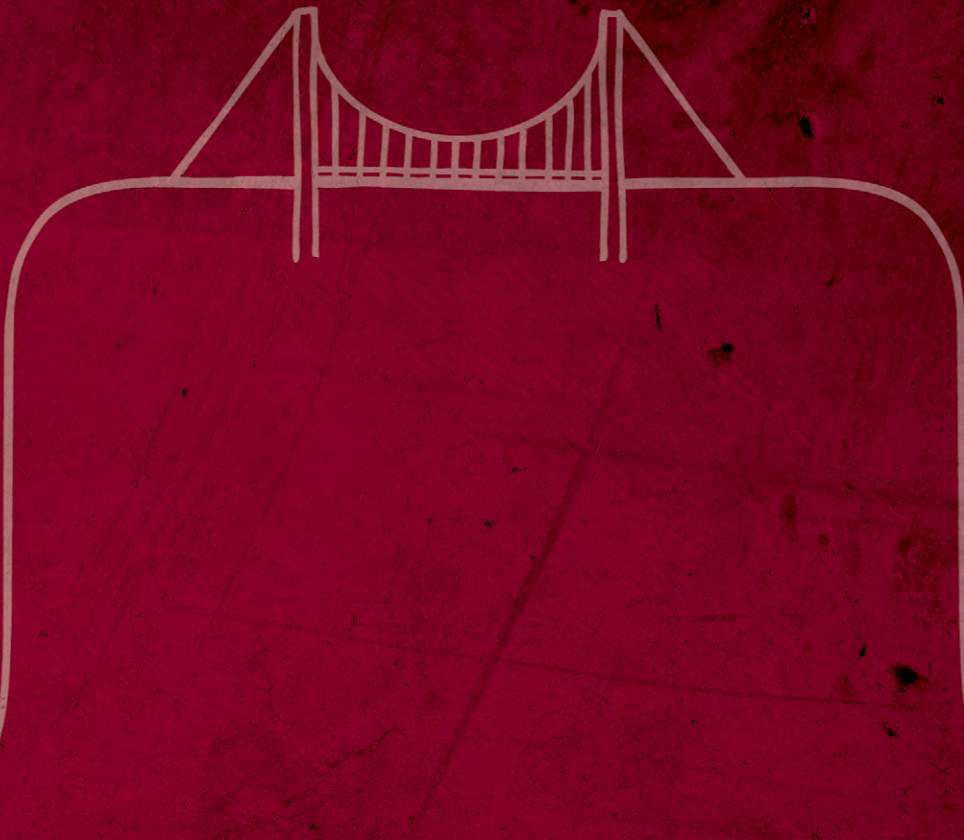
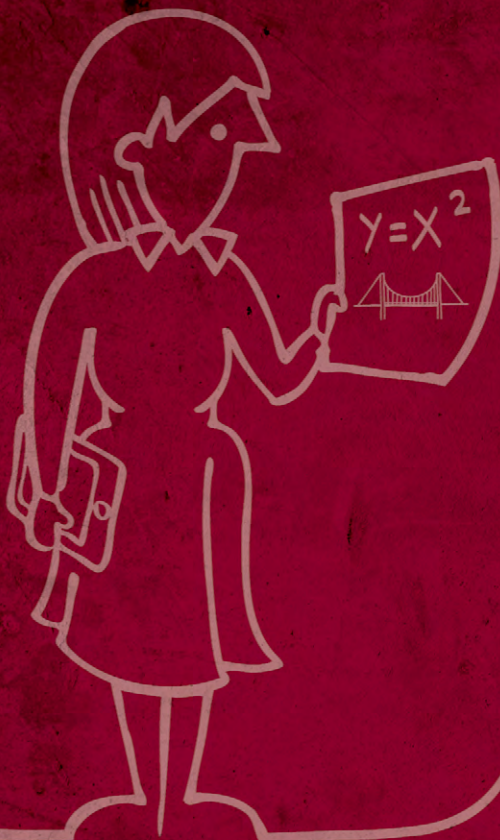




Accredited



CAMBRIDGE NATIONALS IN ENGINEERING

R101, R102, R103, R105, R106, R108, R109, R112 AND R113

RESOURCES LINK FOR PRACTICAL ACTION

MARCH 2015

Practical ACTION

WELCOME

Resources Link is an e-resource, provided by OCR, for teachers of OCR qualifications. It provides descriptions of, and links to, a variety of independent teaching and learning resources that you may find helpful.

In Resources Link you will find details of independent resources, many of which are free: where this is the case this has been indicated.

If you know of other resources you would like to see included here, or discover broken links, please let us know. We would also like to hear from you if have any feedback about your use of these, or other, OCR resources. Please contact us at resourcesfeedback@ocr.org.uk.

We leave it to you, as a professional educator, to decide if any of these resources are right for you and your students, and how best to use them.



