

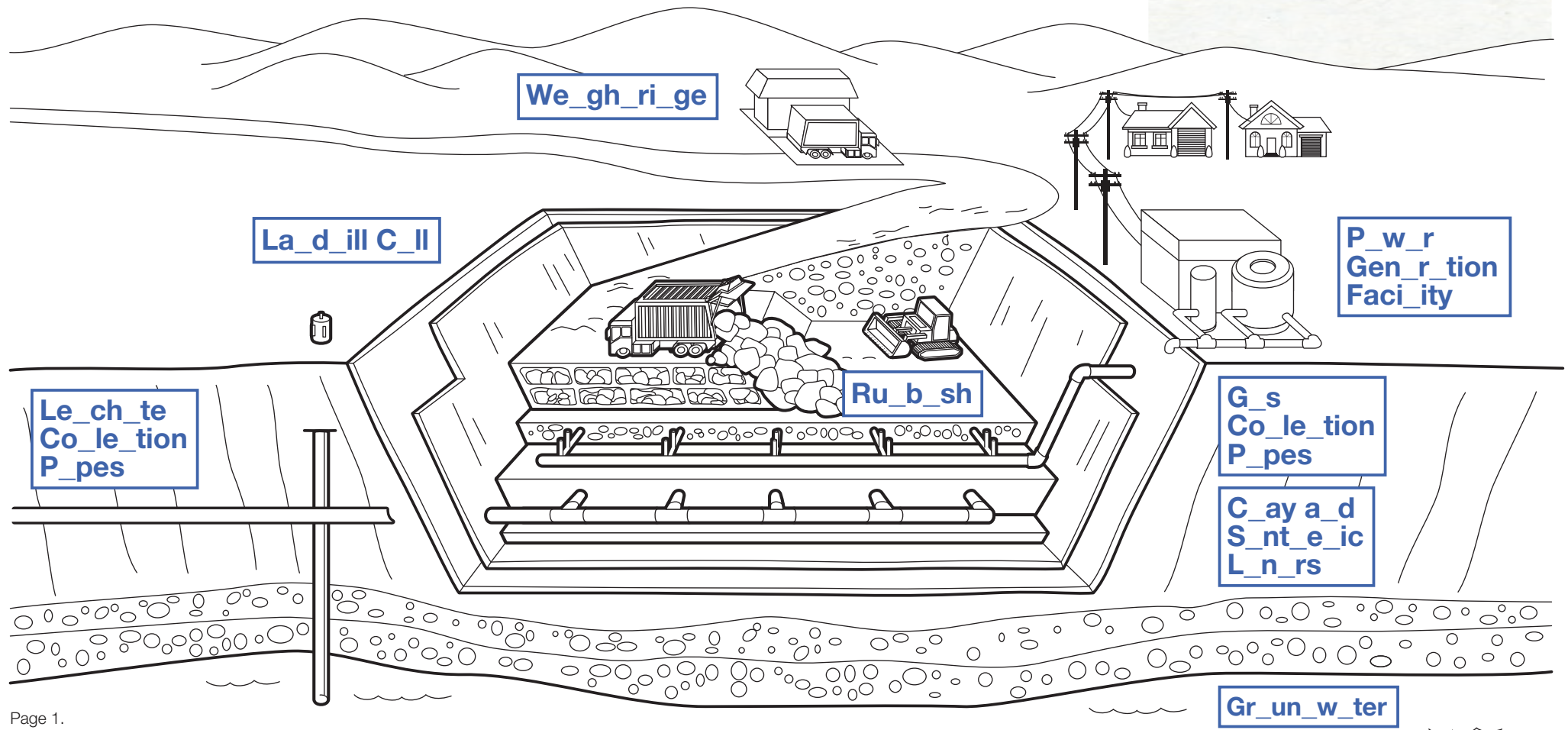
Landfill Construction and Operation

Name _____

INSTRUCTIONS

Identify the parts of a landfill by filling in the missing letters. Colour in the landfill diagram.

