The Mathematics of Jules Verne

1 Project Overview

Jules Verne (1828–1905) was a famous French science fiction writer. He wrote about space, air, and underwater travel before aircraft and submarines were commonplace, and before any means of space travel had been devised.

For example, in his 1865 novel *From the Earth to the Moon,* he wrote about three astronauts who were launched from Florida and recovered through a splash landing. The first actual moon landing wasn't until 1969.

Essential Question How does the knowledge of mathematics influence science fiction writing?

Read one of Jules Verne's science fiction novels. Then write a book report about some of the mathematics used in the novel.

Sample: A league is an old measure of distance. It is approximately equal to 4 kilometers. You can convert 20,000 leagues to miles as follows.

$$20{,}000 \text{ leagues} \cdot \frac{4 \text{ km}}{1 \text{ league}} \cdot \frac{1 \text{ mile}}{1.6 \text{ km}} = 50{,}000 \text{ miles}$$
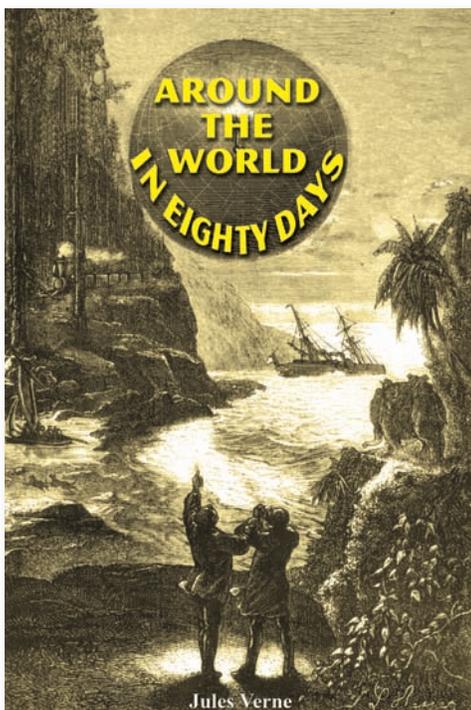
2 Things to Include

- Describe the major events in the plot.

- Write a brief paragraph describing the setting of the story.

- List and identify the main characters. Explain the contribution of each character to the story.

- Explain the major conflict in the story.

- Describe at least four examples of mathematics used in the story.

- Which of Jules Verne's scientific predictions have come true since he wrote the novel?
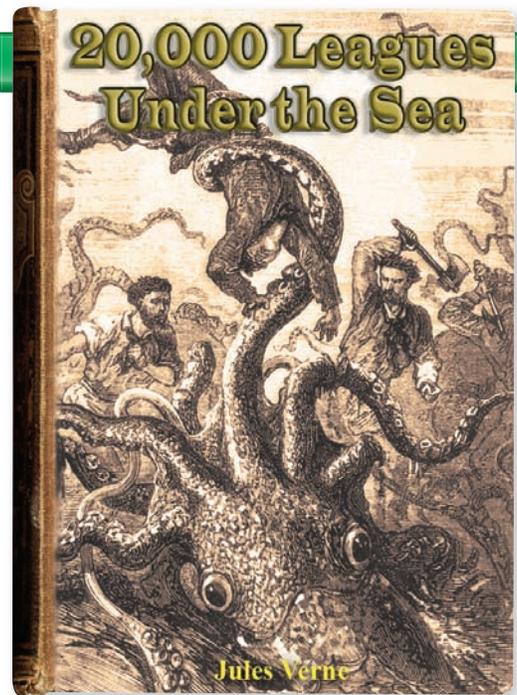
Jules Verne (1828–1905)

3 Things to Remember

- You can download one of Jules Verne's novels at *BigIdeasMath.com*.

- Add your own illustrations to your project.

- Organize your report in a folder, and think of a title for your report.