### Living on a Livable Planet - What I Can Do to Help

### Objectives:

Students will understand and be able to explain key terms related to climate change, including carbon footprint, renewable energy, and sustainable living.
Students will recognize the local and global impacts of individual actions on the health of the planet.
Students will develop a perspective on various sustainable practices and identify feasible changes they can make in their own lives.
Students will enhance their awareness of global citizenship, social responsibility, and sustainability actions.

### Outline:

|  |  |  |  |
| --- | --- | --- | --- |
| Phase | Time | Content | Activity Type |
| Introduction | 20 min | Introduction to the topic with a potentially thought-provoking question “What does your carbon footprint look like?" and a brief overview of climate change and sustainability | Whole class through teacher-student discussion |
| Exploration | 45 min | Working in small groups, students will research various aspects of sustainable living (e.g., renewable energy, waste reduction, sustainable agriculture) and assess their own lifestyles for environmental impact | Group work, individual reflection |
| Expansion | 60 min | Each group will present their findings and discuss practical ways they can reduce their environmental impact. This can include school-wide initiatives, individual actions at home, and advocacy in the community. | Group presentations, whole class discussion |
| Application | 70 min | Students will individually draft a personal action plan, outlining their current environmental impact and detailing changes they plan to implement to reduce their carbon footprint | Individual work |
| Conclusion | 10 min | Reflection on the session, highlighting key learning points, and a discussion on the importance of each person's role in combating climate change | Whole class led by the teacher |
| Homework |  | Students will implement their action plans over the course of two weeks and maintain a journal documenting their progress | Individual assignment |

### Assessment:

**Formative Assessment**: The teacher will assess understanding and engagement during class discussions and group work. Mini quizzes will be given at the end of each major phase to gauge students' understanding of the various sustainability concepts.

**Summative Assessment**: Students will submit their personal action plans and two-week journals for assessment. They will be evaluated based on their understanding of sustainable living concepts, the feasibility and impact of their proposed actions, and their commitment to implementing changes.

**Rubrics**: Assessment will be based on the clarity of explanation, depth of analysis, creativity in problem-solving, and ability to synthesize information across different sustainability concepts. Their journal will also be assessed for consistency, reflection, and growth. These assessments aim to nurture an understanding of sustainable actions and empower students to make tangible changes in their lives to help the planet.

**Living on a Livable Planet - What I Can Do to Help**

**Presentation**

Slide 1:

Title: Living on a Livable Planet - What I Can Do to Help

Image: **Earth with a diverse natural landscape**

Slide 2:

Title: Climate Change

Content:

Slide 3:

Title: Carbon Footprint

Content:

Slide 4:

Title: Sustainability and Renewable Energy

Content:

Slide 5:

Title: Taking Action for a Sustainable Future

Content:

Slide 6:

Title: Conclusion

Content:

Slide 7:

Include interactive elements within the presentation, such as:

Note: The presentation should be concise, with bullet points for easy reading. The entire presentation should last no longer than 15 minutes, allowing 5 minutes for class discussion and interaction.

Worksheet: Sustainable Living Practices

Introduction:
Sustainable living practices are actions and choices that help to conserve resources, protect the environment, and ensure a livable planet for future generations. In this worksheet, you will explore three important aspects of sustainable living: renewable energy, waste reduction, and sustainable agriculture. You will also assess your own lifestyle and identify ways you can make a positive impact on the environment.

Section 1: Renewable Energy

Read the information below and answer the questions that follow.
Renewable energy is generated from sources that are naturally replenished and have minimal impact on the environment. Examples of renewable energy sources include solar power, wind power, hydropower, and geothermal energy.

Questions:
a. What are some examples of renewable energy sources?
b. Why is renewable energy important for sustainable living?

Section 2: Waste Reduction

Read the information below and answer the questions that follow.
Waste reduction involves minimizing the amount of waste we produce and finding ways to reuse and recycle materials. By reducing waste, we can conserve resources and reduce the negative impact on the environment.

Questions:
a. How can you reduce waste in your daily life?
b. Why is waste reduction important for sustainable living?

Section 3: Sustainable Agriculture

Read the information below and answer the questions that follow.
Sustainable agriculture aims to produce food in a way that is environmentally friendly, socially responsible, and economically viable. It involves practices such as organic farming, crop rotation, and minimizing pesticide use.

