

---

Operation:  
Make it

---

---

Difficulty level:



## MAKE IT SERIES

# ORBOT MISSION PLAN

Agent: \_\_\_\_\_





The Big  
Question:

What do satellites do?

---

Mission:  
Objective

---

Build the technology we  
need in space!

---

Mission:  
Resources

---

Pg.1-2: Make it: Orbot  
Pg.3: Orbot cut out  
Pg 4: Australian Space  
Discovery Centre  
logo cut out

---

Images

---

**Above:** Base on Mars, Martian colony in desert landscape, on the red planet, 3d illustration.  
**Below:** Trailblazer logo. Artist impression of Australia's vision for space exploration



## Materials

- Printed black/white copy of the Orbot Template
- Printed colour copy of the Australian Space Discovery Centre logo
- Scissors
- Colouring pens/pencils
- Glue/tape

## Construction

1. Print out the Orbot template on page 3. (Optimised for A4 paper for easier folding but can be printed on other sizes).
2. Print out the colour copy of the Australian Space Discovery Centre logo on page 4. (Optimised for A4 paper, but can be printed on other sizes).
3. Cut out the templates. Make sure to cut around the outside lines (the ones in black) to remove the templates from the rest of the paper.
4. Choose what special job Orbot will do as a satellite in space.
5. Add some drawings to the template of things that will help Orbot do the job you have chosen for it.
6. Colour and decorate the orbit.  
*The Orbot has lots of solar panels – what colour should they be?*

---

## Make It: Lunar Habitat

---

---

### Activity:

---

Congratulations! You have been selected to build an Orbot.

Orbot is a satellite – a type of machine that goes around the Earth.

Satellites can do lots of different jobs. Some help humans on different parts of the Earth talk to each other. Some of us look at the Earth's environment. Some of us even look out into space to see far away stars.

Follow the mission instructions to help you complete the project.

## Construction

7. Fold the Orbot along the dotted lines to form a cube.
8. Stick the tabs down to secure the cube.
9. Stick the Australian Space Discovery Centre logos to the back of the antennae (the cut outs that look like measuring tapes).
10. Stick the antennae to the Orbot.  
*Did you know that measuring tapes make good satellite antennas! We need antennas to talk to people on Earth using radio waves.*
11. Optional: Create other pieces of equipment that will help the Orbot do its job in space.  
*You can either draw them on the Orbot, or create more cut out pieces.*
12. Optional: Attach the other pieces of equipment that you created to the Orbot.



## Make It: Lunar Habitat

### Activity:

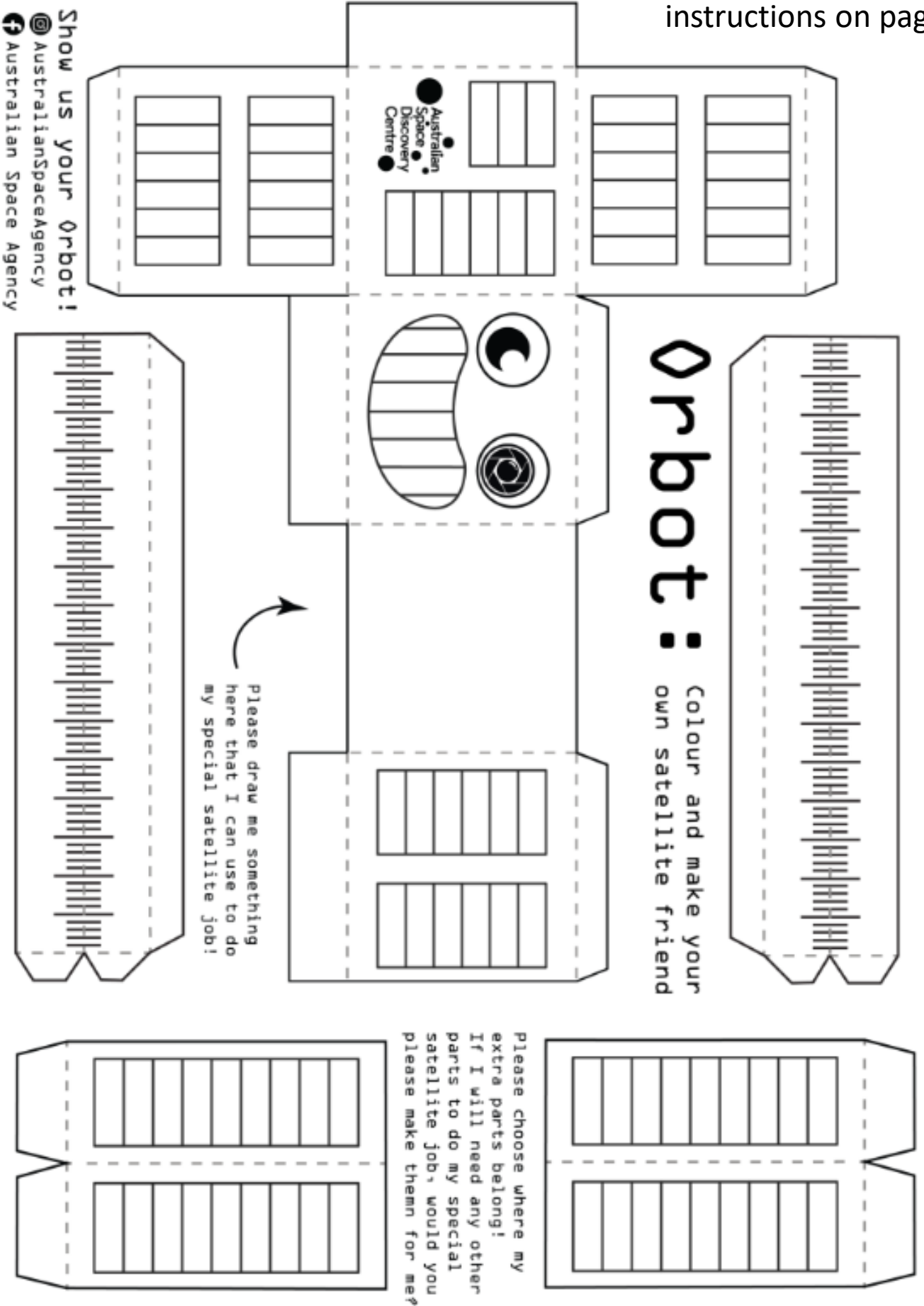
Learn more about satellites here:

<https://www.nasa.gov/learning-resources/for-kids-and-students/what-is-a-satellite-grades-k-4/>



# Orbot template

- Print the cut-out below and then follow the instructions on page 1.



- Print the cut-out below and then follow the instructions on page 1.