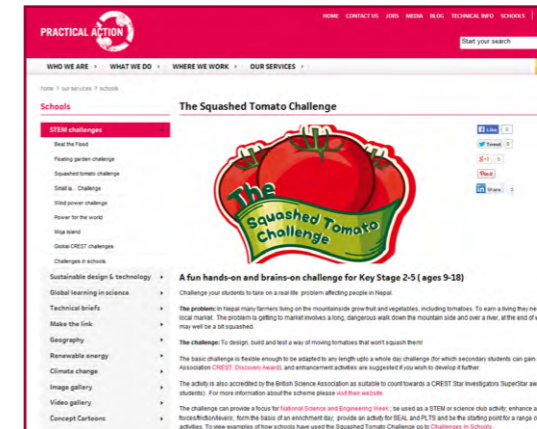
We'd like to know your view on the resources we produce. By clicking on the 'Like' or 'Dislike' button you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click 'Send'. Thank you.

OCR Resources: *the small print*

OCR's resources are provided to support the teaching of OCR specifications, but in no way constitute an endorsed teaching method that is required by the Board and the decision to use them lies with the individual teacher. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

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The Squashed Tomato Challenge



An opportunity for students to do a STEM challenge to increase their understanding of pulleys and levers as used in an aerial ropeway system in Nepal.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R101, LO1 Understand physical properties and mechanical principles

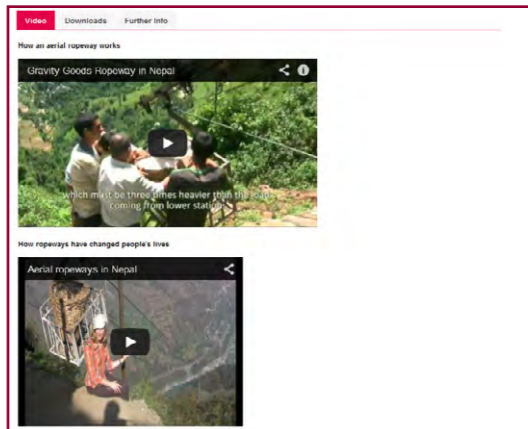
Cost: Free

Format: Website

<http://practicalaction.org/squashed-tomato-challenge-1>

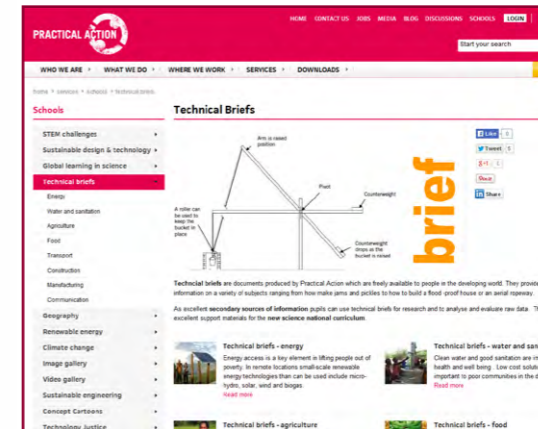
If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Video - aerial ropeway



Secondary source material: Aerial ropeways in Nepal video.

Technical Brief - aerial ropeway



Technical brief on aerial ropeway.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R101, LO1 Understand physical properties and mechanical principles

Cost: Free

Format: Website
<http://practicalaction.org/squashed-tomato-challenge-1>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R101, LO1 Understand physical properties and mechanical principles

Cost: Free

Format: Website
<http://practicalaction.org/technical-briefs-schools-transport>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

STEM careers - Making a difference



Links to careers case studies on STEM careers in international development.

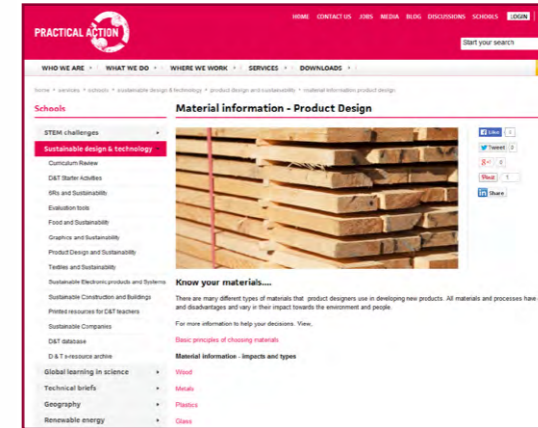
Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R102, LO3 Know about employment in engineering

Cost: Free
Format: Website

<http://practicalaction.org/careers>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Material information - Product Design (1)



A link for students to gain information about issues and principles behind materials choice and specific information about the sustainability of materials.

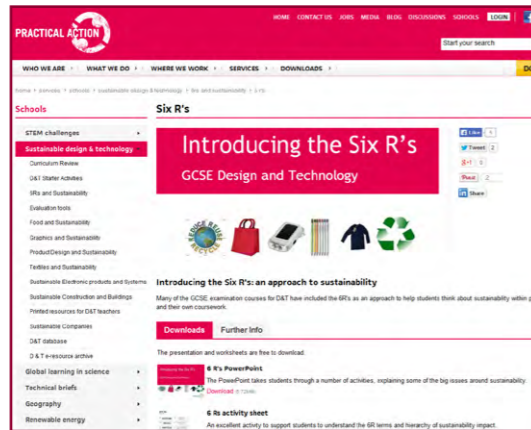
Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO1 Know about the sustainability of engineering materials and products