Questions:
a. What are some examples of sustainable agriculture practices?
b. How does sustainable agriculture contribute to a livable planet?

Self-Assessment:

Reflect on your own lifestyle and answer the following questions:
a. How often do you use public transportation instead of a personal vehicle?
b. Do you regularly recycle or compost at home?
c. How frequently do you consume locally-sourced produce?

Group Discussion:

In your small group, discuss the following questions:
a. Which sustainable practice do you find most feasible to implement in your life?
b. What challenges might you face while trying to live more sustainably?
c. How can we as a community support each other in adopting sustainable habits?

Final Thoughts:
Take a moment to jot down any ideas or thoughts that have emerged from your group discussions. These will help you in the next phase of the lesson, where you will draft your personal action plan for sustainable living.

Remember, small changes in our daily habits can make a big difference! Let's work together to create a more sustainable and livable planet for all.

Internet Search Results:

Renewable Energy: **Google Search**

Waste Reduction: **Google Search**

Sustainable Agriculture: **Google Search**

# Presentation: Living on a livable planet - what I can do to help

**Introduction:**

Slide 1: Title - Living on a livable planet: What I can do to help

Slide 2: Definition of sustainable living and its importance

Slide 3: Impacts of not living sustainably

**Research Findings:**

Slide 4: Title - Renewable Energy

Slide 5: Benefits of renewable energy with relevant images

Slide 6: Examples of renewable energy sources (solar, wind, hydro)

Slide 7: Graph comparing renewable energy to non-renewable energy sources

Slide 8: Title - Waste Reduction

Slide 9: Methods of waste reduction with relevant images

Slide 10: Recycling, composting, and reducing packaging waste

Slide 11: Chart showing the benefits of waste reduction

Slide 12: Title - Sustainable Agriculture

Slide 13: Principles of sustainable agriculture with relevant images

Slide 14: Organic farming, crop rotation, and reducing pesticide use

Slide 15: Graph comparing sustainable agriculture to conventional farming methods

**Personal Lifestyle Assessment:**

Slide 16: Title - Environmental Impact Assessment

Slide 17: Carbon footprint calculation template (e.g., electricity usage, transportation)

Slide 18: Daily habits that are not environmentally friendly

Slide 19: Areas of improvement and potential actions to reduce personal impact

**Proposed Actions for Sustainability:**

Slide 20: Title - School-wide Initiatives

Slide 21: Examples of school-wide initiatives (e.g., recycling programs, energy-efficient practices)

Slide 22: Images showcasing school-wide initiatives

Slide 23: Title - Individual Actions at Home

Slide 24: Examples of individual actions (e.g., reducing water usage, practicing mindful consumption)

Slide 25: Image illustrating individual actions

Slide 26: Title - Advocacy in the Community

Slide 27: Ways to advocate for the environment (e.g., writing to local representatives, participating in community clean-up events)

Slide 28: Images of community advocacy in action

**Conclusion:**

Slide 29: Summary of key points discussed

Slide 30: Encouragement for further discussion and action

**Guidelines for Presentation:**

Each group will have a maximum of 10 minutes to present their findings

Each section (research findings, personal lifestyle assessment, proposed actions) should have approximately equal time allocation

Presenters should use clear and concise language, using visual aids to support their findings

All group members should participate in the presentation and engage in the whole class discussion

**Google search results for images and videos:**

**Renewable energy**

**Waste reduction**

**Sustainable agriculture**

**Carbon footprint**

**School-wide initiatives**

**Individual actions for sustainability**

**Community advocacy for the environment**

### Personal Action Plan for Sustainable Living

**Introduction:**

Creating a personal action plan is an important step towards reducing our individual environmental impact and contributing to a more sustainable future. In this worksheet, you will assess your current environmental impact, set specific goals, and outline the steps you plan to take to reduce your carbon footprint.

**Current Environmental Impact Assessment:**
Think about your daily habits and answer the following questions regarding your environmental impact:

How do you typically commute to school or other places?

How do you use energy at home? Are there any energy-saving habits you could adopt?

What is your typical diet? Do you consume a lot of meat or processed foods?

How much waste do you produce? Are you diligent about recycling or reducing waste?

How much water do you use per day? Do you have any water-saving habits?

