSCUTTING CONCEPT

Energy and matter: Flows, cycles, and conservation

MATERIALS LIST

- ☐ Energy and the Boiler Worksheet
- ☐ Scissors
- ☐ Tape
- ☐ Markers or colored pencils
- ☐ Paper or poster board



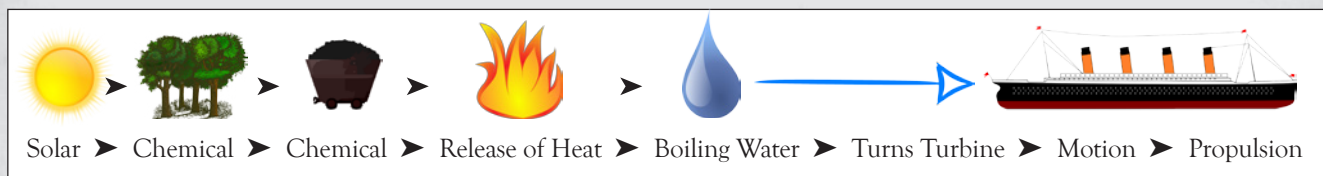
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PROCEDURE

- ❑ After visiting **Titanic: The Exhibition**, ask students to reflect on the boiler room. Ask them what they noticed and how the boilers provided energy to propel the ship.
- ❑ Ask students to define energy and heat. Ask them to try to describe how they are different or the same. (Answer: They are the same! Heat is a form of energy.)
- ❑ Ask students to identify the source of almost all energy on Earth. (Answer: the Sun)
- ❑ Divide students into groups of 3 or 4 and pass out the Energy and the Boiler Worksheet. Have students cut out the images and terms and arrange them on a piece of paper or poster board to make a poster, comic, or diagram describing how energy from the sun was used to power the Titanic. Challenge students to make connections between how the images and terms are related and encourage students to add in their own notes, arrows, and questions.
- ❑ Depending on students' prior understanding of energy, they may become frustrated with the task, but encourage them to make their best guesses. The goal is to think about this process rather than to get the "right" answer.
- ❑ After all groups have finished their posters, comics, or diagrams, have students walk around class and observe each other's work.

DEBRIEF

1. Ask students to discuss the variations among the different groups. What was similar? What was different? Which ones do they think are most correct?
2. Go over the correct progression on the board. Try to solicit answers from the group as opposed to just presenting the answer. Have groups rearrange their images as you go over the concepts. As a class, label the type of energy at each phase in the diagram. An example of what to put on the board is below:



3. Introduce three new terms: electricity, nuclear energy, and waste. Discuss how and where these terms would fit into the diagram.

GRADE LEVEL ADAPTATIONS

MORE CHALLENGING

Give students the additional three terms at the same time as the original images and have them complete the assignment all at once. For a more difficult challenge, have them list all the forms of energy on their poster, comic, or diagram.



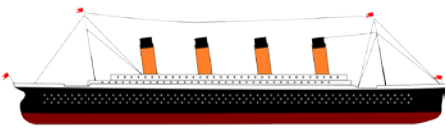






LESS CHALLENGING

Create the initial diagram as a class. Walk students through the process of how energy from the sun is absorbed by plants, plants store the energy and it is converted into fossil fuels, the fossil fuels are burned and release heat energy, and the heat is used to boil water which turns the turbine and propels the Titanic.

NAME: _____

DIRECTIONS:

Directions: Cut out the following images and terms and try to put them together in a way that shows how the sun's energy was used to propel the Titanic.

ANIMAL 	ANIMAL 	ANIMAL 
ANIMAL 	ANIMAL 	ANIMAL 
ANIMAL 	ANIMAL 	ANIMAL 



ESSENTIAL QUESTIONS

- *How do animals warn each other that danger is near?*
- *How do animals warn other animals not to come close to them?*
- *What warning systems do humans use?*

ACTIVITY NAME

TITANIC WARNING!

