

Mayflower Math

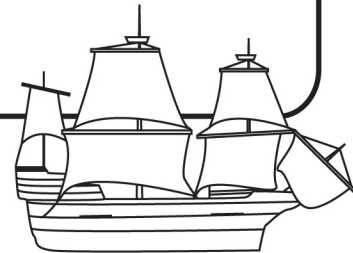


Historians love to collect old letters and other documents to tell the story of the Mayflower in words. But we think there's also great information in the numbers! Here is a factual account of the trip. Read it carefully, and then see how many of the math questions below you can answer!

Have you ever sat crammed in the back seat of your car on a long trip and thought, "Aren't we there yet?" Next time you feel that way, think about this: on September 6, 1620--almost four centuries ago--102 passengers and 26 crew members crammed on board the Mayflower. Fifty were men, 20 were women, 32 were kids, and you can be pretty sure they all felt like that at some time on their trip, too.

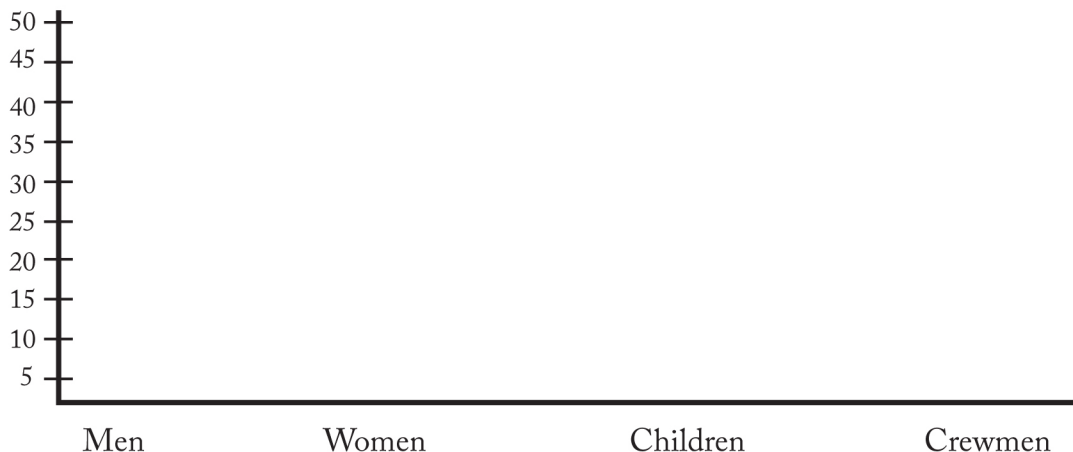
Their journey, of course, was not eight or ten or even 24 hours, like a long car or plane trip might be today. Instead, our Mayflower ancestors traveled for 66 days across the Atlantic Ocean, averaging about 2 miles per hour. On the way, one man died, but one baby was born (a boy named Oceanus!), so in the end, 102 people landed at Provincetown, Massachusetts on November 11, 1620.

Their ship was only 90 feet long and 26 feet wide. Nowadays this would be considered a small boat for an ocean trip, but the Mayflower was pretty large for its time. It had three masts, and could carry 180 "tuns". This is different from "tons" today, which each weigh 2,000 pounds; back then, a "tun" was a barrel which could hold 265 gallons. The ship had previously carried cargo such as wine; this was its first voyage with so many people!



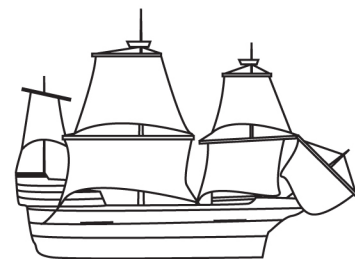
1. The People.

How many of each? Fill in the bar graph below:



How many more women and children were there than men?

- ☉ How many more passengers were there than crewmen?
- ☉ On nice days, the children were allowed to walk around on the upper decks.
If 17 kids came up early to see the sun rise, how many were still sleeping in the cargo hold?
- ☉ There were 11 girls on the ship. How many boys? (Hint: to do this problem, take a look at the facts on the p.1. How many kids were there in all?)
- ☉ In 1620, Mary Allerton was a four-year-old passenger on the Mayflower. When she died in 1699, she was the last living survivor of the voyage. How old was Mary when she died?



2. The Ship.

- ☉ Measure your house along its longest dimension. How much longer or shorter was the Mayflower? (How would you feel about sharing that space with almost 130 other people for more than two months?)
- ☉ Measure the longest side of your living room in your house. How much wider or narrower was the Mayflower? Using this long measurement, how many of your living rooms would it take to stretch across the Mayflower's width?
- ☉ Just for fun, let's pretend that those old fashioned "tuns" were really modern "tons". If the Mayflower were really a 180 "ton" ship (each ton weighing 2,000 pounds) how many pounds of cargo could it hold?

3. The Trip.

- ☉ The Mayflower voyage took 66 days. This is the same as _____ weeks plus ____ days, or _____ minutes.
- ☉ If the Mayflower traveled 2 miles per hour, 24 hours per day for 66 days, how many miles did it travel on the way from England to the New World?