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Overview/ Objectives:

This lesson plan is designed in collaboration with EARTHDAY.ORG's Fashion for the Earth campaign to educate students about the environmental and social implications of fast fashion and promote sustainable fashion choices. Here at EARTHDAY.ORG we aim to raise awareness about the detrimental effects of the fashion industry on the planet and advocate for more sustainable practices in the fashion world. Through a series of interactive activities, students will explore the fast fashion industry's impact on natural resources. They will also discover the environmental benefits of adopting sustainable fashion practices promoted by EARTHDAY.ORG's Fashion for the Earth campaign. By the end of the lesson, students will be equipped with the knowledge and critical thinking skills to make informed choices as conscious consumers during the back-to-school season.

Following the overview, the section details the objectives of the materials. After reading and completing this packet, students will be able to...

- Understand the concept and impact of fast fashion on the environment and society.
- Identify sustainable fashion alternatives and their benefits.
- Foster critical thinking skills and awareness of responsible fashion consumption, inspiring students to become advocates for sustainable fashion choices.

Information and Additional Resources:

Earthday.org's Fashion for the Earth Campaign

EARTHDAY.ORG's Fashion for the Earth Campaign is a global initiative dedicated to advocating for sustainable and environmentally responsible practices within the fashion industry. The campaign aims to raise awareness about the environmental impacts of fashion consumption and production. By encouraging individuals to adopt mindful and sustainable fashion choices, the campaign seeks to reduce the industry's ecological footprint and promote a more sustainable future.

Environmental Impacts of Fast Fashion:

Fast fashion, a dominant aspect of the fashion industry, has far-reaching environmental consequences. The demand for low-cost and rapidly produced clothing leads to overconsumption and increased textile waste. The production of synthetic fabrics, such as polyester and nylon, requires substantial energy and releases harmful chemicals into the environment. Moreover, the fashion industry is responsible for significant greenhouse gas emissions and water pollution, impacting ecosystems and biodiversity. Through the Fashion for the Earth Campaign,

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EARTHDAY.ORG aims to address these environmental challenges and inspire individuals to support sustainable fashion alternatives that prioritize planet-friendly materials, ethical labor practices, and extended product lifecycles.

EARTHDAY.ORG Additional Resources:

- 1. Fashion for the Earth Campaign
- 2. Swap for the Earth Toolkit
- 3. Petition Against Fast Fashion
- 4. Toxic textiles, The Chemicals in our Clothing
- 5. How Does Oil Become Fabric
- 6. <u>A Critical Lens on Shein's Extended Producer Responsibility Fund: Fast Fashion Greenwashing?</u>

These resources from EARTHDAY.ORG provide valuable information about fast fashion's environmental impacts and tips for adopting sustainable fashion practices. Students are encouraged to explore these resources to gain a deeper understanding of the issues and to support informed discussions during the lesson.

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Activities

<u>Title:</u> Introduction to Fast Fashion

Estimate Time: 40 minutes

Subject/Course: Social Studies and Environmental Science

Grade: 3rd-5th grade

Topic: Fast Fashion and Sustainability

SDG Integration: 12, 13

Objective:

Introducing the concept of fast fashion and promoting sustainable clothing choices through interactive activities and discussions.

Materials/Resources:

- Paper
- Color pencils
- Other art supplies

Established Goals:

Students will explore ways to make more conscious clothing decisions and contribute to a healthier planet. Key concepts include "sustainability," "fast fashion", and "environmental impact".

Essential Question:

- What is fast fashion, and how does it differ from sustainable fashion?
- How can you tell whether an outfit is an example of fast fashion or sustainable fashion?

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Students will be able to...

- Recognize various factors that determine whether clothing choices are sustainable or unsustainable.
- Apply their understanding of sustainable clothing choices to the design of their own eco-friendly outfit during the activity.

Vocabulary Words:

- 1. Fast fashion
- 2. Sustainable fashion
- 3. Trendy
- 4. Organic cotton
- 5. Artisan

Assessment Evidence

Performance Tasks:

Create an interactive game using a slideshow that displays different pairs of clothing options (or use our example slideshow below). For each pair, one option should be more sustainable while the other is less sustainable. The students will have to think about which clothing option is more eco-friendly. As each slide is shown, engage the students by asking questions like:

- Which option do you think is better for the Earth?
- Why do you think one option might be better than the other?

Example Pairs of Clothing Options:

- 1. New Clothes vs. Old Clothes
- 2. Cotton Clothes vs. Plastic Clothes
- 3. Local Clothes vs. Clothes Shipped from Far Away
- 4. Handmade Clothes vs. Factory-Made Clothes
- 5. Reusable Clothes vs. Clothes that Get Thrown Away

After each slide have a brief class discussion about why one option is more sustainable than the other. Encourage students to share their thoughts and

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reasoning. This interactive game will help them understand the choices they can make to be more eco-friendly when it comes to clothing.

Limited in time? Check out our example slideshow

Learning Plan

Learning Activities:

Allow students to design their own sustainable outfit. Provide students with paper, colored pencils, and other art supplies. Ask them to design an outfit that they think is sustainable. Encourage them to think about using fewer resources and reusing materials. During this activity, ask:

- How can you make your outfit using less fabric or materials?
- Can you think of ways to make clothes last longer so we don't need to buy new ones as often?

After giving them time to work on their design allow them to share their sustainable outfit designs and explain why they made certain choices. Emphasize the importance of using fewer materials and taking care of clothes to make them last longer. Ask:

- What choices did you make to create a sustainable outfit?
- How does your design help the environment?