OVERVIEW

In **Titanic: The Exhibition**, students learn about the variety of warnings the Titanic received and ignored regarding icebergs in the area. In this activity, students will learn about a variety of warning signs given by animals and will generate ideas about what other warnings could have been sent to Titanic to better encourage the crew to veer away from danger.

CROSSCUTTING CONCEPT

Structure and function

MATERIALS LIST

- ☐ Titanic Warning Worksheet



(Continued on page 18)

PROCEDURE

- ☐ After visiting **Titanic: The Exhibition** ask students to describe the warnings the Titanic's crew were given about icebergs in the area. Ask students why they think the Titanic did not divert from its course despite these warnings.
- ☐ Ask students how they know when something is dangerous. When they are walking at night or in the woods, what signs do they look for to know that there is danger ahead?
- ☐ Ask students for examples of how animals warn each other about imminent danger. How do they warn other animals to stay away from them? As a class, begin creating a list of strategies based on students' ideas. You can provide some ideas to get them started like bright colors in snakes, an arched back in cats, and pinned-back ears in dogs.
- ☐ Tell students that today they are going to look at a few animal warning signs to determine if they are a clear deterrent or not. Students will then look for patterns among these signs and debate if they could have been used to improve the warning signals sent to the Titanic the night it struck an iceberg.
- ☐ Pass out the Titanic Warning Worksheet. Have students work individually to answer all the questions. Have students share their Titanic Warning with the class.

DEBRIEF

1. What are the common themes or characteristics of your classmates' Titanic Warnings?
2. What is the purpose of a warning? Is it in self-defense, to help another in danger, or both?
3. Do you think it was the warning system's fault that the Titanic sank? Explain your reasoning.
4. How would you have warned the Titanic's crew about the icebergs ahead?

GRADE LEVEL ADAPTATIONS

MORE CHALLENGING

Have students research three other animals and their warning signs. Have them add those to the list and present them to the class.

LESS CHALLENGING






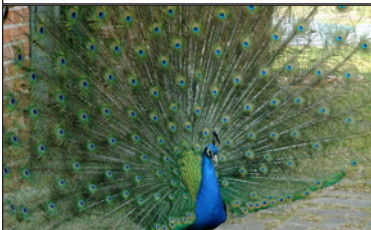
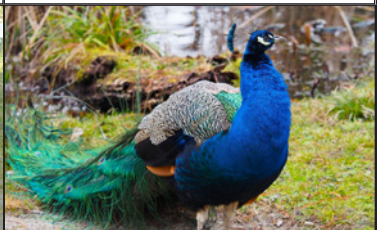
Go over the images together. Have students act out the behaviors of each animal to demonstrate how scary they are!



NAME: _____

DIRECTIONS:

Compare the images in each row and put an X under the image of the animal that is giving a warning. In the right hand column, list the characteristics of the image you chose. Be sure to include what made you think it was a warning.

ANIMAL		WHAT DO YOU NOTICE ABOUT THE IMAGE YOU CHOSE?
		
		
		
		

QUESTIONS:

1. What are the similarities between the images you chose as warning signs?
2. What are some nonvisual ways animals deter other animals?
3. What are other examples of ways animals warn other animals?

TITANIC WARNING:

On the night the Titanic sank, it ignored many warnings about icebergs in the area. Based on what you've just learned and discussed, describe how you would have sent a warning to the Titanic's crew.

What system would you create to ensure that you would get the captain's attention and change the ship's course? Write and/or draw your answers in the box below. When you are done, share your ideas with the class.



ESSENTIAL QUESTIONS

- *What are some of the pros and cons of immigration?
What is the impact of immigration on the native population?*
- *How do ideas, skills, and diseases travel through populations?
Do the same mechanisms spread ideas and diseases?*
- *What are some ways to stop the spread of diseases
without isolating people?*

ACTIVITY NAME

COMMON CONNECTIONS

OVERVIEW

Since humans evolved, we have migrated to places all across the globe and with this migration comes the spread of new ideas, technologies, and diseases. The Titanic wasn't just a luxury cruise—it was transporting many immigrants to the US. Immigrants bring skills, foods, and many other resources to their new country, but unfortunately they can also carry infectious diseases. In the Local Stories section of **Titanic: The Exhibition**, students learn about connections to the Titanic within their community and how widespread these connections are. In this lesson, students investigate how one person infected with a disease can quickly spread the disease to others to demonstrate the impact one person can have on a population.

