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AJMAN UNIVERSITY

# Ajman University

Senior School Groups

Understanding Sustainability



**SKILLS**  
for **Life**

# Sustainable and responsible living

## What you will learn

- The need to live sustainable and responsible lives
- How to manage household waste responsibly
- How to distinguish between organic and inorganic waste and what waste hierarchy means
- What is meant by recycling, waste that can be recycled and the advantages of recycling
- How to be more energy efficient and to conserve water
- The ways consumers can contribute to sustainable and responsible living
- Organisations involved in raising awareness about sustainability



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# Sustainable and responsible living

## Key skills

	<b>Working with others</b>	Contributing to making the world a better place by applying sustainable practices in everyday life.
	<b>Managing myself</b>	Making considered decisions in order to live life in a responsible and sustainable way.
	<b>Being creative</b>	Exploring options and alternatives when conserving energy, water, and managing waste.

# Sustainable and responsible living

## Keywords

Organic waste

Inorganic waste

Biodegradable

Minimisation

Reduce

Reuse

Recycle

Landfill

Compost



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# Sustainable and responsible living

Let's get ready!

1. What type of household waste can be recycled?
2. What are the advantages of recycling waste?
3. What can be done with food waste?
4. How can energy be saved in the home?
5. How can you conserve water in the home?



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# Sustainable and responsible living

## Aims

- To reduce our carbon footprint.
- To conserve natural resources such as \_\_\_\_\_.



# Sustainable and responsible living

Explain the following environmental terms

- Carbon footprint
- Pollution
- Greenhouse gases
- Global warming
- Ozone layer



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# Sustainable and responsible living

## Living sustainably

Living sustainability involves:

- Managing waste
- Being energy efficient
- Conserving water
- Being informed about the environment



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# Sustainable and responsible living

## The waste we create

The amount of waste we create is increasing because:

- We are buying more products
- There is more choice of goods
- More products have short life spans – e.g. \_\_\_\_\_
- More disposable products – e.g. \_\_\_\_\_
- People replace devices more often – e.g. \_\_\_\_\_



See Think-Pair-Share page 274



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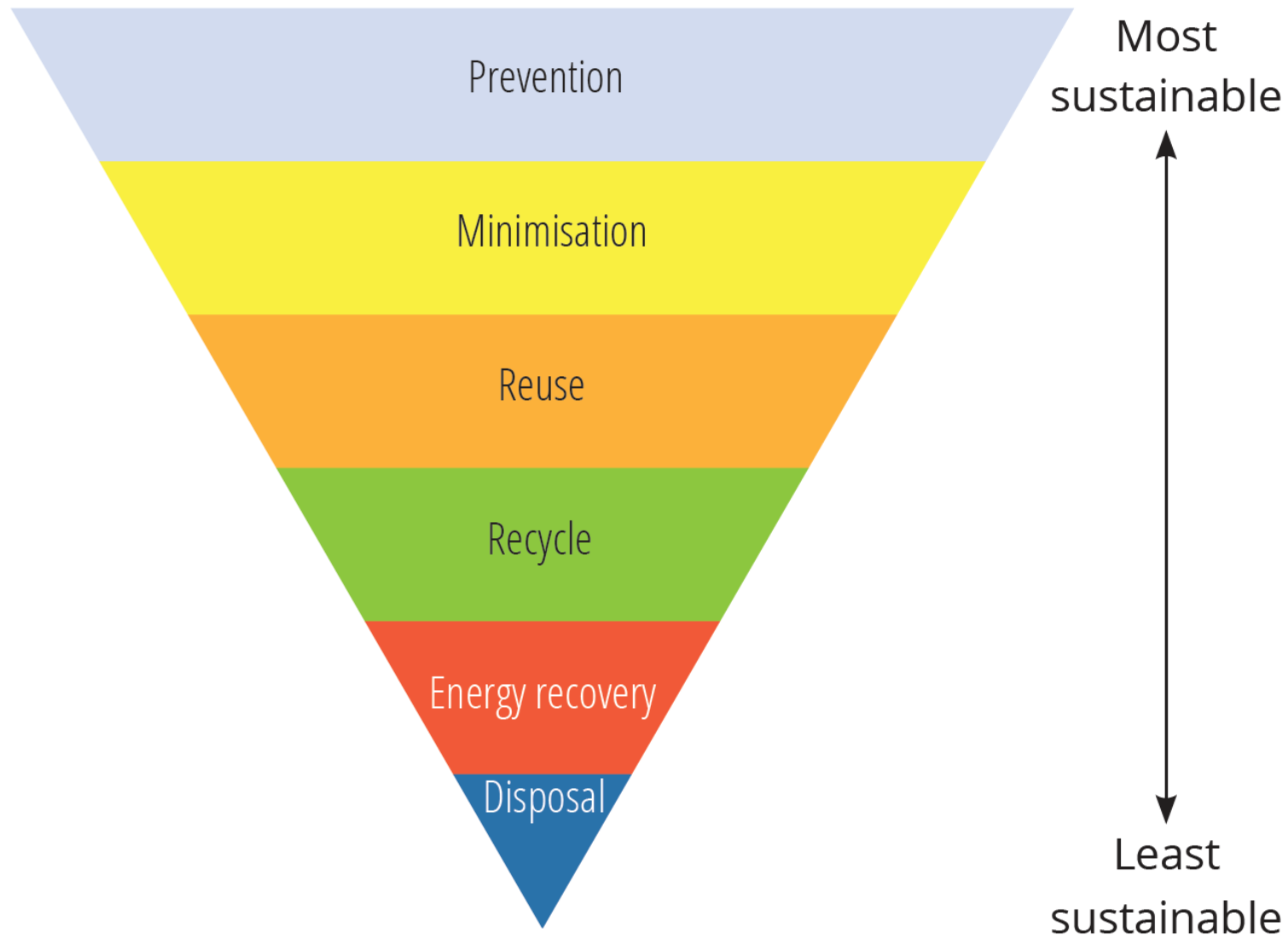
# Sustainable and responsible living

