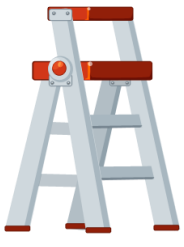
The Key-Ring Project

Percentage	I can …	Prove it!
80%	**Consider the choices of materials and processes and how they could impact the lifecycle of the product and its sustainability**	 Suggest ways you can make this chair more sustainable. Include information on: • Sourcing the raw material • The manufacture of the board • The end of the product's life.
70%	**Analyse an existing product in terms of sustainability using ACCESSFM.** **Explain the environmental impacts of different types of plastics, metals and woods.**	 Bookcase 1 – Sold in Ikea for £25. Made from MDF. Self assembly  Bookcase 2 – Sold in habitat for £300. Made from pine and glass. Delivered assembled. Analyse these bookcase in terms of ACCESSFM. Consider functionality and sustainability. Explain the positive and negative environmental impacts of each of the above bookcases.

Percentage	I can …	Prove it!
60%	**Identify what makes a product sustainably.**	 Here are 2 water bottles. The first is made from polyethylene terephthalate and disposable, the second is high density polyethylene and is multiuse. Explain which is more sustainable and why.
	Define built-in obsolescence.	What is built-in obsolescence?
	Understand the impacts of built-in obsolescence on a throw-away culture.	Explain how a mobile phone company adds to a throw-away culture when designing their products.
50%	**Students will identify ways products can be reused.**	State 3 ways you can reuse a teacup. 
	Explore the benefits of household recycling.	In the lifecycle of a wooden table, how can recycling be used to minimise waste?
	Explain the terms "sustainability" and "renewable resources".	Explain what we mean by "waste minimisation".



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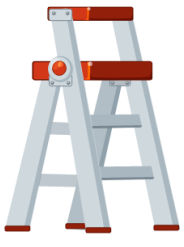
Percentage	I can …	Prove it!
40%	**Explain the source of a range of materials, understand how they are processed for use and how they can be reused, recycled or disposed of.** **Explain the environmental consequences of the use of a range of materials**	For woods, metals and plastic, explain each of these processes. 1. Harvesting 2. Processing 3. Manufacturing 4. Disposing
30%	**list the 4 Rs of sustainability** **Identify materials which can be recycled. Understand why composite materials cannot be recycled including thermosetting plastics.** **Identify Items which can be designed for planned obsolescence** **Define waste minimisation.**	What are the 4 Rs of Sustainability? List 4 materials which can be recycled List 4 products which have been designed with planned obsolescence in mind. Identify 2 ways in which waste can be minimised in a factory making plastic drinking bottles.



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Key Words:

Reuse

Reduce

Recycle

Recover

Sustainability

Raw materials

Harvesting

Manufacturing

Making

Disposing

Built-in obsolescence

Throwaway culture