Cost: Free
Format: Website

<http://practicalaction.org/material-information-product-design>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Six R's (1)



The Six R's PowerPoint and Six R's activity introduces some of the big environmental and social issues to students with an activity to learn about the meaning of the Six R's.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO1 Know about the sustainability of engineering materials and products

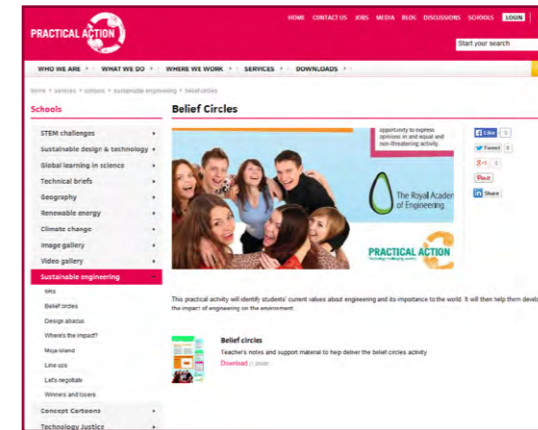
Cost: Free

Format: Website

<http://practicalaction.org/6rs>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Material information - Belief circles (2)



An activity to highlight the responsibilities of designers and engineers in choosing sustainable materials and products.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO1 Know about the sustainability of engineering materials and products

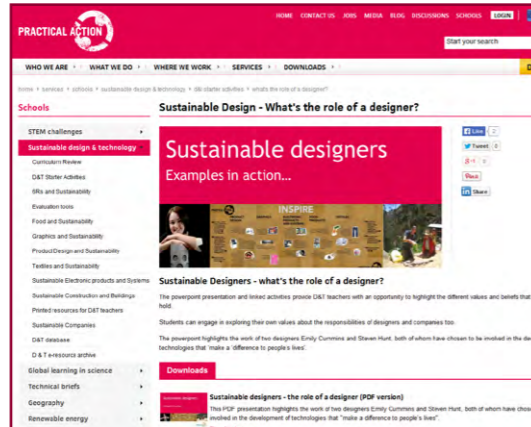
Cost: Free

Format: Website

<http://practicalaction.org/belief-circles>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Sustainable Design - What's the role of a designer? (1)



A PowerPoint presentation with linked activities for students to consider the responsibilities for designers and engineers.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO2 Know about sustainable design for engineered products

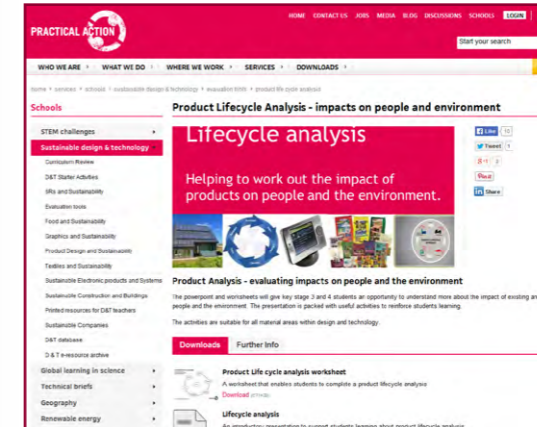
Cost: Free

Format: Website

<http://practicalaction.org/whats-the-role-of-a-designer>

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Product Lifecycle Analysis - impacts on people and environment (1)



An introductory PowerPoint and activity on Product Lifecycle Analysis – impacts on people and the environment.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO2 Know about sustainable design for engineered products

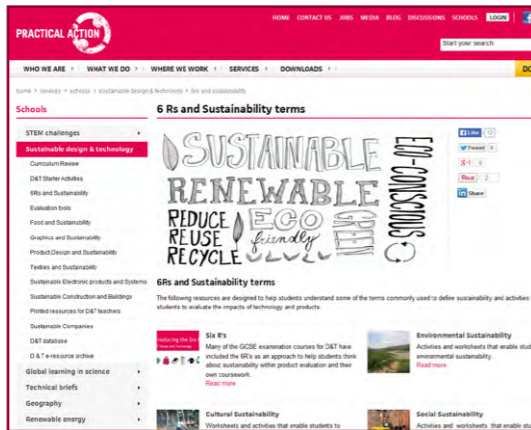
Cost: Free

Format: Website

<http://practicalaction.org/product-life-cycle-analysis>

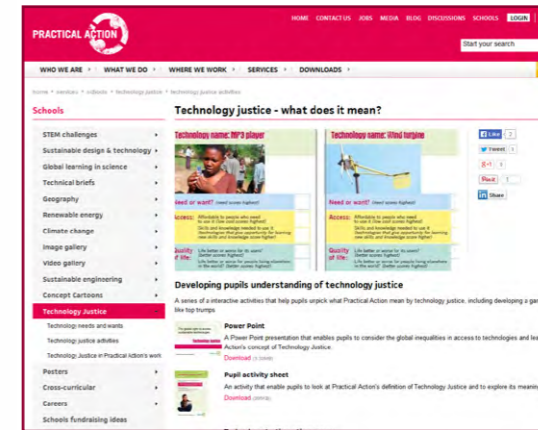
If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Six R's and Sustainability terms



Links to questions that help students to consider the environmental, social and economic impacts of engineered products.

