

Reducing Human Impact on the Environment - Lesson

6th, 7th, 8th Grade

- ✓ **Reducing Human Impact on the Environment:** Why the Environment Matters, What is Human Impact and Common Types, Scientific Monitoring, Government Agencies, and What We Can Do.
- ✓ **Student + Teacher Versions:** Office, Google, and PDF Versions
- ✓ **Multimedia-Rich Lesson with No Prep Required**



Your Lesson

- ✓ **Reducing Human Impact on the Environment:** Why the Environment Matters, What is Human Impact, Common Types of Environmental Impact, The Role of Scientific Monitoring, Government Agencies, and What We Can Do.
- ✓ **Student + Teacher Versions:** Includes editable PowerPoint and Google formats with fill-in-the-blank notes to keep students active and focused. PDF versions also included.
- ✓ **Multimedia-Rich Lesson:** Features diagrams and embedded videos to support visual and auditory learning.
- ✓ **No Extra Prep Required:** Just download, open, and start teaching.

TWO Bonus Activities

Crash Course Geography #46: How Are Cities Organized?

Name: _____ Date: _____

You can access the video here → <https://www.youtube.com/watch?v=hDaW8KleTNw>

1. The buzz of a city includes the constant movement of _____.
2. _____ is the study of how cities grow and change over time.
3. The _____ helps explain the development of towns and cities based on the distribution of services.
4. The _____ is the central area of a city where business activity is concentrated.
5. The _____ Zone Model explains city growth in concentric circles radiating from the city center.
6. The _____ is an area with older industrial buildings and the cheapest housing options.
7. The _____ of Independent Workers is typically home to families needing access to factories.
8. The outermost ring in the Concentric Zone Model is known as the _____.
9. A city's _____ includes its size, shape, and the layout of its streets, homes, and buildings.
10. During the 1850s, cities experienced rapid change due to _____.
11. The process of one social or ethnic group replacing another in a neighborhood is called _____.
12. _____ is the expansion of residential areas into the outer parts of a city.
13. _____ cities are modern urban areas with multiple economic centers, not just a single downtown.
14. In Islamic cities like Fez, narrow streets and inward-facing homes helped provide _____.
15. The historic city of Fez developed around a central _____, surrounded by covered markets.

Crash Course Geography #46: How Are Cities Organized? KEY

1. The buzz of a city includes the constant movement of **people, goods, money, and ideas**.
2. **Urbanization** is the study of how cities grow and change over time.
3. The **Central Place Theory** helps explain the development of towns and cities based on the distribution of services.
4. The **Central Business District** is the central area of a city where business activity is concentrated.
5. The **Concentric Zone Model** explains city growth in concentric circles radiating from the city center.
6. The **Zone of Transition** is an area with older industrial buildings and the cheapest housing options.
7. The **Zone of Independent Workers** is typically home to families needing access to factories.
8. The outermost ring in the Concentric Zone Model is known as the **Zone of Commuters**.
9. A city's **urban form** includes its size, shape, and the layout of its streets, homes, and buildings.
10. During the 1850s, cities experienced rapid change due to **industrialization**.
11. The process of one social or ethnic group replacing another in a neighborhood is called **invasion and succession**.
12. **Suburbanization** is the expansion of residential areas into the outer parts of a city.
13. **Polycentric** cities are modern urban areas with multiple economic centers, not just a single downtown.
14. In Islamic cities like Fez, narrow streets and inward-facing homes helped provide **privacy**.
15. The historic city of Fez developed around a central **mosque**, surrounded by covered markets.

Save the Drops – Designing a Water Conservation Plan

Objective:

Students will examine how much water is used in their home by tracking their usage and surveying their family members and then designing a strategy to reduce water waste.

Project Steps:

1. Track Water Usage:

- Students create a chart for their entire family
 - List all family members (yourself included) and list the activities along the top
 - Fill in the total water usage values for each activity.

	Water used to brush teeth water kept on = 1.2 gallons/4.5 liters per minute x number of times per day.	Water used to brush teeth water turned off = 0.15 gallons/0.57 liters per minute x number of times per day.
Family Member 1		
Family Member 2		
Family Member 3		

2. Calculate potential water usage in the household per day.
3. Design a conservation plan:
 - Create a poster, presentation, or short video.
 - Propose installation of low-flow faucets or other water-saving devices.
4. Present your plan:
 - Include data, visuals (graphs or diagrams), and a clear explanation of how your plan will reduce water use and benefit the environment.

