

SHOULD HUMANS COLONIZE MARS?

THIS ACTIVITY SHOULD TAKE ABOUT 90 MINUTES. IF LEARNERS ARE ABLE TO REVIEW MEDIA PRIOR TO THE LESSON, ACTIVITY TIME SHOULD BE 45 TO 60 MINUTES.

INVESTIGATE

Read, watch, and listen to the three media resources on the Thinkalong module. Learners can use the Investigate graphic organizer to summarize each piece of media and record new information. Below are summaries of the three pieces of media curated in the Thinkalong module.

SHOULD WE PAY PEOPLE TO MOVE TO MARS?

America from Scratch | June 28, 2019 | Video
9:33 minutes

Toussaint Morrison explores the ways the government could motivate people to move to Mars and draws comparisons to when settlers were incentivized to move out West.

- NASA is planning to put humans back on the moon by 2024, and starting missions to Mars by the 2030s. The missions were in the long-term plans for NASA, who hope to put a sustainable human presence on the moon by 2028.
- When the United States expanded, the American frontier was about as unforgiving as Mars, but the government needed people to take a chance and move out West. The government passed the Homestead Act in 1862 and paid people in land to encourage settlers to set up homesteads.
- While Mars doesn't have farmland or a safe atmosphere, it will probably take more incentives for people to inhabit the red planet, like mining or exploration rights.

SHOULD YOU GO TO MARS?

Physics Girl | June 28, 2016 | Video
10:06 minutes

The Physics Girl Dianna Cowern talks to Bill Nye the Science Guy about what makes going to Mars such a hot topic.

- While Mars can be seen from Earth with the naked eye, there's also the possibility that the planet once had water and could have sustained life.
- In 2007, scientists discovered that 1/5th of Mars was once covered in oceans, but a huge volcanic eruption.
- Getting to Mars is dangerous, and the planet itself is harsh – there's no water, air, or way to regain strength after traveling from Earth or the Moon.
- While scientists and astronauts on the ISS have some technology to sustain life in space, a lot of the 'futuristic' things we'd need to put humans on Mars doesn't quite exist yet.
- Supporting life on Mars includes difficulty in sending supplies, since missions to Mars could only fly every 28 months, but there are options for creating a supply chain.
- Nye compares Mars to Antarctica, where people stay short-term to explore and do scientific research but don't live there.

WHEN WILL HUMANS VIST MARS? THIS PHYSICIST SAYS THERE ARE 'REAL PLANS' FOR THE 2030s

Here & Now | June 27, 2018 | Audio

X:XX minutes/XX words

Theoretical physicist Michio Kaku talks to Jeremy Hobson about how soon humans might travel to Mars.

- While it only takes three days to travel to the moon, Mars is a two-year round-trip mission with the effects of weightlessness, micro-meteorites, technical issues, and radiation as large barriers to getting to the red planet.
- Kaku says that the first process of having humans live on Mars is terraforming the planet to sustain life, which could mean raising the Martian temperature to create a greenhouse effect or reflecting sunlight with satellites to melt the polar ice caps and create water.
- He believes a big part of the project would require making sure the colony is self-sustaining and independent.
- Kaku says that the cost of going to Mars is probably less than the movie "The Martian," but says that private space programs could be able to make space travel less expensive than NASA or other government space programs.

KEY WORDS

Look out for these important keywords in the news stories. Discuss the definitions with your learners and see how they affect the understanding of the story.

- Colonization
- Incentives
- Terraforming
- Sustainable

CONTEMPLATE

Learners will use media literacy questions to critically engage with news by thinking about its purpose, searching for bias and discussing missing perspectives. They will answer the 5 Key Questions of Media Literacy created by the Center for Media Literacy, which are:

1. Who created this message?
2. What creative techniques are used to attract my attention?
3. How might different people understand this message differently than me?
4. What values, lifestyles and points of view are represented in, or omitted from, this message?
5. Why is this message being sent?

A graphic organizer is included in this guide and the Thinkalong website to help learners answer these five questions about each piece of media.

DEBATE

Use the debate tool on the module webpage to help form evidence-based responses to the debate question.

Thinkalong is designed to help learners engage with real issues that are relevant to their lives. [Structured discussions](#) allow learners to practice their critical thinking skills through evidence-based debate with their peers. Discussions are designed to take about 30 minutes. Educators are encouraged to modify aspects that work best for their learners.

To encourage civil discourse, please review the [Code of Conduct](#) with your learners.

Using public media — video, audio and digital reports — about newsworthy topics, these classroom-based exercises help learners to think critically about media messages, develop informed opinions, and practice how to take a stand.