Technology justice - what does it mean?



Activities based on the theme of 'Technology Justice' highlighting the impacts engineered products make on people and the environment globally.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO3 Understand the impact of global manufacturing

Cost: Free
Format: Website

<http://practicalaction.org/6rs-sustainability>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO3 Understand the impact of global manufacturing

Cost: Free
Format: Website

<http://practicalaction.org/technology-justice-activities>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

The Sustainability Handbook (1)



Links to questions that help students to consider the environmental, social and economic impacts of engineered products.

Supports: OCR Cambridge Nationals in Principles in Engineering and Engineering Business Level 1/2
Unit R103, LO1 Know about the sustainability of engineering materials and products
LO2 Know about sustainable design for engineered products
LO3 Understand the impact of global manufacturing

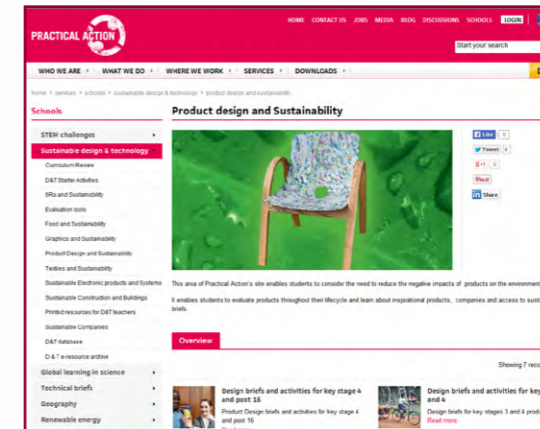
Cost: £9.71

Format: Book

<http://practicalaction.org/the-sustainability-handbook>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Product design and Sustainability



Links to design briefs with linked research with a sustainability or international development focus.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO1 Understand the design cycle and the relationship between design briefs and specifications

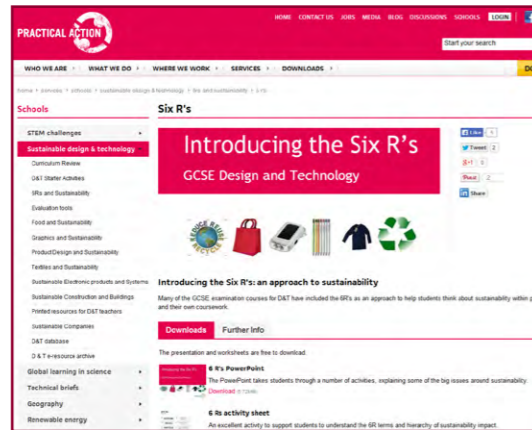
Cost: Free

Format: Website

<http://practicalaction.org/product-design-and-sustainability>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Six R's (2)



The Six R's PowerPoint and What's the specification? Activity introduces students to analyse products to work out the specification the designer used.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO2 Understand the requirements of design specifications for the development of a new product

Cost: Free

Format: Website

<http://practicalaction.org/6rs>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Sustainable Starter activities - Let's negotiate



Let's negotiate is an activity to help students develop specification criteria for their products.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO2 Understand the requirements of design specifications for the development of a new product

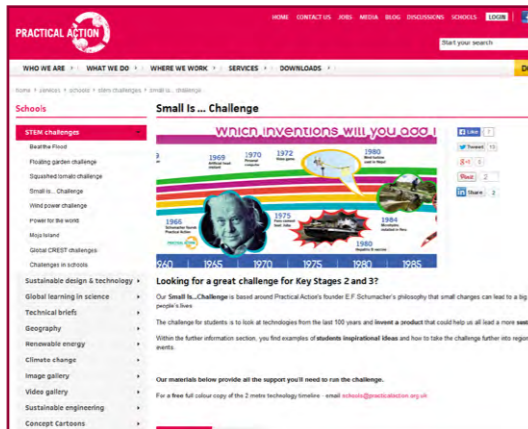
Cost: Free

Format: Website

<http://practicalaction.org/d-t-starter-activities>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Small Is...Challenge (1)



Learners research products from the past 100 years and design their own sustainable products for the future. A two-metre full colour technology timeline poster of iconic products from the past 100 years is also available.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

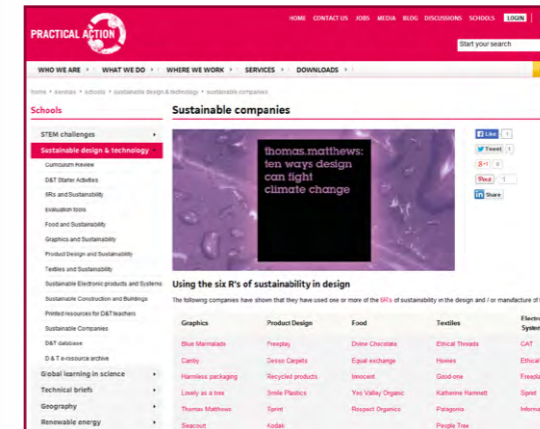
Cost: Free

Format: Website

<http://practicalaction.org/small-is-challenge>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Sustainable companies