Project Questions and Sample Answers:

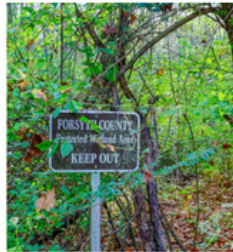
1. What behavior did you identify that uses the most water?
2. How could this behavior be changed to help reduce water usage?
3. What solution (other than changing the behavior) did you propose to help your family reduce water usage?
4. How can your solution be monitored over time?

Rubric	Criteria	4 – Excellent	3 – Good	2 – Satisfactory	1 – Needs Improvement
1. Water Usage Tracking Chart (___/4)		Complete and accurate chart for all family members and all activities; all calculations are correct and clearly shown.	Mostly complete with minor errors or 1-2 missing items; calculations mostly correct.	Somewhat complete; several errors or missing entries; some unclear calculations.	Incomplete or mostly missing; inaccurate or missing calculations.
2. Water Usage Calculations (___/4)		Total household water use is accurately calculated with clear math and units shown.	Calculations are mostly correct with minor mistakes; units mostly included.	Some correct totals, but with several math or unit errors.	Little or no attempt to calculate water use correctly.
3. Conservation Plan (Poster/Video/Presentation) (___/4)		Creative and well-organized; includes at least two strong ideas (e.g., low-flow tools or rain barrels); clearly explains how the plan reduces water waste.	Includes two water-saving ideas; explanation is mostly clear; good organization.	Includes one idea; explanation is basic or unclear; may be lacking detail or organization.	Unclear or missing ideas; poor organization; does not show understanding of water-saving strategies.
4. Presentation & Reflection Questions (___/4)		All four questions answered thoughtfully with detail and personal insight; includes graphs/visuals and connects to data.	Most questions answered with some detail; visuals are included and mostly connected to data.	Some questions answered, lacked detail or connection to project data; visuals may be unclear or missing.	Few or no questions answered; visuals missing or unrelated; explanation minimal.
5. Creativity, Effort & Neatness (___/4)		Project shows strong effort, creativity, and care; visually appealing and well-presented.	Project is neat and shows effort; some creativity shown.	Some effort evident, but project is rushed or messy in places.	Minimal effort; messy or incomplete; lacks attention to presentation.

Reinforce concepts using these bonus activities included in your lesson.

Reducing Land Use Impact

- Urban planning can prevent sprawl and protect habitats
- Wetland and forest protection is critical for biodiversity



Reducing Land Use Impact

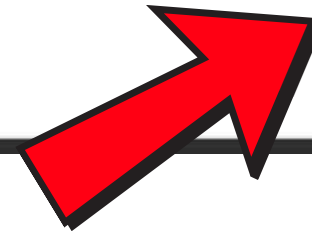
- Urban planning can prevent sprawl and protect habitats
- _____



- Have your students complete the student version of the notes while you teach
- Student notes come mostly filled in so students can spend more time listening and less time copying notes.

What Is Human Impact?

- Human impact means how people affect the land, water, and air
- Some impacts examples include building cities and creating pollution



Videos embedded in directly into your slides. One-click access.

Reducing Human Impact on the Environment - Exit Ticket

* Indicates required question

What is human impact? *

1 point

- ☐ How people affect the land, water, and air
- ☐ The effect of weather on the environment
- ☐ The way animals interact with ecosystems
- ☐ Natural changes in the Earth's surface

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Clear form

Includes student notes in easy-to-fill-in formats.

4-Question, Auto-Graded Exit Ticket based on information from the lesson.

Reducing Human Impact on the Environment - Student Lesson Outline

Why the Environment Matters

- _____
- Our activities can harm ecosystems if not carefully managed
- Science helps us understand and reduce our environmental impact

What Is Human Impact?

- _____
- Some impacts examples include building cities and creating pollution

What Is Human Impact?

- _____
- We must also do our part to keep it clean

Common Types of Environmental Impact

- _____
- Land usage: Deforestation, urban sprawl, agriculture
- Pollution: Air, water, and soil pollution from human activities

The Role of Scientific Monitoring

- Scientists track air quality, water levels, and wildlife health
- _____

Government Agencies

Each country has its own government agency that is in charge of looking after the environment. Here are 3 examples.

- _____

The EPA creates and enforces laws that protect air, water, and land.

- _____

ECCC tracks environmental issues like air and water quality, climate change, and wildlife conservation.

- _____

It monitors pollution, manages waste regulations, and promotes eco-friendly technologies.

Minimizing Water Usage

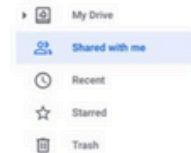
- Solutions: Drip irrigation, water-saving devices, rainwater collection, turning off taps when not using them
- Monitoring: Track water usage in homes and farms
- _____

Reducing Land Use Impact

- Urban planning can prevent sprawl and protect habitats
- _____

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