

**RESOURCE LIBRARY**  
ACTIVITY : 50 MINS

## Create Your Video Challenge

In small groups, students create the final product for the unit project: a short video challenge that communicates why and how to recycle lithium-ion batteries and e-waste to a particular target audience, through the lens of a circular economy.

### GRADES

6 - 8

### SUBJECTS

*Biology, Health, Earth Science, Social Studies, Economics, Storytelling, Filmmaking*

### CONTENTS

3 PDFs

## OVERVIEW

In small groups, students create the final product for the unit project: a short video challenge that communicates why and how to recycle lithium-ion batteries and e-waste to a particular target audience, through the lens of a circular economy.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/create-your-video-challenge/>

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## DIRECTIONS

**Closing the Loop: Towards a Circular Economy** unit driving question: How can we make our economy more circular, and why does it matter?

**Spread the Word to Make an Impact** lesson driving question: How can we create a culture of battery recycling in our community?

### 1. Review the video guidelines and prepare students for producing their video challenge.

- Welcome students to class by announcing that the time to create their video challenge has finally arrived. Motivate them to succeed by reminding them about all they have learned about circular and linear economies, lithium-ion batteries, and how increasing battery recycling can have positive societal and environmental impacts.
- If you haven't done so previously, provide them with the details for the Video Challenge Festival, at which their video proposals will be shared with the community and experts.
- Organize students into their project groups and ensure they have access to their group's Video Storyboard and Script handout, which should be finalized.
  - If necessary, also prompt them to consult the Peer Review Feedback Sheet to incorporate feedback from their peers.

### 2. Support students as they create their video challenge.

- Introduce and provide access to the options available to students for creating their video challenge, including but not limited to: online animation tools, digital cameras or tablets for creating short live action or stop motion films, and digital slide software.
- Encourage group members to take on different roles as they create their video challenge. Roles can include Fact Checker, Actor/Narrator, Video Producer, Animator/Illustrator.
- Given the limited time that students have to create their video challenge, emphasize execution over perfection. Ensure that they address each part of the storyboard, to create a narrative arc that fits the online video genre.

### 3. Provide options for students to finalize their videos and promote their culminating presentations.

- As students finish their videos, consider different options for them to finalize and prepare for the culminating presentations. Some options include:
  - Pointing students towards the *Final Product Checklist and Rubric* to make sure their videos fulfill the criteria.
  - Create promotional materials for the Video Challenge Festival, including hashtags and other online materials, especially if the festival will be held virtually.
  - Have students create a digital pledge that festival audience members and later viewers can sign to change their behaviors in regard to lithium-ion battery use and disposal.
  - Brainstorm types of experts and community members, both within and outside of the school, who should be invited to attend the festival. If possible, invite members of the target audiences that students have decided on for their videos.
  - Determine roles for facilitating the festival, which students will fulfill. These could include: Emcee, Tech Support, or Audience Circulators.
- Once students' videos are complete, upload them to a shared video platform so that students and audience members can easily access them to share in the next activity.

## Modification

**Step 1:** For classrooms with limited access to recording devices, have students create a slideshow presentation with recorded narration. This can be downloaded as a video file and shared via social media.

## Tip

**Step 3:** Explore different options for sharing students' videos on social media in safe and appropriate ways; this may entail you as the teacher uploading to a shared platform rather than having students share on their personal accounts, especially if not all students have access.

## Rubric

Students' videos demonstrate their mastery of all concepts and standards taught in this unit. Use the standards-aligned *Final Product Checklist and Rubric* to assess groups' videos.

## OBJECTIVES

# Subjects & Disciplines

## Biology

- Health

## Earth Science

## Social Studies

- Economics

## Storytelling

- Filmmaking

# Learning Objectives

Students will:

- Create a short video challenge directed at a particular audience to communicate the benefits of recycling devices that use lithium-ion batteries.

# Teaching Approach

- Project-based learning

# Teaching Methods

- Discussions
- Hands-on learning
- Self-directed learning

# Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
  - Information, Media, and Technology Skills
    - Information Literacy
    - Information, Communications, and Technology Literacy

- Learning and Innovation Skills
  - Communication and Collaboration
  - Creativity and Innovation
- Life and Career Skills
  - Leadership and Responsibility
  - Productivity and Accountability
  - Social and Cross-Cultural Skills
- 21st Century Themes
  - Environmental Literacy
- Critical Thinking Skills
  - Applying
  - Creating
- Science and Engineering Practices
  - Obtaining, evaluating, and communicating information

# National Standards, Principles, and Practices

## COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

- **CCSS.ELA-LITERACY.WHST.6-8.2.D:**

Use precise language and domain-specific vocabulary to inform about or explain the topic.

## NEXT GENERATION SCIENCE STANDARDS

- **MS-ESS3: Earth and Human Activity:**

MS-ESS3-3: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment

- **Science and Engineering Practice 8:**

Obtaining, evaluating, and communicating information

### Preparation

### What You'll Need

### REQUIRED TECHNOLOGY

- Internet Access: Required

- Tech Setup: 1 computer per pair, Audio recording device, Digital camera (and related equipment), Media production software, Mobile data device (smartphone or tablet), Video camera (and related equipment), Webcam

## PHYSICAL SPACE

- Classroom

## SETUP

Students will need access to digital devices to record sound and video in this activity. While they are recording, they will also need access to spaces with minimal ambient noise. Prior to teaching this lesson, establish locations where students can record sound and video without interruption.

## GROUPING

- Small-group work

## BACKGROUND & VOCABULARY

### Background Information

In today's internet-driven society, short videos are an ideal format for communicating information and ideas, especially in regard to changing individual behaviors to contribute to broader social change. For videos to have maximum impact, they need to:

1. quickly capture the attention of a target audience,
2. clearly communicate a key takeaway message,
3. provide ideas about how the viewer can take action
4. be brief and visually appealing.

Having an authentic venue and audience for students' final products builds their motivation through the creation process and increases engagement during the culminating presentations. Bringing outside community members and disciplinary experts into the

classroom (whether in-person or virtually) also helps students make connections between their project work and possible STEM career pathways.

# Prior Knowledge

["Environmental and health impacts of mining lithium", "How and why to recycle lithium-ion batteries", "Circular versus linear economies"]

# Recommended Prior Activities

- None

# Vocabulary

Term	Part of Speech	Definition
circular economy	<i>noun</i>	a system of production that extends the lifespan of consumer goods by maximizing reusing and recycling, and minimizing throwing things away.
linear economy	<i>noun</i>	system where raw materials are collected and transformed into products, which are eventually discarded as waste.
recycle	<i>verb</i>	to clean or process in order to make suitable for reuse.

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## For Further Exploration

### Articles & Profiles

- [How to Create Engaging Short Videos for Social Media \(Including Seven Excellent Examples\)](#)



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