CROSSCUTTING CONCEPT

Systems and system models

MATERIALS LIST

- | | | |
|---|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> 4 oz. disposable clear plastic cups
(one per student) | <input type="checkbox"/> Milk | <input type="checkbox"/> Eye dropper |
| | <input type="checkbox"/> Corn Starch | <input type="checkbox"/> Iodine |

(Continued on page 22)

PROCEDURE

- ☐ Before class starts pour 2 oz. of milk into plastic cups. There should be one for each student. In one of the cups, mix in a teaspoon of cornstarch. Set cups aside for later.
- ☐ After visiting **Titanic: The Exhibition**, ask students to discuss the Local Stories gallery. Ask if they were surprised that there were so many local connections to the Titanic. Ask students if they think there would be as many connections everywhere in the world.
- ☐ Discuss how the Titanic was not just a cruise ship—it was bringing hundreds of immigrants to the US to start a new life. Discuss the value and resources that immigrants bring to a new country. Ask students to list some things that immigrants have brought to their country. Some ideas are music, foods, clothing, games, etc.
- ☐ Ask students to discuss how these things and ideas are introduced to a new country.
- ☐ Tell students that they are going to pretend to be immigrants on the Titanic and are going to mingle with the other guests to share some of their ideas.
- ☐ As a class, ask students to list 5–7 of their favorite galleries in the exhibition. Those could include any of the following: Construction, Departure, First Class Hallway, First Class Stateroom, Ballroom/Dining Area, Grand Staircase, Third Class Passengers, Boiler Room, Promenade Deck, Warnings, Iceberg, Memorial, Discovery, and Local Stories. Ask each student to choose their favorite 2 places but not to tell anyone what they choose.
- ☐ Give each student one of the disposable cups and tell them that they are to walk around the room and ask each other what their 2 favorite parts of the exhibition are and why. If they have a match, they need to mix their cups of milk (have one person pour their milk into the other person's milk, and then have them pour half of it back into the other cup)
- ☐ Give the students 5–10 minutes to mingle around the room and have them sit back down at their desks. Each student should mix with 2–4 other students in the class. Ask students to share what they noticed. Were there any themes or new ideas that spread from this activity? What did they learn from their fellow immigrants? Did they enjoy talking with each other?
- ☐ Tell students that they were not just sharing ideas with each other—one had an infectious disease and it has spread.
- ☐ Have students predict how many people in the classroom were infected from that one person.
- ☐ Put one drop of iodine in each student's cup and have them mix it around. Tell students that if their liquid turns blue, they are infected.



(Continued on page 23)



DEBRIEF

1. Ask students to discuss what they noticed. How many people were infected? Was this more or less than you'd thought?
2. Ask student how they could determine who the infected person was. After hearing student's ideas, move all the infected students to one side of the classroom. Ask the infected students if they shared their milk with any of the uninfected students—if they did they can go back and sit with them. Ask the remaining infected students again if they shared their milk with any of the uninfected students and if they did they can move back to the uninfected side. Repeat this until only one student remains. That student was the one who first had the disease.
3. Ask students to discuss the results of this activity. What does it mean? How does this apply to immigration?
How can we stop the spread of disease without stopping the spread of ideas?

GRADE LEVEL ADAPTATIONS

MORE CHALLENGING

Have students look into the ways of preventing the spread of disease and the impact of vaccines. Have students create a public service announcement for the school to share what they learned about how to prevent infectious diseases.

LESS CHALLENGING

Tell students from the beginning of the lesson that they are going to focus on how diseases spread. Don't focus on the immigration aspect of the lesson and instead focus on how diseases are spread and how to help people from becoming infected.

