

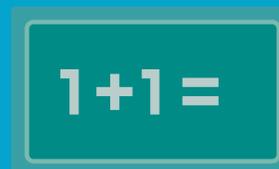
## HOW TO PLAY

You will need: a pen, some paper and a dice or a random number generator (set between 1 and 6).



You are in charge of designing a new product. You must choose what to make it from, how to make it, how it is transported and used and what happens to it at the end of its life. The score that you get represents a simple Life Cycle Assessment (LCA) for the product.

Start by choosing the product. On your turn, roll the dice. Read out the answer associated with that number, and add it to your total score. Then move on to the next step.



Once you have created, used and disposed of your product, compare your total score to the table below. A lower score means a smaller environmental impact.

## SCORING



**6-12**

**HIGHLY SUSTAINABLE**

Your product uses best practices for minimising the environmental impact.



**13-20**

**NEARLY THERE**

Your chosen process uses many good practices for reducing the environmental burden of your product.



**21-29**

**GETTING BETTER**

You have made a good start in improving the environmental impact of your product. Have another go and see if you can do better.



**30-36**

**TRY AGAIN!**

Oh no - your product uses a lot of polluting materials and shipping, possibly for something that only gets used once. Can you think of any way to make it better?

To get the best outcome we need to balance a product's environmental impact across all life cycle stages. In real life these decisions are not random, but carefully chosen. When you play the game again, you could try making your own choices rather than throwing a dice.

The environmental impact of a product starts long before you buy it. Although often there are no easy answers, you might be able to choose lower impact products by asking yourself: where does the product come from? What is it made of? What are the alternatives?

And remember, in real life it isn't always possible to choose the lowest impact for each stage – for example, the raw materials for smartphone batteries can't be found in the UK and come from South America!



# CHOOSE YOUR LCA PRODUCT



SOCKS



DRINKS BOTTLE



PENCIL CASE



## RAW MATERIALS



- 5-6 Brand new materials
- 3-4 Sustainably sourced materials
- 1-2 Reclaimed, reused or recycled materials



## MATERIAL TRANSPORT

- 5-6 International: long journey using trains or lorries
- 3-4 National: trains or a long lorry drive
- 1-2 Local: delivery on foot, bike or a short lorry drive



## MANUFACTURING



- 5-6 High impact: untreated waste is released into the environment, harming wildlife and polluting the earth, water and air
- 3-4 Medium impact: some waste is reduced and recycled
- 1-2 Low impact: waste is minimised and safely treated. The factory runs on renewable energy



## END OF PRODUCT LIFE

- 6 Product is thrown away to landfill 
- 5 Product is burned to generate heat and power 
- 3-4 Product is recycled to create new products 
- 1-2 Product is repaired and reused 



Add up your scores and see how well you have done. Can you do better by choosing your own options at each stage?



## PRODUCT USE



- 5-6 Single use: used once and then replaced
- 3-4 Short life: used for a few months
- 1-2 Long life: lasts for years



## PRODUCT TRANSPORT



- International 5-6
- National 3-4
- Local 1-2