

# Fly on the Wall Series: *Mayflower*

By Author Linda Smigaj



## Discussion Questions

*Correlated to English Language Arts, Mathematics, Social Studies, and Science/Technology Standards for Grade 4, Using Critical Thinking Questions*

## 4th Grade Language Arts

**Explain why** the Pilgrims wanted to travel to the New World. **Locate** the answers from the text. (ELA-Literacy.RI.4.1)

**Determine** the main idea of the text and **explain** how the main idea is supported by key details; **summarize** the text. (ELA-Literacy.RI.4.2)

**Describe the overall structure** (chronology, comparison, cause/effect, problem/solution) of the text. (ELA-Literacy.RI.4.5)

**Describe** in depth a character, setting, and events in the text, drawing on specific details in the text: thoughts, words, or actions. (ELA-Literacy.RL.4.3)

Determine the meaning of words and phrases from the text. (ELA-Literacy.RL.4.4)

**Write an opinion** piece on why you would or would not have liked to be a passenger on the *Mayflower*, supporting a point of view with reasons and information. (ELA-Literacy.W.4.1)

**Write an informative/explanatory** text explaining what made the journey of the Pilgrims on the *Mayflower* so dangerous and uncomfortable, conveying your ideas and information clearly. (ELA-Literacy.W.4.2)

Take the part of a Pilgrim on the *Mayflower* and **write a narrative**, developing real or imagined experiences or events by using effective techniques, descriptive details, and clear event sequences. (ELA-Literacy.W.4.3)

Use the Internet to **produce and publish** your writing as well as to **interact** and work with others. (ELA-Literacy.W.4.6)

**Conduct short research projects** on the *Mayflower's* journey. (ELA-Literacy.W.4.7)

## 4th Grade Mathematics

### Addition

Estimate 41 Pilgrims and 61 “strangers,” each to the nearest ten. Then add 41 and 61 together.

### Multiplication

Multiply how many nautical miles each day the *Mayflower* averaged, times how many days they traveled. How many navigational miles did they travel?

### Geometry

Looking at the different types of sails on the *Mayflower*, what shapes are they?

What are the angle measurements of the *Mayflower* sails?

Are the masts of the *Mayflower* parallel or perpendicular to the main deck? How do you know?

What angle does the mast and deck form?

### Time

If each work shift on board the *Mayflower* is  $\frac{1}{6}$  of the day, how long is each shift?

If the *Mayflower* starts the journey to the New World at 8:00 AM, and after one hour, passes over one time zone going west, what time is it?

### Relative Coordinates (Use a coordinate chart.)

If the *Mayflower* starts at coordinates (5, 4), and at the end of the day it ends at (5, 6), how many units has it traveled?

If the *Mayflower* is on (5, 4) and goes two units down and one unit to the left, where does it land?

## 4th Grade Social Studies

### Mapping

Using the journal dates from the *Mayflower*, **map the events** of the 66-day voyage on the ship, using a timeline with a partner or in a small group.

(Go to [ourtimelines.com](http://ourtimelines.com) – a great resource.)

**Analyze** and **draw conclusions** from the timeline of the *Mayflower*.

### Mapping Elements

**Recognize** and know how to use a map key.

With a peer, **construct** a map of your classroom that has a title, scale, symbols, legend, and a compass rose.

**Compare and contrast** a map of the 1600s to a current map.

**Use cardinal directions** to locate a place on a map. With a peer, magnetize one end of a needle and place it carefully into a dish of water. **Locate the cardinal directions**. Why was a compass so important to the Pilgrims?

Why was knowing latitude and longitude important to the Pilgrims? **Locate your position** on a map, using lines of latitude and longitude.

### Individuals, Groups, and Interactions

After **observing** the illustrations in *Mayflower*, **determine** which objects were needs and which objects were wants.

After **observing** the illustrations in *Mayflower*, when were there times of conflict and times of cooperation? How did cooperating with each other change during the voyage?

**Identify and compare/contrast** three different cultural groups that sailed on the *Mayflower*.

**Determine** how these three different groups resolved their conflicts.

After reading *Mayflower*, **determine the reasons** for the Pilgrims' taking this journey to the New World.

## 4th Grade Science/Technology

**Compare** the relative speed of the *Mayflower* going to the New World (66 days) and returning to England (31 days). Since the distance traveled going each direction was the same, why do you suppose there was such a difference in days?

Remember the *Mayflower* traveled at 2 nautical miles per hour going, but at 4 nautical miles per hour returning. **Infer** why there was such a difference in speed.



After reviewing what plants need in order to grow, why weren't the Pilgrims able to transport any plants on the *Mayflower* over to the New World? Because of the lack of space on the main deck, plants might have been kept on the dark tween deck where the passengers all slept. Remember there was also a lack of water. To see if plants depend on water and light to grow, plan an experiment where you plant the same kind of seeds in four different pots and:

1. Cover with a paper bag, without watering.
2. Cover with a paper bag, and water daily.
3. Don't cover with a paper bag, without watering.
4. Don't cover with a paper bag, and water daily.

Students should **make daily observations** by writing and illustrating in their science journals what they observed. **Draw conclusions** on what plants need in order to grow.

Explain how environmental conditions determine how well plants grow and survive.



Using the Internet, **research** the climate conditions in England during the months of August, September, October, and November. Record your findings on a table or graph. Do the same for the northeastern part of the United States. **Analyze** and **interpret** your findings. Make **predictions** about what kind of weather conditions were present when the *Mayflower* started her voyage in 1620. Why did the journey not start until September, instead of July? **Infer** why the ship's master was afraid to leave in September.

What might have happened if the *Mayflower* left as originally scheduled in July? Infer what the weather conditions might have been like.

In your science journal, write about how the voyage might have been different if they started in July; include more than just the weather conditions.



**Review** the properties of magnetism. Use magnets to make an object move without being touched. **Explain** how the poles of magnets affect each other. Do they attract or repel? **Construct** your own compass using a needle, a shallow dish, water, and a piece of lodestone. Rub one end of the needle with the lodestone. Carefully place the needle into the dish of water. Notice how it swings towards the north. **Infer** why the needle points to the north.

While passing a large body of land, a small magnet on a ship might point to the land instead of north. **Infer** why this might happen. Explain your answer in your science journal.

Sailing ships in the 1600s–1800s used the compass, traverse board, and a chip log to determine where they were located. What do we use today to find our position? (GPS)