

School Battery QUEST!

2020 Student Activity Booklet

The School Battery Quest
runs from Monday, March 2nd
through to Friday, April 3rd



School Battery QUEST!

Welcome to the School Battery Quest!

The Quest

The 2020 School Battery Quest is a great way for you as a student to do something good for the community and planet.

The goal of the contest is to collect and responsibly recycle as many used batteries as possible from your home with adult supervision and bring them to a drop-off location for special recycling.

Complete the activities in this booklet to help your school class or club win a cash prize. **As a reminder, do NOT return the used batteries to your school.**

Be sure to go over the [safety guidelines](#) with your parent or guardian before starting on the School Battery Quest.

Important Dates to Remember

The School Battery Quest starts on **Monday, March 2nd**. Turn in your **Battery Collection Tracker** sheet to your teacher by **Friday, April 3rd** so that your collections are counted toward the total for your school class or club to win a prize. How fast can your class get to the top?

Why Should I Recycle My Batteries?

When a battery gets properly recycled it gets broken down and precious resources are recovered. Recycling your batteries will also prevent the batteries from filling up our landfills, where it can take up to 100 years to fully break down and disappear. Here are a few more reasons why you should be recycling your batteries.

- *In Vermont, it is against the law to throw away certain battery types, BUT all batteries can be easily recycled at special recycling drop-off locations conveniently located all over the state! Used batteries require special handling – don't throw them away or place them in your regular blue recycling bin.*
- The materials recovered from a recycled battery can be turned into stainless steel pots & pans, the asphalt on our roads, golf clubs, sunscreen and of course, new batteries. Reusing these materials instead of mining for new resources saves a lot of energy and protects our environment too!

**With every recycled battery,
you're helping the planet!**

DID YOU KNOW?

In 2018, more than 146,000 pounds of batteries were collected at drop-off sites in Vermont. That translates into only 1 out of 5 batteries sold in Vermont were recycled properly. You can help make a difference!

Now it's time to embark on the School Battery Quest!

STEP 1

Basics about batteries

Batteries are everywhere. Do you know what types of batteries are used to power different things?

STEP 2

At home activity

How many items in your home use batteries?

STEP 3

Where can you recycle batteries?

With the help of an adult, find the nearest drop-off site.

STEP 4

Time to collect!

With the help of an adult, collect used batteries in your home for recycling and track the number you collected – see the [safety guidelines](#).

STEP 5

Time for special recycling at a drop-off site

With the help of an adult, take your used batteries to a drop-off site for special recycling.

STEP 6

Return your Battery Collection Form back to school

Turn the form into your teacher or advisor by **Friday, April 3rd**.

STEP 7

DON'T STOP RECYCLING!

Recycle your used batteries all year long!

Safety Guidelines

Guidelines for Parents and Guardians Supervising Battery Collecting

Safety is always a top priority when it comes to battery recycling. Knowing how to responsibly manage your used batteries helps protect people and property. Properly preparing your batteries keeps everyone involved in the battery recycling journey safe. Follow these easy safety instructions:

- Store batteries in a cool place, preferably in cardboard or plastic, avoiding metal containers.
- Keep batteries dry and away from sources of heat, combustible, or flammable materials.
- Protect the terminals on batteries that can easily short circuit (e.g., 9V or lithium-ion batteries) by taping their terminals with non-conductive tape, like electrical or duct tape. You can also individually bag batteries.

Many drop-off locations in Vermont have individual bags and materials to help you recycle batteries properly.

There is more information online about [safely preparing your batteries](#).

1. Battery Basics

Understanding the different types and chemistries of batteries is an important part of the battery quest! Use this chart as a guide. If you can't quite figure it out, ask your parent or guardian for help.

Primary/ Single-Use

Primary batteries are batteries meant to be used once and then recycled. They cannot be recharged!



Battery Type	Common Items that use each battery type
AA	Smoke/ fire detectors, clocks, remote controls, game controllers, digital cameras
AAA	Wireless keyboards, wireless mouse devices, game controllers, remote controls, digital cameras
D-Cell/ C-Cell	Flashlights, portable radios, camping lamps, portable electronic air pumps
6-Volt	Camping lamps
9-Volt	Smoke/ fire detectors, Walkie-Talkies
Button Cell	Watches, hearing aids, car key remotes, pacemakers

1. Battery Basics (continued)

Rechargeable

There are four types of rechargeable batteries. Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (Ni-MH), Lithium Ion (Li-Ion), and Small Sealed Lead Acid (SSLA/Pb). Any item that needs to be plugged-in to charge probably uses one of these types of batteries!

Ni-Cd and Ni-MH batteries

Ni-Cd (Nickel Cadmium)



Ni-MH (Nickel Metal Hydride)



Commonly found in cordless power tools, digital cameras, video cameras, and cordless phones.

Li-Ion batteries

Li-Ion (Lithium Ion)



Commonly found in cellphones, laptops, rechargeable portable speakers, and other handheld electronic devices.

SSLA/Pb batteries

SSLA/Pb (Small Sealed Lead Acid)



Commonly found in electric scooters, emergency devices, exit signs and security systems.

Sometimes AA, AAA, D-Cell and C-Cell batteries are also rechargeable.



2. Home Battery Estimator

What items in your home use batteries?

Item name	Number of items	Battery Type (Use the chart on the previous page)	Where was it located?
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Do you have any of these items in your home?

Laptops/ Tablets			
Cellphones			
Flashlights			
Fire/Smoke Detectors			
Portable speakers			
Cordless Power tools			
Clocks			
Wireless game controllers			
Car keys/ remotes			
Toys/Games			
TV/Cable remotes			
Video/digital cameras			

What other items in your home use batteries? (Use the space below.)

3. Where is your nearest drop-off location?

There are battery drop-off locations throughout Vermont where batteries can be safely collected to be recycled. 99% of Vermonters live within 10-miles of a drop-off location. Which locations are nearest to you?

Answer: _____

Don't know where your nearest drop-off location is?
Go to www.call2recycle.org/locator with your parent or guardian to find all of the available locations near you.

4. Time to collect!

To get started, collect the used batteries around your home with your parent or guardian. Don't forget to show them the **Safety Guidelines** first.

5. To the drop-off site!

Use the **Battery Collection Tracker** to record how many batteries you bring to drop-off locations.

6. Turn in your Battery Collection Tracker

Turn in your filled-out Battery Collection Tracker sheet to your teacher or club advisor by **Friday, April 3rd** so that your collections are counted toward the total.

This is a great way to get your family and community involved. Check with your parent or guardian if you can ask relatives, neighbors or community centers for their used batteries and spread the battery recycling message!

7. Keep recycling!

DON'T STOP RECYCLING. Recycle your used batteries all year long!

**Every battery counts - in Vermont,
ALL batteries can be recycled.**



Remove this sheet

Your Name: _____

Record the number of each type of battery in a different box, even if you bring them to a drop-off location all at the same time!

**School Battery
QUEST!** 

Battery Collection Tracker

Drop-Off Date: _____			
AA	AAA	C-Cell	Rechargeable
D-Cell	9-Volt	Button Cell	Unknown

Drop-Off Date: _____			
AA	AAA	C-Cell	Rechargeable
D-Cell	9-Volt	Button Cell	Unknown

Drop-Off Date: _____			
AA	AAA	C-Cell	Rechargeable
D-Cell	9-Volt	Button Cell	Unknown