Secondary source material

Links to inspirational companies producing sustainable products.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

Cost: Free

Format: Website

<http://practicalaction.org/sustainable-companies>

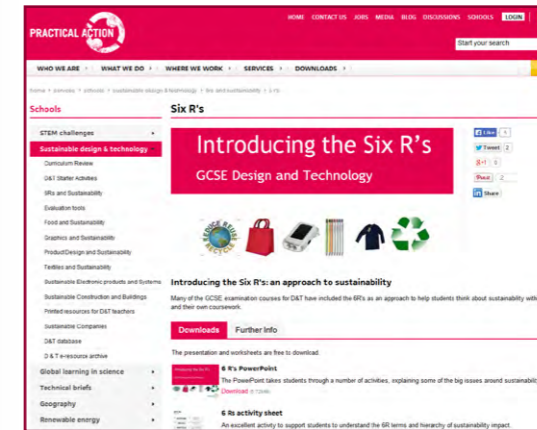
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Product Lifecycle Analysis - impacts on people and environment (2)



An introductory PowerPoint and activity on Product Lifecycle Analysis – impacts on people and the environment.

Six R's (3)



The Six R's PowerPoint and Six R's activity introduces some of the big environmental and social issues to students with ideas for improving products.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

Cost: Free

Format: Website

<http://practicalaction.org/product-life-cycle-analysis>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

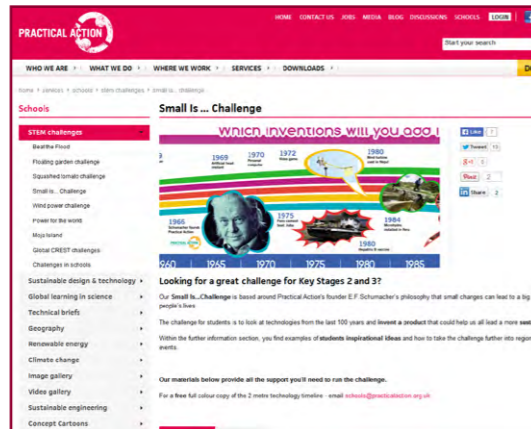
Cost: Free

Format: Website

<http://practicalaction.org/6rs>

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Small Is...Challenge (2)



The Small Is Challenge PowerPoint introduces the big environmental challenges for designers.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

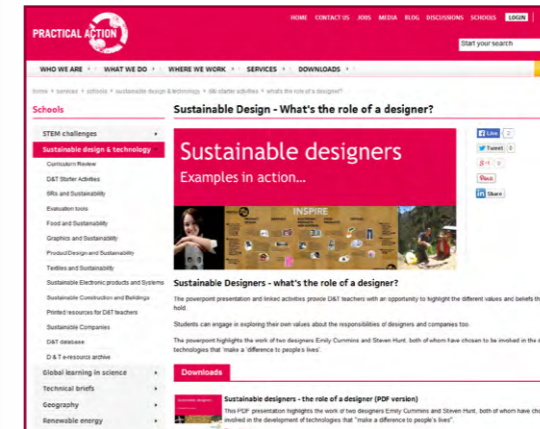
Cost: Free

Format: Website

<http://practicalaction.org/small-is-challenge>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Sustainable Design - What's the role of a designer? (2)



An introductory PowerPoint and Belief Circle activity on the role of sustainable designers.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

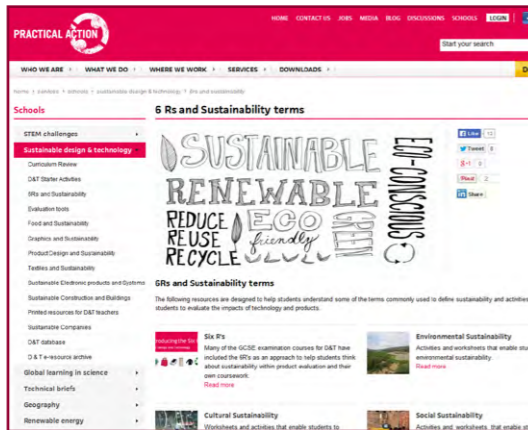
Cost: Free

Format: Website

<http://practicalaction.org/whats-the-role-of-a-designer>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

The Six R's and Sustainability terms (2)



Sustainability terms: A set of questions that help students to understand the balance of environmental, social and economic issues involved in product design.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

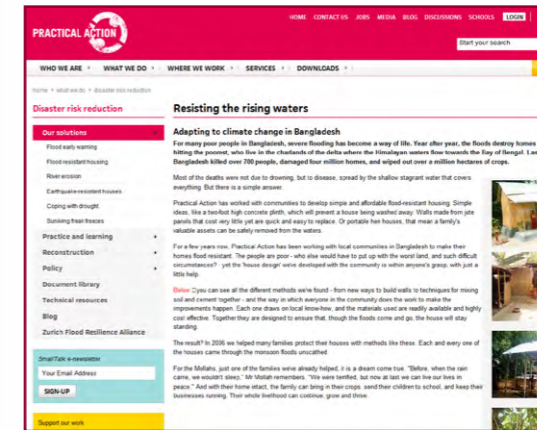
Cost: Free

Format: Website

<http://practicalaction.org/6rs-sustainability>

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Resisting the rising waters



Flood resistant housing case study.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

