

# Giving Back to the Planet December 2024 Lesson Plan: High School

Lesson Plan: Giving Back to the Planet Grade Level: High School Duration: 60-75 minutes Subject Areas: Environmental Science, Social Studies, Sustainability

#### Lesson Overview:

In this lesson, high school students will analyze the environmental impact of waste, especially during the holiday season, and explore sustainable practices that individuals and communities can adopt to reduce their ecological footprints. Through group discussions, case studies, and critical reflection, students will develop their own "Giving Back Eco-Plan," outlining concrete actions for improving sustainability in their personal lives and local communities. The lesson will emphasize the importance of systems thinking, sustainable consumerism, and personal responsibility in the context of global environmental challenges.

#### **Materials Needed:**

- Infographic or data on holiday waste and its environmental impact (digital or print)
- Case study handouts (e.g., waste reduction programs, successful sustainability initiatives)
- Worksheet: "Giving Back to the Planet Eco-Plan"
- Whiteboard or digital collaboration tool (e.g., Jamboard, Google Docs)
- Markers and paper for group brainstorming

#### 1. Introduction and Discussion (15 minutes)

Topic: The Environmental Cost of Excessive Consumption and Waste

- Start with a provocative question: "How many of you have seen piles of wrapping paper or plastic waste after a holiday celebration? What happens to all that trash?"
- Present an infographic or statistics showing the environmental toll of excess holiday waste (plastic, food waste, packaging). Highlight the global impact of waste and unsustainable consumer habits. You can find an example here: <u>https://inhabitat.com/eye-opening-info-graphic-illustrates-how-much-we-waste-each-holid ay-season/</u>
- Facilitate a class discussion with the following questions:
  - How do holiday traditions contribute to waste, and how can we rethink them?
  - What environmental problems do we face due to waste (e.g., pollution, resource depletion)?
  - What are the challenges in reducing waste on an individual and community level?



Introduce the concepts of *systems thinking*—understanding how our actions connect to larger global environmental issues—and *sustainable consumerism*.

#### 2. Case Study and Group Discussion: Sustainable Solutions (20 minutes)

**Objective:** Investigate real-world examples of waste reduction and sustainability initiatives.

- Divide students into small groups. Distribute case studies of successful sustainability programs, such as community recycling initiatives, corporate waste reduction policies, or cities aiming to reduce their carbon footprints.
- Assign each group to review and discuss their case study, focusing on the following questions:
  - What were the main strategies used to reduce waste or promote sustainability?
  - What were the challenges faced during the implementation of these strategies?
  - How can these strategies be adapted or scaled to other communities or individuals?
- Have each group present their case study and its key takeaways to the class, encouraging a broader discussion on scalability and individual action.

#### 3. Worksheet: "Give Back to the Planet Eco-Plan" (20 minutes)

**Objective:** Have students critically reflect on how they can reduce their personal and collective environmental impact.

- Hand out the **"Give Back to the Planet Eco-Plan"** worksheet. This worksheet is designed to encourage deep reflection and higher-level thinking.
- After completing the worksheet, students can share their action plans in small groups for feedback and discussion. This will foster peer accountability and encourage idea sharing.

#### 4. Group Brainstorming: Scaling Sustainable Practices (15 minutes)

**Objective:** Discuss how sustainable practices can be applied at the community or school level.

- Ask students to brainstorm ideas for sustainability projects or initiatives that could be implemented in their school or local community. Possible ideas could include:
  - Organizing a waste reduction or recycling challenge at school
  - Launching a campaign to encourage sustainable shopping habits
  - Implementing an energy-saving program in classrooms or at home



• Use a whiteboard or digital tool (like Jamboard or Google Docs) to organize the ideas and prioritize the most feasible or impactful projects. Discuss the potential barriers to these projects (e.g., cost, time, awareness) and how they can be overcome.

#### 5. Wrap-Up and Reflection (5-10 minutes)

- **Reflection Question:** Ask each student to share one actionable step they will take over the next month to reduce their environmental impact.
- Revisit the concept of *systems thinking* and emphasize that even small individual actions can lead to larger societal shifts when adopted by many people.
- Encourage students to think beyond the holidays and consider sustainability as a year-round commitment.

### Assessment:

- **Participation:** Engagement in group discussions, case study analysis, and brainstorming sessions.
- **Reflection:** Completion of the "Creating My Giving Back Eco-Plan" worksheet.
- **Collaboration:** Contribution to the group's brainstorming session and ability to offer constructive feedback to peers.

#### **Extension Activities:**

#### 1. Sustainability Campaign:

Have students plan and execute a sustainability awareness campaign at school, focusing on a specific issue (e.g., reducing single-use plastics, improving school recycling practices). This can involve creating posters, hosting a discussion panel, or organizing a challenge to reduce waste.

## 2. Research Project:

Assign students to research a specific environmental issue or sustainable practice and create a report or presentation. Topics could include waste-to-energy technologies, circular economies, or the environmental impact of fast fashion.

## 3. Sustainability Documentary Viewing:

Watch a documentary like *The True Cost* (on fast fashion) or *An Inconvenient Truth* (on climate change). Facilitate a post-viewing discussion on how the film's content relates to the students' lives and what steps they can take to mitigate the environmental issues raised.

#### 4. Community Clean-Up/Planting Event:

Organize a school-wide or community clean-up event or tree-planting activity. Have



students track the amount of waste collected or the number of trees planted and discuss the environmental benefits of their actions.