



Practice Worksheet on Circular Economy

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Long Answer Questions

1. Explain the concept of a circular economy as described in the resource.
2. Describe the key interventions in chemicals and waste management to achieve circularity.
3. Summarize the strategies for promoting product innovation and redesign for a circular economy.
4. Explain the strategies for tackling the global plastic pollution crisis.
5. Describe the challenges and solutions regarding circularity in the textile sector.
6. Describe the interventions UNDP promotes to achieve sustainable agriculture.
7. Discuss the challenges and potential solutions related to sustainable mining, particularly in ASGM.

8. Explain the issues and solutions related to reducing pollutant releases from the secondary metal industry.

Multiple Choice Questions

1. Which of the following best describes a circular economy?

- a) Eliminates waste and pollution
- b) Increases linear production
- c) Focuses on resource depletion
- d) Promotes unsustainable practices

2. A key strategy for achieving circularity is:

- a) Linear production
- b) Product redesign
- c) Increased consumption
- d) Waste disposal

3. A significant indicator of progress toward a circular economy is:

- a) Increased landfill use
- b) Improved recycling rates
- c) Higher production of plastics
- d) Greater reliance on virgin materials

4. Sustainable agriculture emphasizes:

- a) Increased use of hazardous chemicals
- b) Sustainable agriculture practices
- c) Promoting unsustainable pesticides
- d) Ignoring environmental impact

5. Sustainable mining practices should prioritize:

- a) Mercury-free technologies
- b) Increased mercury use
- c) Ignoring environmental impact
- d) Promoting informal mining

6. The secondary metal industry needs to emphasize:

- a) Increased energy consumption
- b) Cleaner production processes
- c) Higher levels of pollution
- d) Reliance on virgin materials

7. Effective waste management should focus on:

- a) Increased waste generation
- b) Improved waste management
- c) Linear waste disposal
- d) Ignoring waste reduction

8. Sustainable construction practices should focus on:

- a) Promoting unsustainable building practices
- b) Designing for product reusability and recyclability
- c) Using hazardous materials
- d) Ignoring resource efficiency

Answer Key

Long Answer Questions - Expected Responses

1. Explain the concept of a circular economy as described in the resource.

Expected Answer: It discusses the transition to a circular economy by eliminating waste and pollution, keeping products in use longer, and regenerating natural systems.

2. Describe the key interventions in chemicals and waste management to achieve circularity.

Expected Answer: It involves phasing out harmful chemicals, redesigning products for durability and recyclability, improving waste management systems, and raising consumer awareness.

3. Summarize the strategies for promoting product innovation and redesign for a circular economy.

Expected Answer: It includes using safer materials, designing products for longevity and recyclability, using sustainable packaging, and promoting product leasing instead of ownership.

4. Explain the strategies for tackling the global plastic pollution crisis.

Expected Answer: It focuses on reducing plastic waste by eliminating unnecessary plastics, increasing recycling rates, preventing plastic leakage into the environment, and raising consumer awareness.

5. Describe the challenges and solutions regarding circularity in the textile sector.

Expected Answer: It is chemical-intensive, generates significant pollution, and its products have short lifespans. Circularity requires redesigning production, improving waste management, and raising consumer awareness.

6. Describe the interventions UNDP promotes to achieve sustainable agriculture.

Expected Answer: It involves using less hazardous chemicals, improving waste management, and raising awareness. The solutions include adopting integrated pest management and using biopesticides.

7. Discuss the challenges and potential solutions related to sustainable mining, particularly in ASGM.

Expected Answer: It is a significant source of income for millions, with 30% being women. Mercury use is common and harmful. Circularity involves promoting formalization, mercury-free technologies, and raising awareness.

8. Explain the issues and solutions related to reducing pollutant releases from the secondary metal industry.

Expected Answer: It's energy-intensive and generates pollutants. Circularity requires cleaner production, improving waste management, and encouraging the use of recycled materials.

Multiple Choice Questions – Correct Answers

1. Which of the following best describes a circular economy?

Correct Answer: Eliminates waste and pollution

2. A key strategy for achieving circularity is:

Correct Answer: Product redesign

3. A significant indicator of progress toward a circular economy is:

Correct Answer: Improved recycling rates

4. Sustainable agriculture emphasizes:

Correct Answer: Sustainable agriculture practices

5. Sustainable mining practices should prioritize:

Correct Answer: Mercury-free technologies

6. The secondary metal industry needs to emphasize:

Correct Answer: Cleaner production processes

7. Effective waste management should focus on:

Correct Answer: Improved waste management

8. Sustainable construction practices should focus on:

Correct Answer: Designing for product reusability and recyclability