Student Reflection Plan

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Student Reflection:

Summarize the main points of the lesson, highlighting the difference between sustainable and fast fashion. Encourage students to think about the clothing choices they make and how they can help the environment by choosing sustainable options. Use the questions you provided earlier for reflection:

- What is one thing you learned about sustainable clothing?
- How can you help the Earth by choosing sustainable clothes?
- What is one small change you can make to your clothing habits to be more sustainable?

Additional resources

- CBS Kids: Your back-to-school outfit could be bad for the planet I CBC Kids News
- Kids.EARTH.Org: 6 Interesting Facts About Fast Fashion for Kids
- The Guardian: Want to Teach Ethical Fashion to Kids? Here's how

If you want to share your student's activities, please take pictures and send them to education@earthday.org. Please share the photos on our social media platforms (Instagram, Twitter, and TikTok) using these hashtags #earthdayeveryday #earthday_education, #earthdayeduchampions, and #earthday_ed (include your name, grade level, number of students participating, and class subject).

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Alignment to NGSS / PARCC

Students who demonstrate understanding can

ESS3-3.

Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.*

[Clarification Statement: Examples of the design process include examining human environmental impacts, assessing the kinds of solutions that are feasible, and designing and evaluating solutions that could reduce that impact. Examples of human impacts can include water usage (such as the withdrawal of water from streams and aquifers or the construction of dams and levees), land usage (such as urban development, agriculture, or the removal of wetlands), and pollution (such as of the air, water, or land).]

The performance expectation above was developed using the following elements from the NRC document A Framework for K-12 Science Education:

Science and Engineering Practices

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 6–8 builds on K–5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories

Apply scientific principles to design an object, tool, process or system.

Disciplinary Core Ideas

ESS3.C: Human Impacts on Earth Systems

- · Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth's environments can have different impacts (negative and positive) for different living things.
- Typically as human populations and per-capita consumption of natural resources increase, so do the negative impacts on Earth unless the activities and technologies involved are engineered otherwise.

Crosscutting Concepts

Cause and Effect

· Relationships can be classified as causal or correlational, and correlation does not necessarily imply causation.

Connections to Engineering, Technology, and Applications of Science

Influence of Science, Engineering, and Technology on Society and the Natural World

The uses of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in factors as climate, natural resources, and economic conditions. Thus technology use varies from region to region and over time

Connections to other DCIs in this grade-band

MS.LS2.A; MS.LS2.C, MS.LS4.D

Articulation of DCIs across grade-band

3.LS2.C; 3.LS4.D; 5.ESS3.C; HS.LS2.C; HS.LS4.C; HS.LS4.D; HS.ESS2.C; HS.ESS2.D; HS.ESS2.E; HS.ESS3.C; HS.ESS3.D

Common Core State Standards Connections

WHST.6-8.7

Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. (MS-ESS3-3)

WHST.6-8.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (MS-ESS3-3)

Mathematics -

Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. (MS-ESS3-3) 7.RP.A.2

Recognize and represent proportional relationships between quantities. (MS-ESS3-3)

Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an 6.EE.B.6

unknown number, or, depending on the purpose at hand, any number in a specified set. (MS-ESS3-3)

Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by

7.EE.B.4

reasoning about the quantities. (MS-ESS3-3)

Source: MS-ESS3-3 Earth and Human Activity | Next Generation Science Standards

(nextgenscience.org)

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Students who demonstrate understanding can:

Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.* [Clarification

Statement: Examples of data on the impacts of human activities could include the quantities and types of pollutants released. changes to biomass and species diversity, or areal changes in land surface use (such as for urban development, agriculture and livestock, or surface mining). Examples for limiting future impacts could range from local efforts (such as reducing, reusing, and recycling resources) to large-scale geoengineering design solutions (such as altering global temperatures by making large changes to the atmosphere or ocean).]

The performance expectation above was developed using the following elements from the NRC document A Framework for K-12 Science Education:

Science and Engineering Practices

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 9-12 builds on K–8 experiences and progresses to explanations and designs that are supported by multiple and independent student-generated sources of evidence consistent with scientific knowledge, principles, and theories

Design or refine a solution to a complex realworld problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and tradeoff considerations.

Disciplinary Core Ideas

ESS3.C: Human Impacts on Earth Systems

 Scientists and engineers can make major contributions by developing technologies that produce less pollution and waste and that preclude ecosystem degradation.

ETS1.B: Developing Possible Solutions

 When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts. (secondary)

Crosscutting Concepts

Stability and Change

· Feedback (negative or positive) can stabilize or destabilize a system.

Connections to Engineering, Technology, and Applications of Science

Influence of Science, Engineering, and Technology on Society and the Natural World

 Engineers continuously modify these technological systems by applying scientific knowledge and engineering design practices to increase benefits while decreasing costs and risks

Connections to other DCIs in this grade-band.

HS.LS2.C; HS.LS4.D

Articulation of DCIs across grade-bands.

MS.LS2.C: MS.ESS2.A: MS.ESS3.B: MS.ESS3.C: MS.ESS3.D

Common Core State Standards Connections.

ELA/Literacy -RST.11-12.1

4.

Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or

inconsistencies in the account. (HS-ESS3-4)

Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. (HS-ESS3-4) RST.11-12.8

Mathematics -

MP.2 Reason abstractly and quantitatively. (HS-ESS3-4) HSN.Q.A.1

Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose

and interpret the scale and the origin in graphs and data displays. (HS-ESS3-4) HSN.Q.A.2 Define appropriate quantities for the purpose of descriptive modeling. (HS-ESS3-4)

HSN.Q.A.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. (HS-ESS3-4)

Source: HS-ESS3-4 Earth and Human Activity | Next Generation Science Standards

(nextgenscience.org)