

## Virgin Hyperloop Experience

Produced by [Virgin Hyperloop](#)

Duration

2:21 (cc)

## STEAM Curriculum Lesson Extension:

*Potentially Perpetual, Grade 6*

**Please Note:** To view this content, you will be leaving the EarthX website. It is offered by Virgin Hyperloop through their website.

Be sure to read the information on the Virgin landing page and then click on Learn More in the Passenger Experience section.

### Goal

Students will analyze information from a video and an essay to learn about a possible innovation in mass transit technology.

### Overview

This lesson synthesizes information from a short video, Virgin Hyperloop Experience, and an informational essay, It's Faster, Cheaper, Safer... Could It Be Hyperloop? Both of these materials review a new technology for mass transit that relies on passenger pods being transported through tubes. Students may choose to view the video either prior to reading the essay or after, whichever will provide them with the best prior knowledge. They may also wish to view the video both before and after reading the passage.

### Connections to [EarthX STEAM Curriculum Lesson:](#)

#### ***Potentially Perpetual***

In the STEAM lesson, students explore how energy is created to power many types of engines. They are then challenged to create a form of mass transit that is powered by green energy. Once these concepts are reviewed, a discussion into the theoretical workings of the hyperloop technology can further develop these ideas.

### Guiding Questions

- What slogan could you create to advertise a newly activated hyperloop route in your area?
- What would be the most important advantage of having hyperloop routes established throughout the world?
- If hyperloop technology is able to be developed, it will cause people to think of how mass transportation is powered in a new way. Many times people resist change. Can you think of a time when you had to convince someone to adopt a new way of thinking or doing something? What strategies did you use that proved helpful in persuading people to consider your idea(s)?

### Vocabulary

#### Video

- Hyperloop
- Multi-modal integration
- Portals
- Airdocks
- Pod
- Near-vacuum
- Sustainability
- Low-emissions
- High-durability
- Anti-microbial
- Post-consumer
- Tube
- Suffuse
- Full-spectrum light
- Terrain
- Levitation
- Autonomous vehicle
- Turbulence
- Biophilia

#### Essay

- Pneumatic
- Vacuum
- Friction
- Aerodynamic drag
- Magnetic levitation
- Bullet trains
- Air-bearing skis
- Pod

### Standards

#### Next Generation Science

- MS-PS2-3
- MS-PS3-5

#### TEKS Science Objectives

- 5.b.6A
- 6.b.7
- 8.b.6