

FREQUENTLY ASKED QUESTIONS



WHAT IS THE SPACE TO DREAM CHALLENGE?

Children are challenged to design a toy or gadget for a child their age who is moving to Mars.

They are asked to do this using a famous 5-step process used by the best engineers and designers around the world called 'Design Thinking'.

WHO CAN TAKE THE CHALLENGE?

Anyone under 18 years of age in South Australia.

HOW LONG DOES IT TAKE?

There is total flexibility regarding the length of time children spend completing the Space to Dream Challenge. The Challenge can take anywhere from an hour or two to days, weeks, or even months – the choice is yours!

WHAT ARE THE KEY DATES?

The Challenge opens on 27 January 2021 and closes on 24 September 2021.

DO I NEED TO REGISTER?

No, unless you are a library.

Children wishing to take part outside of school, at home, or within a community group, do not need to register. Children simply submit their online Challenge Completion Form before the closing date of 24 September 2021.

Libraries wishing to run a Challenge program are asked to register. Libraries can find out more at <https://commissionersdigitalchallenge.net.au/design-thinking/outside-schools/at-the-library/>

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WHAT EQUIPMENT IS REQUIRED?

A child completing the Challenge will require access to the Challenge website via a laptop, PC or other digital device with an internet connection.

If they wish to use Makers Empire to create their design with free 3D tools, they will need access to a computer or device with the free version of the software downloaded: <https://www.makersempire.com/download/>

Children drawing their designs will need a print out of the 'MAKE IT!' Design Sheet. Once they have completed the Challenge, this sheet will need to be scanned and uploaded to their online Challenge Completion Form.

Children using Makers Empire to create their design do not need a 'MAKE IT!' Design Sheet but may still find this sheet a useful record to help them fill out the fields in their Challenge Completion Form.

Access '**MAKE IT!** Design Sheet' (download and print) at:

<https://commissionersdigitalchallenge.net.au/design-thinking/make-it-design-sheet/>

WHAT IS THE DESIGN THINKING PROCESS?

Children work their way through the five steps of the design thinking process using the Challenge website.

Step 1: Understand and Care

Learn about space with our Challenge video from former astronaut, Pamela Melroy. Look at some interesting facts about Mars. Find some books or do some Internet research at the library about Mars and space travel.

Step 2: Make a Plan

Think about the kinds of things that are important to the person you are designing your toy or gadget for. What do they really need or want?

Step 3: Come up with lots of ideas – Choose the best

Jot down as many ideas as you can think of. Get creative and don't hold back! Choose the idea that you like the best.

Step 4: Make it!

Decide how you will show the Commissioner your design:

Option 1 – Create your design using the free 3D tools available from Makers Empire

Option 2 – Draw your design.

Option 1 – Create your design with free 3D tools from Makers Empire

- 1 Download the free version of Makers Empire at <https://www.makersempire.com/download/>
- 2 Sign up to Makers Empire or login if you already have an account:
 - Think of a username: nothing that could identify you.
 - Think of a password: nothing anyone could easily guess.

- 3 Write down the Makers Empire Username you use to create your Space to Dream design. Keep your username in a safe place as you will need it again when you submit your design.
- 4 Once logged in, select the 'Shaper' tool.
- 5 Create your design in 3D – use the Pro tips to get the best result! Allow plenty of time to create your design with the Makers Empire online tools.
- 6 Click 'Finish'. When you save your design you need to include the wording 'SPACE TO DREAM' in the title. It is important that you remember this step as this is how the Commissioner will be able to look at your design.

Option 2 – Draw your design

Draw your design onto the 'MAKE IT!' Design Sheet.

Step 5: Can you make it better?

Ask other children your age what they think of your design. Are there things they love about it? Are there things you may want to change after hearing their thoughts? Children are asked to revisit their design to make any necessary improvements. If there are lots of changes, children may wish to revise their designs.

Those using Makers Empire can go back and edit their design via the 'My Designs' tab on the Makers Empire software.

Those drawing their design may wish to complete a new 'MAKE IT!' Design Sheet if they have made big changes or lots of changes.

To complete the Challenge, you need to submit your design online.