Word List: Clay and Synthetic Liners, Gas Collection Pipes, Ground Water, Landfill Cell, Leachate Collection Pipes, Power Generation Facility, Rubbish, Weighbridge



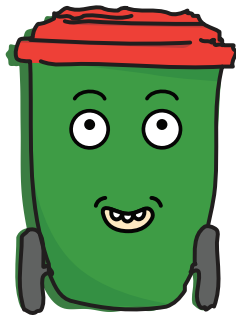
Page 1.

Edible Landfill Recipe

MATERIALS NEEDED

- Glass jar, cup or bowl (or clear plastic) to create landfill in (must be see-through).
- Teaspoon.
- Tablespoon.
- Plastic bag.
- Bowl for mixing.

**COLLECT ALL
YOUR MATERIALS
AND INGREDIENTS
BEFORE STARTING!**



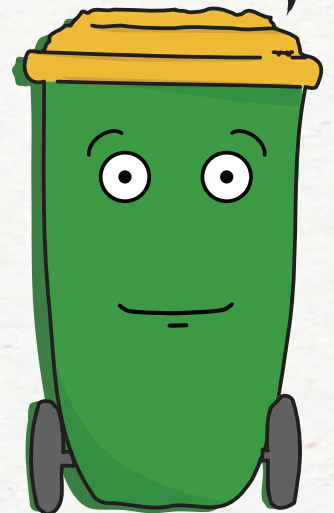
INGREDIENTS

- 2 tablespoons blue jelly
- 3 biscuits (oreos, arrowroots, choc chip – anything you can crush up)
- 4 tablespoons custard (chocolate or vanilla)
- 1 fruit roll up
- 2 tablespoons rice bubbles
- 2 chocolate fingers (kit kats could be used)
- 1 tablespoon mini marshmallows
- 1 teaspoon mini M&Ms
- 1 teaspoon white chocolate chips
- 1 teaspoon chocolate chips
- 1 tablespoon of green coconut (use green food colouring) or green sprinkles
- 2 tablespoons of chocolate or caramel syrup

METHOD

1. Place 2 tablespoons of blue jelly in the bottom of your cup. This 1st layer represents 'Groundwater'.
2. Place 1 biscuit in the plastic bag and gently crush it by squashing it down with your spoon. Place your crumbed biscuit on top of the jelly. This 2nd layer represents the ground/soil layer.
3. Place 2 tablespoons of custard on top of the biscuit. This 3rd layer represents the clay liner used to protect the soil and groundwater from the landfill.
4. Place the fruit roll up on top of the custard. Make sure you completely cover the custard as this 4th layer represents your synthetic liner, also used to protect the soil and ground water from the landfill.
5. Add 2 tablespoons of rice bubbles. This 5th layer is to represent drainage.

**EACH LAYER
REPRESENTS A LAYER
OF LANDFILL**



Edible Landfill Recipe

METHOD CONTINUED

6. Place the following in your mixing bowl and stir with a spoon to mix them together:

- 1 tablespoon mini marshmallows
- 1 teaspoon mini M&Ms
- 1 teaspoon white chocolate chips
- 1 teaspoon chocolate chips

These represent the different garbage you might throw in your red lid bin and which will be sent to the landfill for disposal. Add approximately half of this mixture to your landfill. This 6th layer is a rubbish layer.

7. Place 1 biscuit in the plastic bag and gently crush it by squashing it down with your spoon. Place your crumbed biscuit on top of the rubbish layer. This 7th layer represents soil used to cover the rubbish.

8. Put the remaining mixed mini marshmallows, mini M&Ms and chocolate chips as your 8th layer – more rubbish.

9. Place 1 biscuit in the plastic bag and gently crush it by squashing it down with your spoon. Place your crumbed biscuit on top of the rubbish. This 9th layer represents soil used to cover the rubbish.

