

Lesson Plan 2 – STREAMS Education: TECHNOLOGY

Lesson Plan: **How Technology Can Help Our Planet Address Climate Action**

Grade Level: 8-12 year old students

Objective: Students will understand how technology can be used to address climate change and its impact on the planet. They will also identify and evaluate examples of how technology has been used to reduce carbon footprint and mitigate the effects of climate change.

Materials Needed:

- Computer or tablet with internet access
- Projector or large monitor
- YouTube videos (links provided below)
- Worksheets and assessments (provided below)

Procedure:

Introduction (10 minutes)

- Begin by asking students if they know what climate change is, and if they have heard of any ways that technology can help address climate change.
- Discuss with the class how technology can be used to reduce carbon emissions and the impact of climate change on the planet.

Main Activity (40 minutes)

- Show the class the following videos and ask students to take notes on what they see and hear:
 1. How Technology Can Save the Planet: <https://www.youtube.com/watch?v=qC-cqN3yMxl>
 2. 5 Amazing Ways Technology is Helping the Environment: <https://www.youtube.com/watch?v=Nsg6U7BYyYQ>
- After the videos, divide the class into groups of 3-4 students and give each group a worksheet to complete. The worksheet will ask students to identify one example of technology used to address climate change from the videos they just watched and explain how it works.
- Once all groups have completed their worksheets, have them present their findings to the class.

Assessment (10 minutes)

- Have students take a short quiz (provided below) to assess their understanding of the topic.
- Review answers as a class and discuss any areas where students may need further clarification.

Conclusion (5 minutes)

- Summarize the key takeaways from the lesson and encourage students to think about ways they can personally help reduce their carbon footprint.

Worksheets: Name: _____

Example of Technology Used to Address Climate Change: _____

How does it work?

Quiz:

1. What is climate change?
2. Name one example of technology that can be used to reduce carbon emissions.
3. Why is it important to address climate change?
4. How can you personally help reduce your carbon footprint?

Answers:

1. Climate change refers to long-term changes in the temperature, precipitation, and other atmospheric conditions of the earth.
2. Answers may vary, but examples could include: solar panels, electric cars, wind turbines, or energy-efficient appliances.
3. It is important to address climate change because it poses a significant threat to the planet's ecosystems, biodiversity, and human health and well-being.
4. Answers may vary, but examples could include: using public transportation or carpooling, reducing meat consumption, recycling, or reducing energy usage at home