The Future of Transportation

High-speed railways and airlines may have a new competitor soon as technology companies are pursuing a new form of high-speed transportation. It is called a hyperloop. The hyperloop concept, first introduced by Elon Musk in 2012, could enable people to travel at speeds exceeding 1000 kilometers per hour. This remarkable technology would allow such high speeds by using airless tubes combined with cars to reduce air resistance. Traditional transportation requires rolling or sliding along a hard surface; however, magnets in the tubes would make hyperloop cars float. This would reduce friction that slows normal cars down. Linear induction motors (motors that use magnetic fields to create force) would then push the cars through the tube at an average speed of 970 kilometers per hour or more.

Whereas many see the hyperloop as an ingenious application of modern technology, others are not so confident. In fact, some experts have suggested that it is not yet ready for production. They calculate that the cost of construction and the risk to passengers are too extreme to move forward just yet. Despite this debate, countries like France and South Korea are already starting to invest in this ambitious new endeavor.

Question 1

According to the article, hyperloops are much faster than traditional transportation. How do magnets in the airless tubes help hyperloops move fast?

Question 2

Many experts disagree about whether hyperloops should be built yet. According to the article, what two things need to be done to end this debate?