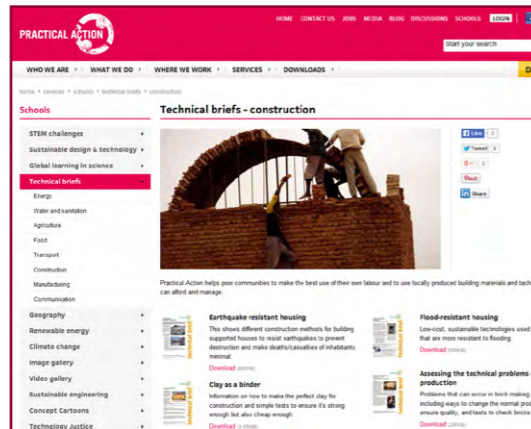
Cost: Free

Format: Website

<http://practicalaction.org/flood-resistant-housing>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Technical briefs - flood-resistant housing



Flood resistant housing technical brief.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO3 Know about the wider influences on the design of new products

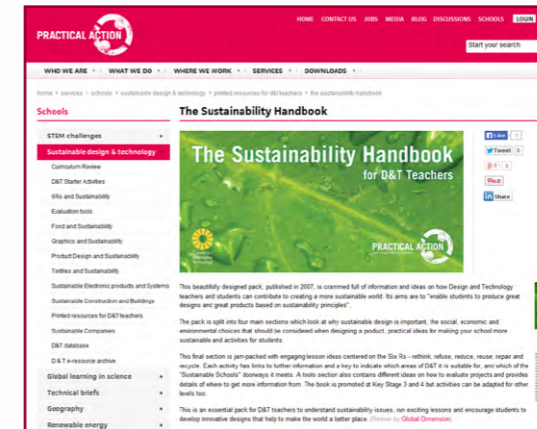
Cost: Free

Format: Website

<http://practicalaction.org/technical-briefs-schools-construction>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

The Sustainability Handbook (2)



The Sustainability Handbook is a guide to help teachers familiarise themselves with the big sustainability issues, run exciting lessons and encourage students to develop innovative and sustainable products.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R105, LO1 Understand the design cycle and the relationship between design briefs and specifications
LO2 Understand the requirements of design specifications for the development of a new product
LO3 Know about the wider influences on the design of new products

Cost: £9.71

Format: Website

<http://practicalaction.org/the-sustainability-handbook>

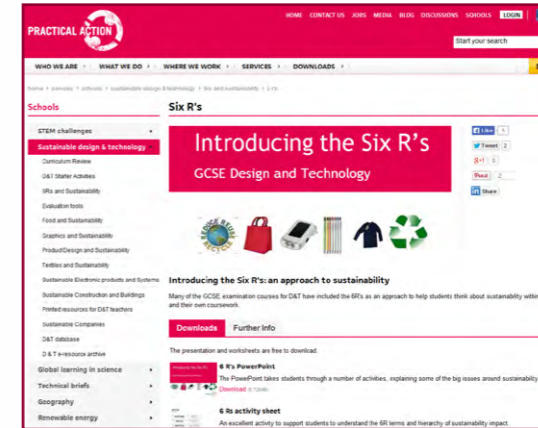
If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Product Lifecycle Analysis - impacts on people and environment (3)



The lifecycle analysis activity with the Six R's definition activity highlight the end of life options for products and define re-use and recycling.

Six R's (4)



The Six R's definition activity together with the lifecycle analysis activities highlight the end of life options for products and define re-use and recycling.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO1 Know how commercial production methods, quality and legislation impact on the design of products and components

Cost: Free

Format: Website

<http://practicalaction.org/product-life-cycle-analysis>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO1 Know how commercial production methods, quality and legislation impact on the design of products and components

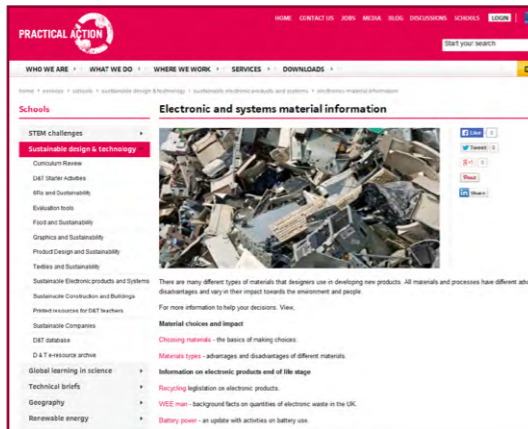
Cost: Free

Format: Website

<http://practicalaction.org/6rs>

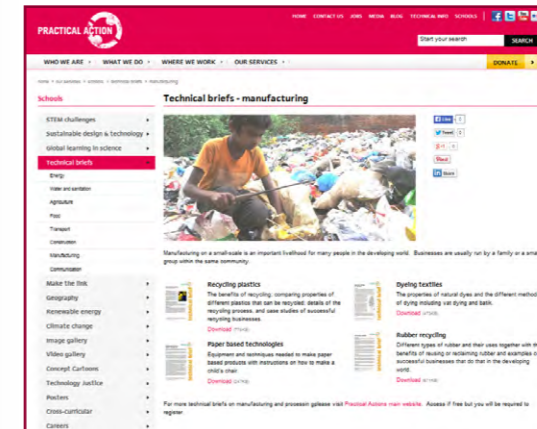
If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Electronic and systems material information



Secondary source material: legislation on the disposal and recycling of electronic products.