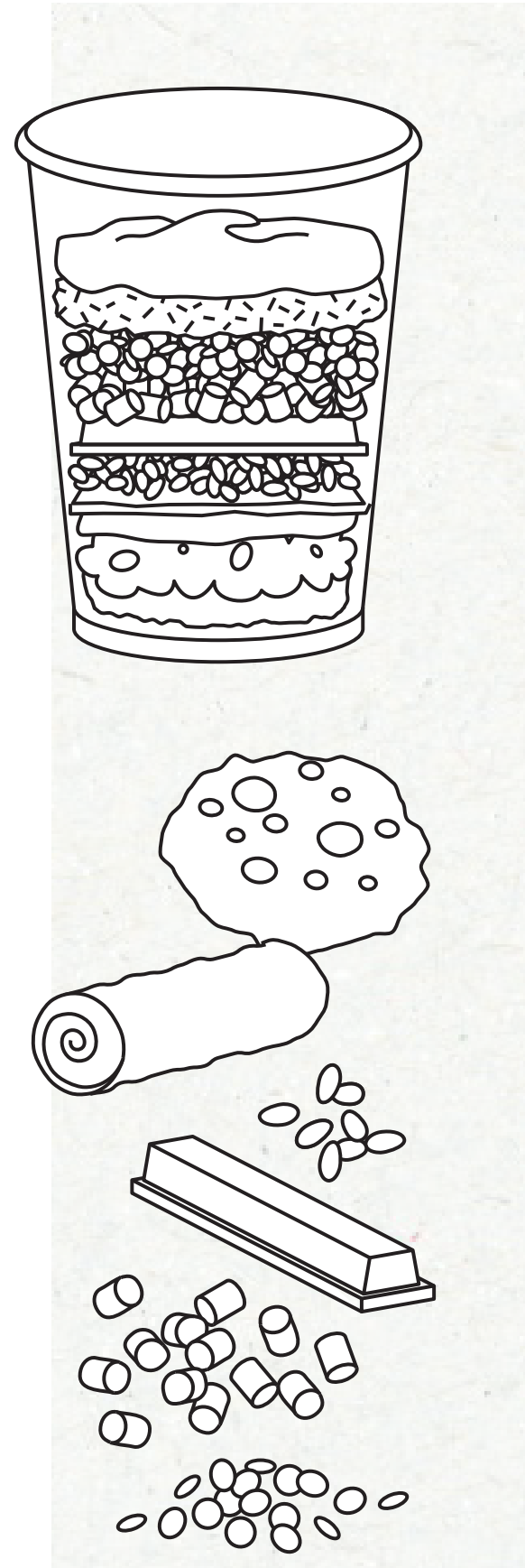
10. Place 2 tablespoons of custard on top. This 10th layer represents the clay liner to cap your filled landfill.

11. Place chocolate fingers or kit kats into the custard sticking out to represent the leachate and gas collection pipes.

12. Sprinkle your tablespoon of green coconut or sprinkles to represent grass growing on top of your filled landfill.

13. Finally pour your syrup on top of the landfill and let it sit for 10 minutes. The syrup is going to represent the leachate. If you built your landfill correctly your leachate should not reach our first 2 layers – the ground soil and groundwater!

