Environmental Education: **3Rs (Reduce, Reuse, Recycle)**That's Ridiculous!

Use this activity as a warm-up or review. Depending on how you set the activity up it can also be a good way to give students and opportunity to move around and stretch.

The activity is very simple and is a modified True or False. You can add your own statements and/or adjust statements to suit your students or learning objectives. You will read statements out loud and students must individually decide if they feel the statement is "Ridiculous!" or 'Strange, but true." To indicate which choice the student is voting for they must complete the corresponding action.

Action options:

- Assign opposite sides of the room as "Ridiculous!" and "Strange, but true." Students must walk to the side of the room that matches their answer. You can create signs or write on a whiteboard or blackboard to help students remember which side of the room is which.
- Have students stand beside their desks and complete two different actions (e.g. squat, stand on one foot, touch your toes) to show their answer.
- If you would like students to stay seated, create handheld signs for each students to hold up "Ridiculous!" or "Strange, but true." to show their answer.

Activity Instructions

- 1. Decide how students will show if they think a statement is "Ridiculous!" or "Strange, but true."
- 2. Read statements out loud one at a time.
- 3. Give all students time to think through their answer and complete the corresponding action.
- 4. Reveal the correct answer.

Statements

History

- 1. Evidence of landfill sites have been discovered from over 3500 years ago. **Strange, but true!**There is archaeological evidence that in the Cretan capital, Knossos, the Minoan people created landfill sites where waste was placed in large pits and covered with earth at various levels.
- 2. Garbage in Victoria was once "managed" by dumping it in the ocean. **Strange, but true!** From 1892 -1955, garbage was loaded onto barges at the foot of Herald St. and dumped into the ocean about 3 km (2 miles) out from Victoria Harbour.
- 3. Plastic was invented in the 1960s. **That's ridiculous!**Plastic was invented in the 1860s as a substitute for ivory (initially for billiard balls and piano keys).



Hartland Landfill

- 4. Hartland is a dump. **That's ridiculous!**Hartland is an engineered sanitary landfill. It is designed and operated to minimize environmental impacts.
- 5. Organics (food scraps), account for the largest percent of waste put in Hartland Landfill. **Strange, but true!** In 2016, organics accounted for 21.1% of waste going in the landfill (Wood and wood products 17%; Paper and paperboard 15.4%; Plastics 14.3%).
- 6. Organics (food scraps) belong in the garbage. **That's ridiculous!**Organics belong in a compost bin or kitchen scraps bin not the garbage. A landfill ban on kitchen scraps was implemented in 2015 in order to help save a valuable resource, conserve landfill space and reduce greenhouse gas emissions.
- 7. It is safe to put batteries in the garbage. **That's ridiculous!**When batteries are put in the garbage they can cause landfill fires. Instead, drop them off at a depot to be recycled.
- 8. We want birds to eat the garbage at Hartland Landfill. **That's ridiculous!** If birds eat garbage it can make them sick and it can allow for garbage to be spread to the surrounding environment if they carried off by birds.
- 9. We use trained eagles and hawks to scare birds away from the landfill. **Strange, but true!**
- 10. When garbage breaks down in the landfill it produces a liquid called leachate. **Strange, but true!**When garbage breaks down, it produces a liquid by-product called leachate. To keep leachate from entering the surrounding environment it is captured and collected at Hartland before being tested and discharged into the sanitary sewer system.
- 11. Hartland landfill has the ability to convert gas from the garbage and turn it into electricity. **Strange, but true!** Hartland has been capturing gas since the 1990s. In 2005 the gas utilization facility went online and began converting collected methane gas to electricity and selling it back to the BC Hydro grid.
- 12. 200kg (440lbs; 1 dolphin) of garbage per person per year is disposed of in Hartland Landfill. **That's ridiculous!** In 2019, 382 kg (842lbs or 1 moose) of garbage per person per year is disposed of in Hartland Landfill

Recycling

- 13. It takes 1 year for a pop can to be recycled and returned to the store new. **That's ridiculous!** It takes about 60 days for a can to go from collection to a new product on the shelf.
- 14. Using recycled aluminum to make new cans decreases resources and energy needed by 95%. **Strange, but true!** Using recycled aluminum instead of virgin materials decreases water, air pollution and energy use by 95%.



- 15. Glass is recycled into construction materials. **Strange, but true!**Glass can also be recycled into reflective material in paint and concrete products. Glass can also be recycled into new bottles.
- 16. Before the plastics bag ban, residents in Victoria used about 5 million plastic bags a year. **That's ridiculous!** An average Victoria resident used 200 plastic shopping bags a year. That equals 17 million plastic bags a year.
- 17. In Canada, 80% of plastic water bottles make it into the recycle. **That's ridiculous!** Only 30-50% of plastic water bottles are recycled in Canada.
- 18. In British Columbia we recycle fewer plastic water bottles than the rest of Canada. **That's ridiculous!** We recycle about 73% of the plastic water bottles sold in B.C.
- 19. Styrofoam packaging and plastic bags are recyclable. **Strange, but true!**Styrofoam packaging and plastic bags can be returned to a drop off depot to then be recycled into new products. Styrofoam is recycled into picture frames and crown molding.
- 20. It takes 50 recycled plastic bottles to make a fleece jacket. **That's ridiculous!** It takes about 25 plastic drink bottles to make a fleece jacket.
- 21. Chip bags and candy bar wrappers are garbage. **That's ridiculous!**These are called "flexible plastics" and are being studied to see what types of things they can be recycled into and are used as alternative fuels.
- 22. As an individual there is very little you can do to reduce the amount of garbage you create. **That's ridiculous!** We all have an important role to play in reducing waste. Whether it's at home, school or on the go, we can make choices to reduce waste (e.g. using a reusable lunch box and water bottle or donating toys and clothes we no longer need.)

Time to Decompose

- 23. It takes 500 years for a disposable diaper to begin to decompose in a landfill. **Strange, but true!**
- 24. It takes at least 2 months for an apple core to decompose in landfill. Strange, but true!
- 25. It takes 100 years for a plastic bottle to decompose in a landfill. **That's ridiculous!** It actually takes about 450 years.
- 26. It takes 200 years for a glass jar to begin to decompose in a landfill. **That's ridiculous!** Current estimates are that it will take 1 million years.

If you have any questions about waste or recycling in the region, or are looking for ideas on how to connect this topic with other learning opportunities, please contact us at education@crd.bc.ca.

