Getting Around

Before watching the video, discuss these questions

A) Why do you think mag lev trains are a good idea?

B) Do you think that they are more economical than regular trains?

C) What specific advantages do you think mag lev trains have over regular trains?

Now watch the video using the link below

https://www.youtube.com/watch?v=5Xnhf8DckzU

After watching the video discuss your answers for questions A, B, & C.

Now watch the video again, and fill in the blanks below.

1. the mag lev train which runs 6.1 km through Incheon international airport to Yongyu station at up to 85km/h is called echo B.
2. The vehicle stays afloat and moves 8 mm above the rails. Even without passengers onboard the vehicle itself weighs 19tons.
3. When current flows into the electro magnets above the track the opposite poles of the magnet move into formation and create a push & pull effect making the train move forward.
4. Measurement of noise inside the vehicle recorded 65dB which is lower than 71 to 85 recorded in a regular train.

eightfive

The New Uber

Read the passage and discuss the questions

The field of flying taxis is one that is starting to fill up. Joining the likes of the Ehang 184 and Volocopter is the newly announced Passenger Drone, which is built to help usher in an era of personal **aerial** transportation by **autonomously** carrying people from point A to point B.

Just like the Ehang 184 and Volocopter, the Passenger Drone comes equipped with a **touchscreen** that allows users to **punch in** their destination and then have the autonomous software take care of the actual flying. These kinds of short-range pilotless aircraft could have huge **ramifications** for how people move around cities, and nowhere is **keener** than Dubai to see how they fare, this week kicking off trials of the Volocopter with tests of Ehang's personal taxi drone also **in the pipeline**.

The makers of the Passenger Drone tell us they are currently testing the vehicle in Europe and have carried out **manned flights** with one person onboard. The aircraft is built from **carbon fiber composites** and features a total of 16 **rotors**, each powered by its own electric motor. There is also a **joystick** should it need to be flown manually, and two passenger seats, one behind the other. The range is 30 to 35 mins at speeds of 30 to 35 **knots** (34 to 40 mph), Passenger Drone's Peter Delco explains that these are the realistic numbers. There are other **VTOL (vertical take-off and landing)** projects out there promising hours of flying in the air but it is just impossible with current battery technology. So ranges are around 20 miles (32 km).

This kind of range should be enough for the kind of trips imagined for the Passenger Drone, one day helping to alleviate traffic by simply **hoisting** urban folk over the top of it. Like all VTOL projects, there is obviously a long way to go before the Passenger Drone enters use, not just in terms of proving the technology, but also in getting the **all-clear** from lawmakers to allow it to fly around cities. But another player on the scene won't do the industry's chances any harm.

https://youtu.be/IStmyk3R3Hc

Discussion Questions

1. In the reading, there are several bolded words or phrases. With a partner or group discuss the meanings.
2. What do you think are some design considerations the people developing VTOL projects plan for?
3. What would be some concerns people using this technology might have?
4. What issues might a city have with the use of these drones inside a city?
5. Do you think this type of transportation will ever be widely used in cities like Seoul?
6. What do you think the best form of personal transport for the future might be?
7. Will these more environmentally friendly forms of transportation replace our current forms?