Eat your landfill 😊



Reduce Landfill

INTRODUCTION

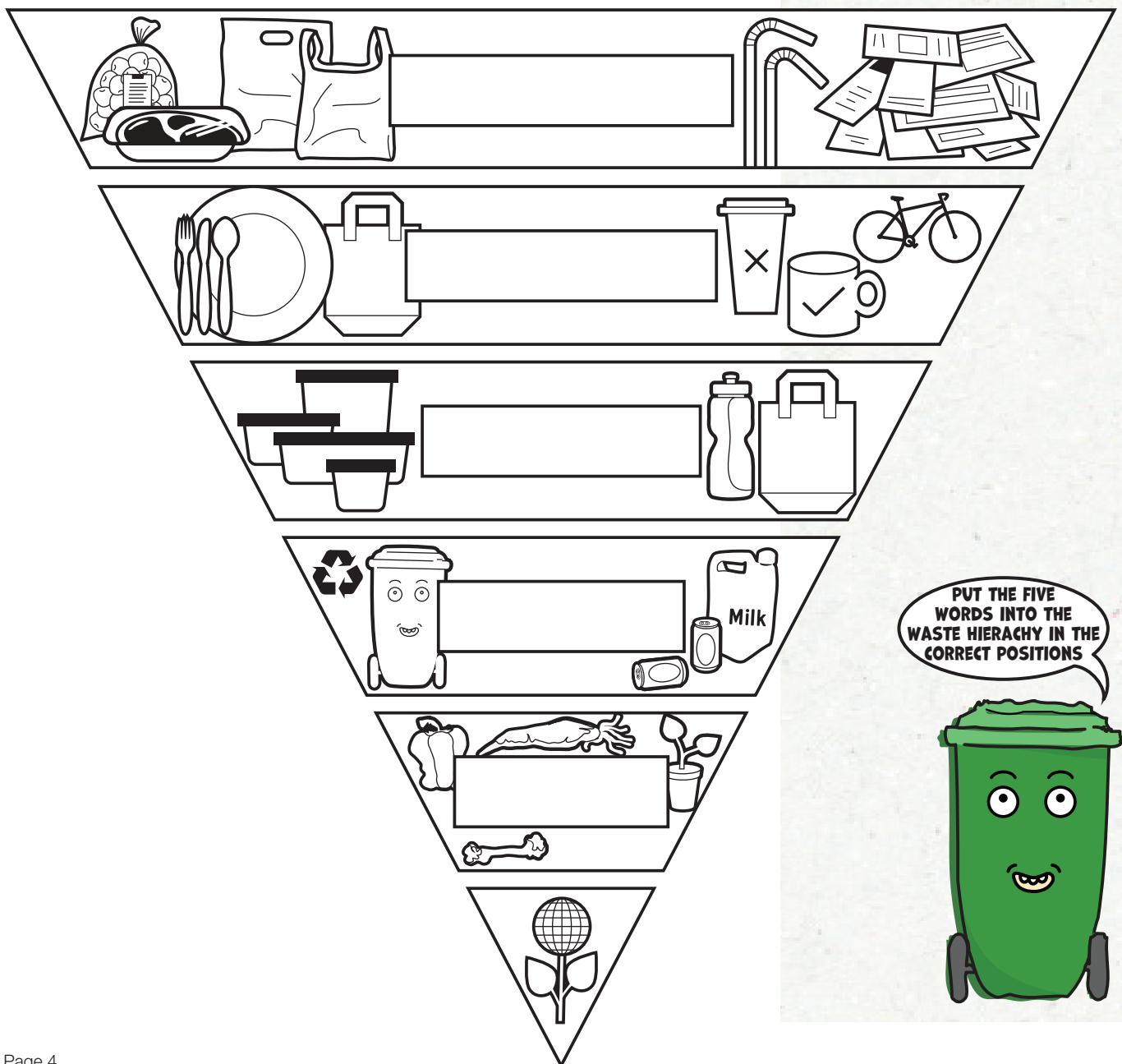
Reducing waste is easy if you follow the waste hierarchy.

INSTRUCTIONS

Insert the words below in the correct spot on the waste hierarchy.

The items at the top of the hierarchy are the things we want to be doing the most to help us reduce waste – they are the first and most important steps.

Words: Recycle, Rot, Reuse, Refuse, Reduce



Reduce Landfill

INSTRUCTIONS

List three things you could do to help reduce waste going to landfill:

- 1.
- 2.
- 3.

Create a poster encouraging people to reduce waste!



A large empty rectangular box for creating a poster.