

[Science] Mini-Lesson: Clothing Impact Data Collection

This lesson comes from the *Chasing the Fashion Footprint* project- found in the *A Climate for Change Educator's Toolkit*. Visit www.hiclimatoprojects.org to view the whole project.

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Teacher Instructions:

In this lesson, students will use data collection skills to document the impact of the clothes they are currently wearing. This lesson can be done independently, in small groups, or as a guided lesson. Some sections require students to do the work at home (for example, the closet inventory) so you may choose to omit those sections or assign guidelines for how and when they can be completed. You can use the results of the data collection activities to discuss the long-term impacts of the “fast-fashion” industry.

Standards + Rubric:

The following standard can be assessed during this mini-lesson:

NGSS MS-ETS1-3 Engineering Design

Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

Use the following single-point rubric to give feedback on, or assess, the assignment:

Standard/Content/Skill Being Assessed	Feedback for Improvement	Succeeding - Proficient	Feedback Where Work Exceeds the Standard
Analyze data from tests. (NGSS MS-ETS1-3 Engineering Design)		Analyzed data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria.	

Student Handouts:

Follow the steps below to calculate your fashion footprint!

Part 1: What am I wearing?

<ol style="list-style-type: none">1. Look at the tags on the clothing you are currently wearing2. Make a list of where your clothing pieces were "MADE"<ol style="list-style-type: none">a. <i>Hint: Look for "MADE IN _____"</i>	<p>Made in:</p> <ul style="list-style-type: none">●●●●●●	<p>Count up the # regions your clothes are MADE IN:</p> <p># _____</p>
<p>WHOLE CLASS</p> <ol style="list-style-type: none">3. Put a dot on the class map for each place your clothing pieces were made.		
<ol style="list-style-type: none">4. Look at the class data. What do you notice?	<p>I notice:</p>	

Part 2: What's in my closet?

C A L C U L A T E A T H O M E	Collect Data:	
	# of shirts:	
	#of pants/shorts/bottoms:	
	#of "other" clothing pieces (<i>undergarments, accessories, socks, etc.</i>):	
	Of ALL of your clothing pieces, how many were purchased NEW?	
	Of ALL of your clothing pieces, how many are SECONDHAND?	
	Count up the TOTAL number of clothing pieces in your closet:	
	Investigate: Of the above, list the various regions that your clothing was "made":	
	Shirts:	
	Pants/shorts/bottoms:	
"Other" clothing pieces (<i>undergarments, accessories, socks, etc.</i>):		
Calculate:		

C A L C U L A T E A T S C H O O L	<p>Add up the number of regions that your clothing is made:</p> <p><i>(ex: USA + Guatemala + China = 3 regions)</i></p>	
	<p>Divide the number of NEW clothing pieces by the TOTAL number of clothing pieces.</p> <p>Multiply by 100</p> <p><i>(ex: 4 secondhand pieces)</i></p>	
	<p>Complete the THREDUP Fashion Footprint Calculator. Record your results below:</p>	
	<p>Your fashion footprint is:</p>	
	<p>Annual carbon emissions:</p>	
	<p>How does your fashion footprint compare to the average?</p>	
	<p>Equivalent to how many flights from San Francisco to Los Angeles?</p>	