**Goal Setting:**
Set specific, measurable, achievable, relevant, and time-bound (SMART) goals for reducing your environmental impact. Consider the categories below and write at least one goal for each category:

Transportation:

Energy usage:

Diet:

Waste production:

Water usage:

**Action Steps:**
Outline the actions you will take to achieve your goals. Consider both short-term and long-term actions, as well as any potential challenges you might face and how you could overcome them. Use the space below to write your action steps.

Transportation:

Short-term actions:

Long-term actions:

Potential challenges and solutions:

Energy usage:

Short-term actions:

Long-term actions:

Potential challenges and solutions:

Diet:

Short-term actions:

Long-term actions:

Potential challenges and solutions:

Waste production:

Short-term actions:

Long-term actions:

Potential challenges and solutions:

Water usage:

Short-term actions:

Long-term actions:

Potential challenges and solutions:

**Reflection:**
In the space below, write about how you think your actions will contribute to a more sustainable future and what you hope to learn from implementing your action plan.

Remember, your personal action plan is a living document that can be adjusted as you learn more about sustainability and as circumstances change. Make sure to regularly revisit and update your plan based on new knowledge and experiences.

**Conclusion: Living on a livable planet - what I can do to help**

**Reflection and Discussion**

**Activity: Reflecting on Our Learning and Commitments**

Take a moment to reflect silently on what you have learned during today's session on living sustainably and combating climate change. Think about the key concepts we discussed, such as carbon footprint, renewable energy, and sustainable living.

Once you have gathered your thoughts, we will engage in a whole class discussion to share what we have learned and our commitments to making a positive impact on the planet.

**Discussion Prompts:**

What is one new thing you learned today about sustainability?

How do you think your actions impact the planet?

What are some changes you plan to make after today's lesson?

Why is it important for everyone to contribute to fighting climate change?

**Instructions for Discussion:**

Write down your responses to the reflection prompts in your notebook or on a piece of paper.

We will go around the classroom, giving each student an opportunity to share their thoughts and commitments.

When it's your turn, speak clearly and concisely, sharing what you have learned and how you plan to implement it.

Be respectful when listening to others and actively engage in the discussion by asking follow-up questions or offering support and advice.

At the end of the discussion, the teacher will summarize the key points and emphasize the collective responsibility and the power of individual actions in combating climate change.

**Note: Encourage students to think beyond the immediate classroom and consider their actions at home, in their communities, and globally when reflecting and discussing their commitments.**

**Reflection and Commitments Worksheet:**

Use the following worksheet to jot down your reflections and commitments:

Write down one new thing you learned about sustainability today:**-**

Reflect on how your actions impact the planet:**-**

List three changes you plan to make after today's lesson:

**Optional**:

Describe why it is important for everyone to contribute to fighting climate change:**-**

Take this worksheet home and keep it as a visual reminder of your commitments. Remember, even small actions matter when it comes to living sustainably and creating a livable planet for future generations.

**My Sustainable Living Journal**

**Cover Page:**

Title: My Sustainable Living Journal

Space for student's name and date range of the journal.

**Introduction Page:**

Brief reminder of the objectives of the personal action plan and the importance of documenting progress.

**Daily Entry Pages:**
Each page should have a date and the following prompts:

Action I took today to reduce my carbon footprint:

Challenges I faced in implementing my action plan:

Successes I experienced today:

Reflection on how my actions today contribute to a sustainable future:

**Weekly Summary Page:**

A page for students to summarize their efforts, reflect on what they've learned, and plan for the next week.

**Measurable Changes Tracker:**

Include a section or page where students can record any quantitative data related to their action plan, such as "Amount of waste reduced," "Water saved," or "Miles traveled by bike instead of car."

**Final Reflection Page:**

A page for students to reflect on their overall experience, what they have learned, and how they plan to continue these practices in the future.

**Instructions Page:**

Clearly outline the expectations for the journal, including:

**Implementation of the material:**
Design a printable document or an editable digital file of the "My Sustainable Living Journal" template. Encourage students to personalize their journals with drawings, photos, or other creative elements that make the journaling process engaging and meaningful.

**Relevant Google search results for images:**

**Sustainable lifestyle images**

**Eco-friendly actions images**

**Relevant Google search results for videos:**

**Sustainable living tips videos**

**Environmental impact videos**

(Note: The search results can provide additional visual inspiration for the journal template and can be used to supplement the lesson plan.)