

Name: _____

Date: _____

Class: _____

IB ESS

8.3 Solid Domestic Waste

Significant ideas:

Solid domestic waste (SDW) is increasing as a result of growing human population and consumption.

Both production and management of solid domestic waste can have significant influence on sustainability.



What is Solid Domestic Waste?

1. List the types of SDW and their proportions in order of decreasing proportion. You can choose which country to present information for but remember to state the nation.

SDW data for _____.

SDW Category	Proportion (%)

2. SDW can be formally categorized into a number of groups. For the groups below, list examples of each.

Type of SDW	Examples
Biodegradable	
Recyclable	
Waste electrical and electronic equipment (WEEE)	
Hazardous	
Toxic	
Medical	
Inert	
Mixed	

What is "Waste"?

1. In your own opinion, when does a product become "waste"?

2. The caption of a Shell (oil company) advert reads:

"Don't throw anything away. There is no away".

a) What's your opinion on this caption?

b) Does this influence your definition of "waste" present in question 1?

3. Draw diagrams to represent the circular and linear economy for waste management.

Circular economy:

Linear Economy:



4. Which of the above models (circular or linear) is more sustainable for waste management?
Explain your answer.

5. It is possible to limit the amount of waste that is generate using the reduce/re-use/recycle approach.

Summarise these concepts using the table below.

Concept	Outline	Examples
Reduce	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Re-use	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Recycle	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Management of Solid Domestic Waste

1.

a) List the four main methods of SDW disposal.

b) Do you know of or use any other methods of waste disposal?

2. Summarise and evaluate pollution management strategies for solid domestic waste using the table below.

Process	Details/examples	Evaluation
Human activity producing the pollutant.	<p>Altering human activity generating waste</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Release of pollutant into the environment.	<p>Controlling the release of waste</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Impact of pollutant on ecosystems	<p>Clean up and restoration of areas affected by waste disposal</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

