

WELCOME TO THE FUTURE

Before you can design the vehicles of the future, you need to think about the future, so charge up your imagination and spend a few minutes capturing details of the future you imagine.

Here are some questions to consider:

- Where does humanity live? On Earth? In space? On other planets?
- What do homes and offices look like in the future? Where are they located? How are they connected?
- What type of work are people doing in the future?
- What has technology made possible that isn't possible now?

Draw your future on the back of this sheet, and take notes about any details you don't want to forget. Ready?

THE CHALLENGE

Design three vehicles for *your* future:

- A vehicle for moving people;
- A vehicle for moving goods; and
- A vehicle designed to be FUN.

Do not worry about your artistic ability, spelling, or feasibility! Let your ideas flow . . .

TEST YOUR TECH

Show your future to a partner or adult. Describe it to them. Then, ask them to come up with three scenarios that would test the abilities of your vehicle. Come up with three scenarios of your own. What did you learn from the tests? Adapt your vehicle to the lessons learned.

Additional questions to consider:

- How fast can your vehicle travel? How did you handle the impacts of those speeds both on the vehicle, and on the occupants or load? What about acceleration and deceleration?
- How is your vehicle powered? If your vehicle requires refueling, how does that happen?
- How big is it? Is the shape consistent with the physics of its intended environment?
- What is your vehicle made of? What stresses must the material withstand within its intended environment?

TOOLBOX ADD: Using scenarios to test your thinking is a great tool for your toolbox, and can be used in any sort of planning. Scenarios are only as good as your imagination, though, so think carefully. What are the most likely things to happen? What are the absolutely worst-case scenarios, even if they are not likely to happen?

PLAN FORWARD

Your creations are big ideas! Discuss:

- What innovations would be needed to turn your idea into reality?
 - Materials
 - Fuel
 - Engineering
 - Technology
- What fields of study need to advance in order to support your idea?

Formal Sciences

Natural and Applied Sciences

Social Sciences

The Humanities

The Arts

- Which advances do you personally want to be involved in? What do you need to study / learn to get to the leading edge of that field?
- What makes big ideas hard to implement? How can you avoid the common pitfall of giving up on your big idea? What can your Launchpad23 friends do to support you?



NASA Space Vehicle Design Criteria

This document does a great job showing the thinking that goes into NASA vehicles.



Scenario planning

Scenario planning, scenario thinking, scenario analysis,[1] scenario prediction[2] and the scenario method[3] all describe a strategic planning method that some...

w Wikipedia / Jun 5



Future cars: 9 designs that could revolutionise the vehicle industry

The vehicle industry rapidly improves every year, bringing about incredible new and exciting technology for cars.

SF BBC Science Focus Magazine



Brought to you by Launchpad23

Launchpad23 is a gateway for curious minds of all ages to explore new ideas, develop new friendships, and boldly build a better future together.

https://www.launchpad23.org/