gateway health

People living well

Seeing waste differently

Recycled Art Workshop

FACILITATOR MANUAL

Content courtesy of

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Thank you to Jess Young for the initial design and delivery of this workshop as well as Bunnings Wangaratta and Pangerang Community Hub for their contributions.

To learn more about how Gateway Health helped to establish the Recycled Art Workshops you can read the case study by scanning the QR code on the right.

We acknowledge the traditional custodians of all the lands on which we live, work and play. We pay our respects to Elders, past present and future, for they hold the memory, culture and stories all First Nations peoples. We commit to Reconciliation through truth telling and recognition of loss of land, language and culture; and, to listening and learning as part of a future where all can grow and thrive.

We recognise and celebrate the diversity of our communities and all people we serve, including First Nations peoples; people with disabilities; lesbian, gay, bisexual, transgender and gender diverse people; intersex people; people experiencing health inequalities; culturally and linguistically diverse people; older people; children and people from rural and remote areas.

We are a Child Safe organisation and will ensure the safety of children and young people at all times.

“Exploring cause and effect, simple machines and how we look at “waste”

OVERVIEW AND PURPOSE

This workshop provides an invitation to build something with recycled and found, everyday materials. It includes, art and craft, creation, imagination and Science, Technology, Engineering, Art, Maths (STEAM). It is designed to build design skills, confidence, problem solving, fine motor skills, social connection and wellbeing.

OBJECTIVES

1. To provide open-ended, creative opportunities for children to tinker and explore materials, use their imagination and unlock the hidden potential of “waste”.
2. The main outcome is really just having fun and supporting children to play creatively with materials.

MATERIALS

Source a range of recycled materials to use in the workshop. You may like to gather these by asking schools, local businesses or organisations, family and friends to collect and donate.

The list provided is a suggestion of what can be used but feel free to expand and use what works for you.

1. Drill, hole punch, hammers, scissors
2. Cardboard lengths and tubes
3. Blocks, dominoes, plastic and tetra bottles
4. Connectors: Tape, Blutack, velcro stickers, oci straps, pegs, string
5. Rollers: Cars, Reels, plastic and cardboard, balls, marbles
6. Bicarb and vinegar, funnel, bottles
7. Catapult, blower, torch, fan,

ACTIVITY STRUCTURE

Time: A standard workshop goes for two hours but it can be modified to suit your group's needs.

Include a start/middle/end to the activity.

1. Set up before the participants arrive. This typically takes 30 minutes.
2. Once participants arrive, gather, welcome, describe the activity
3. Regroup again in the middle of the session to see if participants need help, want to share something that is working, or whether can they make their sequence join to another group's?
3. About 20 minutes before the end - gather, do a tidy up of all the bits not in use and finish with a final run of each machine. A good opportunity for photos and videos.

Number of participants: Participants can work individually, in pairs or in groups, depending on your arrangement and the confidence of the children. It can be whatever works for you! For this reason, the group size can be adaptable but it is recommended to not exceed 20 participants. In previous workshops the group size has worked best from anywhere from four to 12 participants.

ACTIVITY

General: Depending on the group, students can make their own creation or a series of machines that connect to achieve a collective outcome, for example, close a door, crack a nut, tip over a cup, draw a picture, put some recycling in the bin.

Example: To learn about design, you could use what is referred to as a Rube Goldberg Machine. It starts with a simple problem but to solve it you do so in an over-complicated way which ends up making it over the top but fun.

The *OK GO* music video is a great example of a Rube Goldberg Machine. (This amazing and elaborate set up took 50 to -60 people and 1½ years to develop. Lots of testing!)