Technical Briefs - recycling plastics



Recycling plastics: A technical brief outlining plastics recycling techniques.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO1 Know how commercial production methods, quality and legislation impact on the design of products and components

Cost: Free

Format: Website

<http://practicalaction.org/electronics-material-information>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO1 Know how commercial production methods, quality and legislation impact on the design of products and components

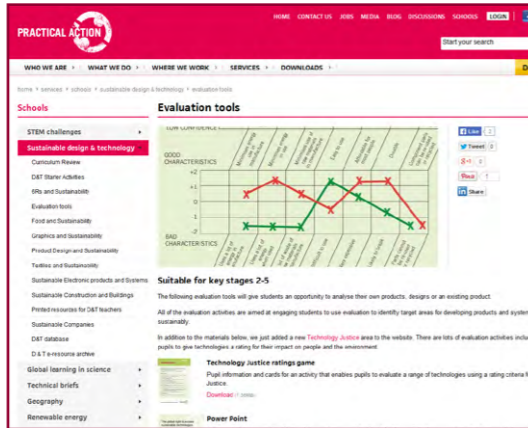
Cost: Free

Format: Website

<http://practicalaction.org/technical-briefs-schools-manufacturing>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Evaluation tools



The evaluation tools linked here Design Abacus, Eco Web and Winners and Losers all offer product evaluation techniques and recoding methods for analysing products with sustainability and other criteria.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO2 Be able to research existing products

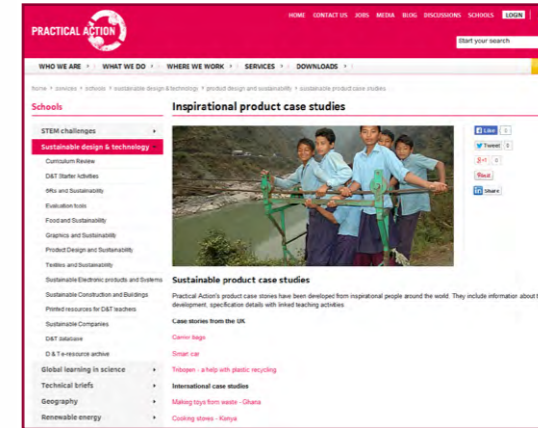
Cost: Free

Format: Website

<http://practicalaction.org/evaluation-tools>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Inspirational product case studies



Links to product case studies.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO1 Know how commercial production methods, quality and legislation impact on the design of products and components

Cost: Free

Format: Website

<http://practicalaction.org/sustainable-product-case-studies>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

The Sustainability Handbook (3)



The Sustainability Handbook is a guide to help teachers familiarise themselves with the big sustainability issues, run exciting lessons and encourage students to develop innovative and sustainable products.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO1 Know how commercial production methods, quality and legislation impact on the design of products and components

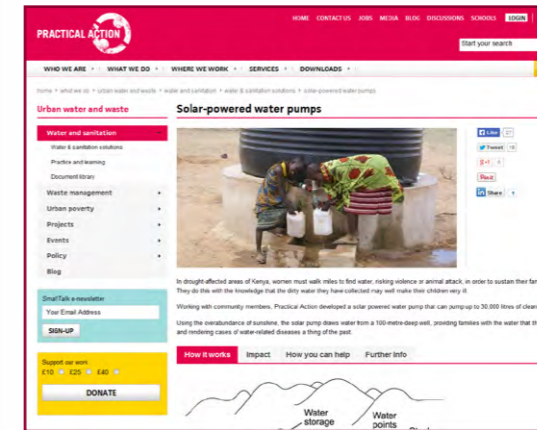
Cost: £9.71

Format: Website

<http://practicalaction.org/the-sustainability-handbook>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Solar-powered water pumps



Links to inspirational products developed and used in developing countries:
Solar water pump case study.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO2 Be able to research existing products

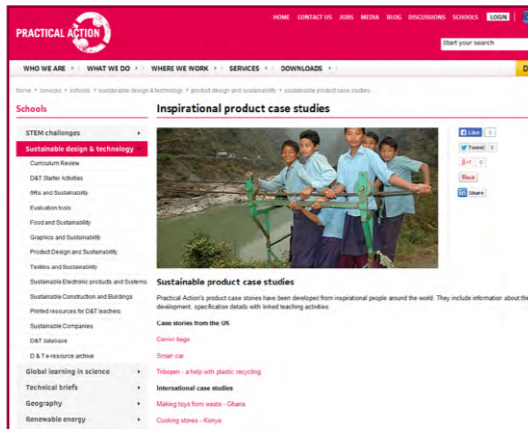
Cost: Free

Format: Website

<http://practicalaction.org/pumping-water-by-solar-power>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Inspirational product case studies (2)



Links to inspirational products developed and used in developing countries:
Solar water pump technical brief.

