This science fiction film is based on a 2011 novel, *The Martian*, by Andy Weir. An exploratory mission to Mars is hit by a violent storm and the crew is forced to abandon the mission. Left behind is astronaut Mark Watney (played by Matt Damon), who had become separated from the team and mistakenly presumed dead. Stranded alone with few supplies, Watney must figure out how to send a message to Earth informing that he needs to be rescued - and even more challenging – find ways to survive until help arrives on the harsh planet.

**Additional Information**

*The Martian* is about a lone astronaut stranded on a distant planet, and others’ efforts to rescue him. Astronaut Mark Watney must rely on his own scientific knowledge and sense of humor to survive. Realizing his supplies will not last until the rescue mission arrives, astronaut Mark Watney applies scientific method as he ponders his options:

"If I want water, I'll have to make it from scratch. Fortunately, I know the recipe: Take hydrogen. Add oxygen. Burn."

*The Martian* is an excellent film for programming on STEM, not only for watching Mark Watney’s ingenuity in action, but to also see the diverse team of scientists on Earth who must work their way through numerous problems if the rescue mission to save Watney is to be successful.

**Vocabulary/ Phrases/ Figures**

- **Grudgingly** – done in an unwilling way.
- **“Here’s the Rub”** - a phrase from Shakespeare’s *Hamlet*, meaning “here is the problem.”
- **Jettisoning** – to get rid of something that is no longer needed.
- **Moot** – open to question and debate, unresolved.
- **Neil Armstrong** – was an American astronaut and the first person to walk on the moon.
- **Redundancy** – needless repetition.
- **Thermodynamics** – the branch of physics that deals with the relation of heat and temperature to energy and work.
- **Transparent** – allowing light to pass through so objects can be clearly seen; easy to perceive; obvious.

**Discussion Questions**
- Do you believe the crew did the right thing in abandoning their search for Mark Watney? Did they have a choice?
- There have been discussions in recent years of sending astronauts to Mars. It would be a long and dangerous mission. Why do humans want to explore distant planets? Do you think going to Mars is a good idea?
- How has the world benefited from the space program?
- Do you look at achievements made through space exploration as country specific successes or do you regard them to be triumphs of humanity? How are countries cooperating on space exploration?

**Share America Resources**

Fact or fiction: Take our quiz about Mars [video]: [https://share.america.gov/fact-or-fiction-take-our-quiz-about-mars/](https://share.america.gov/fact-or-fiction-take-our-quiz-about-mars/)

You can build a Mars rover, with this woman’s help: [https://share.america.gov/you-can-build-mars-rover-with-her-help/](https://share.america.gov/you-can-build-mars-rover-with-her-help/)

**NASA Resources**