

## RECYCLED CLOTHING

- Grade Level: 7-8
- Subjects: Science, Art
- Suggested Time: 3 periods

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*Customize old clothes into wearable ways to save energy.*

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### Materials

Chalk/white board, computers with internet access, old clothes, fabric paint, sharpie markers, fabric glue, scissors, needles, thread, and other desired craft or sewing supplies.

### National Standards

#### Science:

- Properties and changes of properties in matter.
- Population and ecosystems.

### Ohio 2010 Standards

#### Art:

- Use multiple sources to research various art forms used for social, cultural or political purposes.
- Explain how social, cultural and political factors affect what artists, architects or designers create.
- Create a visual product that reflects current, cultural influences.

#### Science:

- Matter is transferred continuously between one organism to another and between organisms and their physical environments. (7)

### Objectives

The student will be able to:

- Read clothing tags to identify the fabric type and country where it was made.
- Research the resources required to make different types of fabric and to manufacture clothing.
- Explain the benefits of recycling clothing.
- Recycle old clothing into a new clothing item.



## Teacher Preparation

Art or home economics teachers may wish to collaborate with science teachers for this cross-disciplinary lesson.

## Introduction

- Ask students what their favorite piece of clothing is. How long have they had that clothing item?
- Ask students when they last bought clothing. How often do they go shopping for clothes?
- Discuss students' reasons for buying new clothes—does it have more to do with fashion or necessity?
- Tell students they will be learning about the resources it takes to make clothes. Then they will recycle old clothing to make original pieces of clothing.

## Activities

### Day One:

- Students should check the clothing tag on a friend's (same gender) shirt and find the fabric type(s). As a class, write a list of these fabrics. Then assign students (individually or in groups) to research the resources used to make this fabric. How does this affect the environment (e.g. pesticides for growing cotton).
- Students should write down two reasons to recycle clothing.
- As a class, create a chart on the board showing the resources used to make different types of fabric. Then help students think about the resources and/or types of energy used to manufacture and transport clothes to consumer stores.
- Fabric and clothing factories use natural gas and electricity (often from fossil fuels) to manufacture clothing.
- Fabric dye can harm the environment by entering water sources or emitting harmful gases.
- Carbon dioxide and other greenhouse gases are released by factories.
- Petroleum (for plastic) and metal are used to create buttons, zippers, strings, and other clothing parts.
- Petroleum (gas) is used to transport clothing to stores, which also releases carbon dioxide. Most clothes are made overseas, requiring lots of transportation.
- Assign for students to bring in unwanted, used clothing items the next day. They will use them to create new clothes, or donate extras to a local thrift store.

### Days Two & Three:

- Assign for students to recycle old clothes into wearable items. Provide examples such as:
- Sew fabric patches onto holes in clothing.
- Make old jeans into a purse, using the pockets and zippers to decorate it.
- Sew two old shirts into one, especially if they are ripped or too small.
- Make too-short pants into shorts.
- Sew a hat or scarf from an old fleece jacket.

- Replace lost buttons and mend holes or rips on seams.
- Students should plan their design on paper first, based on the materials available. They may submit them for teacher review, if desired. Students may wish to mend several items instead of creating a new item.
- Review sewing and mending skills, if needed. Students should create what they have designed. Extend the project another day if needed.
- Encourage students to wear their creations to school the next day, and explain to their friends and classmates why they recycled clothing.
- Gather in tact used clothing and drop it off at a local thrift store or shelter.

### Extensions

- Students may hold a recycled clothing fashion show with their new creations. Invite other classes and staff as the audience for the show. The class may write a brief rationale for recycling clothing and choose a student to read it at the beginning of the show.
- Students may find other ways to inform people about the environmental and social impacts of manufacturing clothing, such as writing an article for the school newspaper, writing an informative PA announcement, or making a short video to raise awareness.
- Students may ask their families for mending work and complete it for credit.

### Closing

Ask students how they plan to change their long-term clothes-buying habits. Will they buy fewer clothes, shop less often, shop at thrift stores, recycle using hand-me-downs, or buy organic cotton or American-made brands?