

Grades 6-8

Genius by Stephen Hawking “Can We Time Travel?”

Join Stephen Hawking as he challenges three ordinary people to determine if time travel is possible. The fascinating journey of discovery features DeLoreans, atomic clocks, a giant black hole and a large swath of New York City.

After watching this episode, choose from the following questions and/or tasks to extend your learning

<ul style="list-style-type: none"> • Can we time travel? • What does Einstein's theory of relativity have to do with time travel? • How does Hawking explain space time? • Who was Descartes' Cartesian, and what does his work have to do with time travel? • Explain conceptual physics.
<ul style="list-style-type: none"> • If you could, would you travel through time? If so, where would you go and why? (ELD) Try to connect your ideas by creating compound sentences and using these: “and, but, so, to, even though, while, for, yet” or any others of your choice. • Why would anyone want to engage in time travel? • What could be the effects and outcomes of time travel and different decisions being made? • Do you believe that time travel has already occurred? Provide your reasoning.
<ul style="list-style-type: none"> • If a star 10 times more massive than the sun can fit in the diameter of New York City. What would the constant of proportionality be? • What size would your city be if it were in a black hole?
<ul style="list-style-type: none"> • Have a little fun looking at how Hollywood has portrayed time travel in such shows and movies: • Star Trek • Star Trek the Next Generation • Stargate • Timeline

Continued on the next page...

- About Time
- Brigadoon
- If you could go back in time to when you were little, what skills would you advise yourself to try to develop at a younger age that would better prepare you for high school? How would having these skills help you in High School?
- Write a letter to yourself to open 10 years from now.