

Lego Challenge: Transportation Innovation

Your Challenge!

Create a new method of transportation that is environmentally friendly. Try and think of something innovative to make your contraption move and don't forget to make it look good

Engineering Goals:

- Think outside the box about transportation methods that don't yet exist
- Explore forms of alternative energy that are more eco-friendly
- Try not to use wheels.

Reflection Questions

What should I do first?

Is something confusing me?

Could I explain this to someone else?

Where can I look for help?

How can I do it better?



Walking vehicles

A walking vehicle is a vehicle that moves on legs rather than wheels or tracks. Walking vehicles have been constructed with anywhere from one to more than eight legs. They are classified according to the number of legs with common configurations being one leg (pogo stick or "hopper"), two legs (biped), four legs (quadruped), and six legs (hexapod).

Wind powered vehicles

Wind-powered vehicles derive their power from sails, kites or rotors and ride on wheels—which may be linked to a wind-powered rotor—or runners. Whether powered by sail, kite or rotor, these vehicles share a common trait: As the vehicle increases in speed, the advancing airfoil encounters an increasing apparent wind at an angle of attack that is increasingly smaller. At the same time, such vehicles are subject to relatively low forward resistance, compared with traditional sailing craft. As a result, such vehicles are often capable of speeds exceeding that of the wind.