

In groups, discuss:

- 1. How could your journey from home to here be improved?**
- 2. Are we moving fast enough in general?**
- 3. What impact will driverless cars have on our cities?**
- 4. Is there a good future for supersonic air transport by plane?**
- 5. Will travel in the future be electric?**
- 6. Will it be fast or slow?**
- 7. Do the majority of travel innovations only benefit the super-rich?**
- 8. Could teleportation ever really happen?**

Questions taken or adapted from:

<https://www.virgin.com/disruptors/10-questions-sum-future-travel>

Part A

The following video *Hyperloop vs High Speed Rail* is now eight years old, but still useful as an introduction to the subject:

<https://www.youtube.com/watch?v=pztF8wMUajM>

According to the video, are the sentences below true (T) or false (F)?

1. The Hyperloop contains elements of other transport technologies.	T	F
2. It was designed for distances greater than 1000 miles.	T	F
3. The system would be raised off the ground.	T	F
4. Power would be provided by solar panels.	T	F
5. The current capsule design is only adapted for passenger transport.	T	F
6. Hyperloop routes must be straight lines.	T	F
7. The world train speed record is more than ten years old.	T	F
8. Japanese Maglev trains have wheels.	T	F
9. TGV technology has existed since the 1980s.	T	F
10. There are parts of German autobahns that have no speed limit.	T	F

Now watch this short video:

<https://hyperloop-one.com/hyperloop-explained>

Part B

<http://www.explainthatstuff.com/linearmotor.html>

Section 'Maglev - "A Closer Look"'

1. How old is the idea for Maglev technology, and why wasn't it developed much earlier?
2. Which two countries lead the world in Maglev design?
3. What is the main design difference between their Maglev train technologies?
4. Which one uses superconductivity?
5. Where is the world's only commercial high-speed Maglev system and who was it built by?

Part C

Some questions concerning the hyperloop (you will have to click a few links to get useful content):

<https://www.quora.com/What-are-the-disadvantages-of-a-Hyperloop>

For the link below, the answer by C. Stuart Hardwick is recommended:

<https://www.quora.com/Why-is-HyperLoop-One-of-Elon-Musk-physically-impossible>

If you were interested in the 'vacuum implosion' video:

<https://physics.stackexchange.com/questions/265966/how-can-a-vacuum-implode-a-metal-tank>