



APPLYING WASTE EQUALS FOOD TO LIFECYCLE ASSESSMENTS

STARTER (5 mins)

Think of an example of when waste equals food in nature. Share this with a partner.

LIFE CYCLE ASSESSMENT (30 mins)

Make a product life cycle assessment for a newspaper or a car. Visit this website <http://practicalaction.org/product-lifecycle-analysis> to download a worksheet that has a diagram to help create a product life cycle analysis.

An introductory presentation to support learning about product lifecycle analysis can also be downloaded.

Materials: List all the materials (metal, plastic) in your product.

Production: Most metals and plastics must be processed before they are in a useful form for manufacturing. Then all of the processed materials must be formed and shaped into something useful.

Distribution: How is your product packaged for sale? How is it transported for sale?

Use: Can it be used once or reused for a number of years?

Disposal: Does it have to be thrown away or can it be recycled (all of it or parts)?

OBJECTIVE

Understand the problems with current production systems and consider potential benefits of closed loop systems.

KEY COMPETENCIES

- Using initiative
- Communicating ideas
- Analysing information
- Reflecting & Evaluating

PRODUCT LIFECYCLE ANALYSIS

Activity: Mind map the resources used at each stage of the product's lifecycle.



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Is the lifecycle of your product linear (take it – make it – dump it) or closed loop?



APPLY

LONDON OLYMPICS (15 mins)

How did the London Olympic Park try to close the loop on the building of sporting venues? <http://sustainablecities.dk/en/city-projects/cases/london-olympic-park-is-recycling-building-materials>

CURRICULUM LINKS

Design & Technology

- Carry out a 'Life Cycle Analysis' for a product.
- Consider sustainability and environmental issues when designing and manufacturing.
- Have a knowledge of 'Green Designs'.

REFLECTION (10 mins)

You should now know how the waste equals food insight can be applied to man-made systems. Life cycle assessments are a useful tool to analyse whether a product or production system is closed loop. Add notes to the Reflection sheet and chart your progress on the Learning wall.

Visit the Share page of www.lessonsfromnature.org to comment on the activities you have taken part in.

