

REUSE RECIPE



Thank you for helping RGQ to save approximately 2 tonnes (2,000kg) of industrial discards from landfill every week.



DESIGN AND MAKE a robot friend

*This activity is suitable for children in grades **Prep to Yr 4** as it is aligned to the [Australian Curriculum](#) standards for [Visual Arts](#) and [Chemical & Physical Sciences](#).*

Make robots and space explorers from salvaged materials. Create control panels, buttons, dials, wires and appendages. Discuss the reasons robots are built and what characters they need to do their jobs. Explore the future of space by building planetary explorers, launch pads and space stations.

- Why do we build robots?
- What can robots do that humans can't?
- What would you like your robot to be able to do?
- Will your robot have stiff strong arms or flexible bendy arms?
- How will your robot move?
- What powers your robot? Does it have a charging cord or control panel?

Tools:

- Scissors
- Staplers
- Pencil, pen & ruler
- PVA, craft glue or water-based paste
- Hole puncher
- Sticky Tape (but challenge yourself to find alternatives)

Optional tools:

- Box cutter
- Cutting mat
- Hot glue gun
- Needle & thread
- Awl

Before we begin, we recommend watching our [RGQ TV](#) virtual workshop on how to build your own robot.



4 STEPS TO A ROBOT

- 1. Choose a body shape:** A container, plastic tray, reel or cardboard tube create a strong body.
- 2. Appendages.** Is there a separate head to allow movement? Select arms and legs (fabric, plastic, cords, string or tubes can be tied, stapled or glued on) based on your robot design.
- 3. Control and Communication.** Does your robot need a control panel, buttons and switches or antennas? Will there be a charging cord or power pack?
- 4. Personalise it.** Cut shapes from sticky foam, stickers or fabric. Glue or tie on lids or hardware to complete your robot.

NOTES TO FACILITATORS



It may be necessary to pre-prepare the materials for your participants depending on the age group and time constraints.

Some of the materials that have been provided will require the use of moderately strong adhesive.

You may need to supply, operate or help facilitate the use of a hot glue gun or a moderately strong adhesive.

Please check the contents of the box for suitability for your group. We may include small pieces, items with pointy ends and heavy items.

Reduce, Re-use, Recycle

By using excess material and products from RGQ you are helping to reduce the demand for new products and re-using existing materials.

To complete the loop we ask you to recycle any materials possible when you are finished enjoying your creations.