

Purpose:

These quiz sheets have been designed with the purpose of offering fun educational opportunities for children around years 5-9 to learn more about batteries and battery safety.

How to Use:

It is recommended that the teacher use these quiz sheets to check learning after teaching students about battery structure, chemistry and function, different ways batteries are used, specific local information about battery drop-off locations, safety with using and disposing of batteries and why it is important to recycle old batteries.

Recommended Resources:

Written Material:

It is recommended teachers ask students to do some independent research on battery structure, function and potential risks associated with incorrect battery disposal. Students could also explore the available drop-off/collection places within the City of Kalamunda for battery recycling on a local scale.

Educational Videos:

- **"Battery Recycling Behind the News"**: <u>https://youtu.be/Sx_-pmOAeb0?</u> <u>si=Fi697kPy8rRv-pk_</u> Video lasts: 3 mins, 26 seconds.
- **"This Tape Saves Lives"**: <u>https://youtu.be/C1k-HjCJ7L0?si=U76xhtxNBA2vmt7o</u> Video Lasts: 1 min, 5 seconds.

Relevance:

Media, Science, Safety, Sustainability, HASS, Chemistry



- Which bin should you place your old batteries?
 - a) Recycling (Yellow lid) Bin
 - b) General Waste (Red lid) Bin
 - c) FOGO (Green lid) Bin
 - d) None of the above

2 Where should you keep used batteries at home before dropping them off?

- a) In the fridge
- b) Loose in a draw
- c) A sealed jar or container
- d) In a sandwich bag

3 You should Never....

- a) Tape the end of batteries with clear tape
- b) Put batteries in the bin
- c) Put batteries in your mouth
- d) B and C only
- **4** True or False: Used batteries can still hold a little bit of power
 - a) True
 - b) False

5 True or False: Batteries can explode if they get hot or damaged

- a) True
- b) False

- **6** True or False: The City of Kalamunda has free battery drop-off points
 - a) True
 - b) False
- **7** What useful materials can be recycled from old batteries?
 - a) Air, water and plastic
 - b) Lithium, zinc and steel
 - c) Rubber and glass
 - d) Aluminium, clay and copper
- 8 The Walliston Transfer Station can help City of Kalamunda residents recycle which of the following?

a) Household dry cell batteries, mobile phones and car batteries
b) Car batteries, button batteries and smoke detectors
c) Mobile phones, household dry cell batteries and X-Rays

9 "Dry cell batteries" refer to....

a) AA, AAA, 9V, button batteriesb) Lead-acid batteriesc) lithium-ion mobile phone batteries

10 True or False: Household dry cell batteries can be collected at most supermarkets and libraries

a) True b) False

BATTERY SAFETY BEATTERY SAFETY KNOWLEDGE QUIZ Check your knowledge on battery disposal and safety by circling the correct answers

- Why should you tape the ends of batteries before recycling them?
 - a) It prevents them from rolling away
 - b) So you can write the date on themc) It helps prevent sparks or short
 - circuits
 - d) To decorate them

12^{Why is it important for people to recycle batteries?}

- a) Batteries are expensive
- b) To prevent landfill fires and protect the environment
- c) Because recycling is a popular trend

3 What is the B-cycle program?

- a) a program for people to make their own batteries
- b) a national battery recycling programc) a program on television about thebattery lifecycle
- d) a program for making bicycles

14 What should you do with a leaking or damaged battery?

- a) Wrap it up in aluminium foil tightly
- b) Wash it in water and reuse it
- c) Carefully place it in a sealed
- container and take it to a hazardous waste drop-off

- **15**True or False: If a battery hasn't been damaged and is not leaking, it can go in the recycling bin
 - a) True
 - b) False
- **16** Which group can be harmed by chemicals from batteries that leak into the nevironment?
 - a) Amphibians
 - b) Native vegetation
 - c) Humans
 - d) All of the above
- 17 True or False: Old car batteries can be recycled to recover lead
 - a) True b) False
- **18** True or False: A short circuit happens when the positive and negative terminals of a battery touch each other directly
 - a) True b) False

19 Lithium-ion batteries are...

a) Heavier and more powerful than traditional AA batteriesb) Lighter and less powerful than traditional AA batteriesc) Lighter and more powerful than traditional AA batteries





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