## Waste management

Organic waste	Inorganic waste
Organic waste is <b>biodegradable</b> which means _____.	Inorganic waste is <b>not biodegradable</b> which means _____.
List some examples of organic waste. 1. _____ 2. _____ 3. _____	List some examples of inorganic waste. 1. _____ 2. _____ 3. _____

# Sustainable and responsible living

## The waste hierarchy



# Sustainable and responsible living

To prevent waste...

- Buy what you need.
- Maintain, repair or reuse items.
- Compost organic waste.
- Avoid over packaged goods.
- Use a lunchbox instead of plastic bags.



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# Sustainable and responsible living

## Recycling different types of household waste

Black bin	Green bin	Brown bin	Recycling centre
General rubbish	Tin cans Plastic bottles	Vegetable peelings Tea leaves	Glass jars Clothes Batteries

Where would you dispose of the following?

- Animal waste
- Cardboard boxes
- Mobile phones
- Newspapers
- Old laptops



# Sustainable and responsible living

## Advantages of recycling

- Reduces the use of raw materials, such as metal
- Lowers cost
- Reduces the amount of waste going to landfill
- Reduces litter and pollution problems
- Creates jobs



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# Sustainable and responsible living

## BER

- BER stands for:  
B \_\_\_\_\_ E \_\_\_\_\_ R \_\_\_\_\_.
- Houses are rated on a scale from \_\_\_\_\_ to \_\_\_\_\_ depending on their energy efficiency.
- All houses for sale must have a \_\_\_\_\_.

**Building Energy Rating (BER)** DEAP Version X, Y

BER for the building detailed below is: **A3**

Name of House, Street Name One, Street Name Two, Town Name One, Town Name Two, County Name One, County Name Two,

BER Number: XXXXXXXXX  
Date of Issue: Day Month Year  
Valid Until: Day Month Year  
BER Assessor No.: XXXX  
Assessor Company No.: XXXX

The Building Energy Rating (BER) is an indication of the energy performance of this dwelling. It covers energy use for space heating, water heating, ventilation and lighting, calculated on the basis of standard occupancy. It is expressed as primary energy use per unit floor area per year (kWh/m<sup>2</sup>/yr).  
'A' rated properties are the most energy efficient and will tend to have the lowest energy bills.

**Building Energy Rating**  
kWh/m<sup>2</sup>/yr  
MOST EFFICIENT

<25	A1
>25	A2
>50	A3
>75	B1
>100	B2
>125	B3
>150	C1
>175	C2
>200	C3
>225	D1
>260	D2
>300	E1
>340	E2
>380	F
>450	G

XXX kWh/m<sup>2</sup>/yr  
YYY

**A3**

**Carbon Dioxide (CO<sub>2</sub>) Emissions Indicator**  
kgCO<sub>2</sub>/m<sup>2</sup>/yr

BEST  
0

Calculated annual CO<sub>2</sub> emissions  
XXX kgCO<sub>2</sub>/m<sup>2</sup>/yr  
YYY

WORST  
>120

The less CO<sub>2</sub> produced, the less the dwelling contributes to global warming.

**IMPORTANT:** This BER is calculated on the basis of data provided to and by the BER Assessor, and using the version of the assessment software quoted below. A future BER assigned to this dwelling may be different, as a result of changes to the dwelling or to the assessment software.

# Sustainable and responsible living

## Saving energy

List some ways you can save energy in your home.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



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# Sustainable and responsible living

## Conserving water

List some ways you can conserve water.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



# Sustainable and responsible living

## Sustainable practices when shopping

- Avoid buying over packaged products.
- Buy fruit and vegetables that are in season and grown locally.
- Organically produced food has a less negative impact on the environment.
- Choose biodegradable detergents and packaging.
- Buy ozone-friendly or environmentally friendly products.
- Use reusable shopping bags.
- Reduce car trips to the shops by bulk buying.
- Look out for environmentally friendly products.
- Choose energy-efficient electrical appliances.



# Sustainable and responsible living

## Sustainable practices at home

List some ways of being more **sustainable** at home.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



# Sustainable and responsible living

## Sustainable practices in your locality

List some ways of being more **sustainable** in your community.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



# Sustainable and responsible living

Remember the four Rs...

- Reduce
- Reuse
- Recycle
- Repair



# Sustainable and responsible living



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## Sustainable Development Goals



# Sustainable and responsible living

## Rapid recap

1. Describe what is meant by 'sustainable living'.
2. Distinguish between organic and inorganic waste.
3. Explain why waste is a growing problem.
4. What are the preferred ways of dealing with household waste?
5. What are the benefits of recycling?
6. What is meant by BER?
7. Give some ways of conserving energy.
8. How may water be conserved in the home?
9. Name any one organisation concerned with environmental issues.