Watch the Ok Go music video here

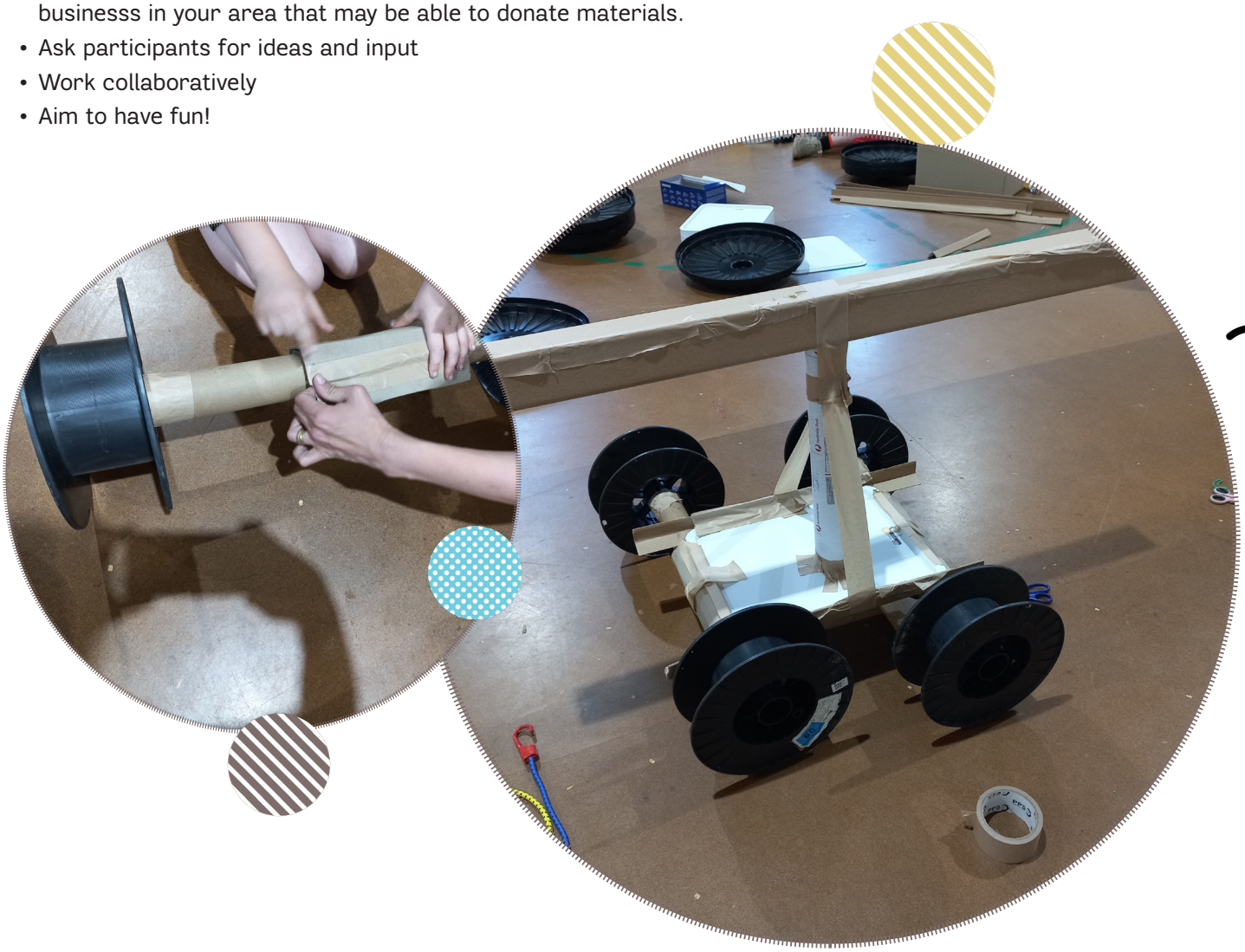
The machine is about "complicating" a simple task. In previous workshops, one student first made a run that easily sent his marble from one end of the gym to the other. That was great. Then he added lots of additional steps for it to travel through. Another child made an amazing set of wheels then realised they were fixed and wouldn't roll. We added a moving sleeve to create a wheel and axle.

Rube Goldberg (rōōb gōld'berg), a comically involved, complicated invention, laboriously contrived to perform a simple operation — *Webster's New World Dictionary*

TIPS!

- You could coincide the workshop with National Recycling Week
- Go for a scavenge and find some additional materials around the venue
- Take opportunities to talk to participants about the force needed, questions could include: Could it be a bigger ball? Could it fall from higher? Roll further to gather momentum?
- If needed, you could have prompt cards of problems to solve that kids choose at the start.
- Success breeds enthusiasm, so to start with, keep the steps to a minimum. You can always add more as you go.
- A big venue or space is great!
- In previous workshops, participants have been really engaged and excited by how the materials were presented and watching the video helped describe the possibilities of what they could do. If you don't have the equipment to show the video, have a mini example set up that you can show the kids to inspire them.
- Terminology for simple machines: Lever (like a seesaw), inclined plane (ramp), wheel and axle, screw, pulley, wedge (like scissors)
- Previous workshop materials came from Bunnings and other local businesses that would otherwise have gone in the bin. What else can be done with these materials? What other businesses are regularly throwing out materials that could be used? Is it better to reduce, reuse or recycle? Why? Use these prompts to start a discussion with the participants. You could approach any relevant businesss in your area that may be able to donate materials.
- Ask participants for ideas and input
- Work collaboratively
- Aim to have fun!

Scan the QR code to find out more about National Recycling week



RESOURCES

Tinkerlab - a great resource for process art with kids
https://tinkerlab.com/engineering-kids-rube-goldberg-machine/

RUBE GOLDBERG MACHINE SUPPLY LIST

Things that roll

- Marbles
- Balls: Tennis, Baseball, Bowling, etc.
- Toy Cars
- Dominoes
- Skateboard
- Roller Skate

Things that Move

- Mousetrap
- Dominoes
- Toaster
- Fan

Ramps

- Toy Train Tracks
- Marble Runs
- Books
- Trays
- PVC pipe
- Plastic tubing
- Gutters

Recyclables

- Cardboard
- Cereal Boxes
- Cardboard Rolls
- Plastic Water Bottles
- Cans
- Aluminum Foil

Household Materials

- Chopsticks
- Popsicle Sticks
- Ruler
- Wooden Blocks
- Bowl
- String
- Tape
- Sand
- Pins
- Hammer
- Balloons
- Waiter
- Fan
- Vinegar and Baking Soda

Scan the QR code to head to Tinkerlab

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