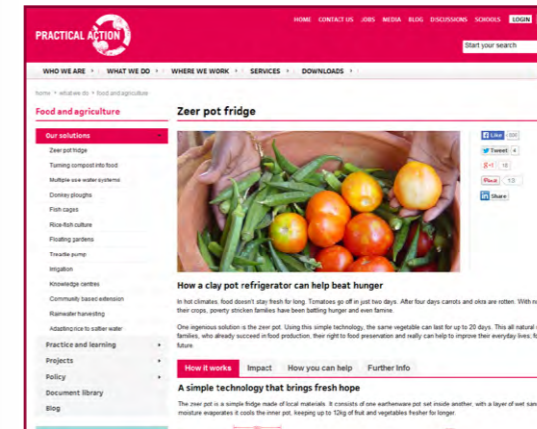
Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO2 Be able to research existing products

Cost: Free

Format: Website
<http://practicalaction.org/sustainable-product-case-studies>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Zeer pot fridge



Case study of zeer pots used to keep food cool in Sudan.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO2 Be able to research existing products

Cost: Free

Format: Website
<http://practicalaction.org/zeer-pots>

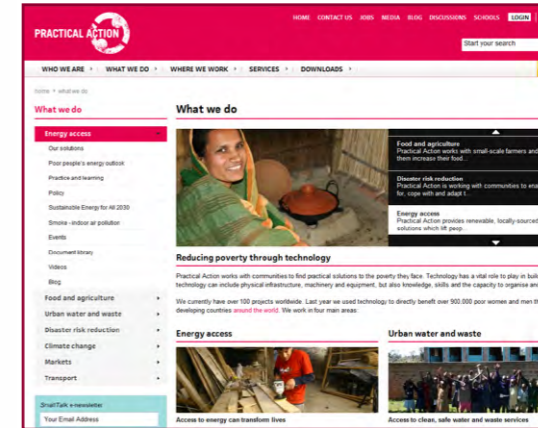
If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Technical brief - zeer pot



Technical brief on the zeer pot, used to keep food cool in Sudan.

What we do



For links to more international product case studies.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO2 Be able to research existing products
Cost: Free
Format: Website
<http://practicalaction.org/technical-briefs-schools-energy>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO2 Be able to research existing products
Cost: Free
Format: Website
<http://practicalaction.org/what-we-do>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Video gallery



For links to video clips on a range of international products.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R106, LO2 Be able to research existing products

Cost: Free

Format: Website

<http://practicalaction.org/videogallery>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

STEM challenges and awards



The 'hands-on' STEM challenges offer a range of excellent real-life contexts for developing, modelling and testing prototypes.

Supports: OCR Cambridge Nationals in Engineering Design Level 1/2
Unit R108, LO1 Know how to plan the making of a prototype

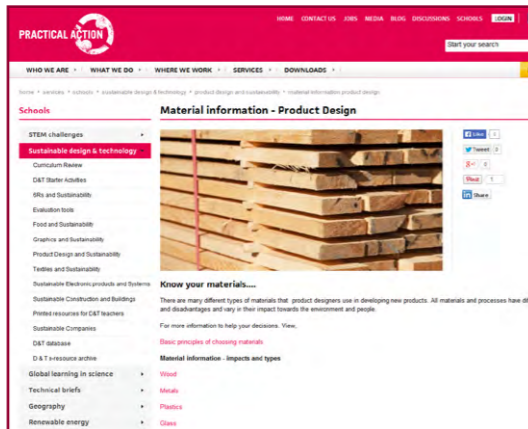
Cost: Free

Format: Website

<http://practicalaction.org/stem>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Material information - Product Design (3)



Links to principles of selecting materials and information about their properties and sustainability features.

Supports: OCR Cambridge Nationals in Engineering Manufacture Level 1/2
Unit R109, LO1 Know about properties and uses of engineering materials

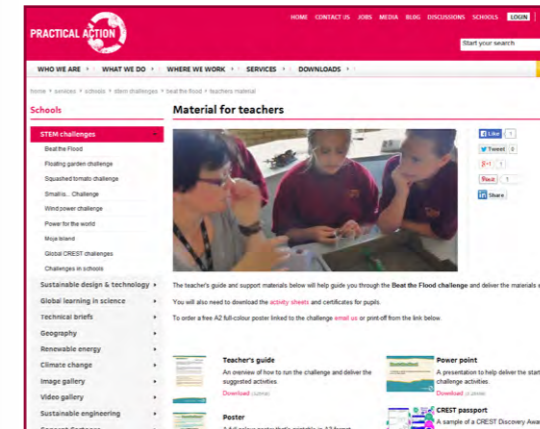
Cost: Free

Format: Website

<http://practicalaction.org/material-information-product-design>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Material testing



Links to materials testing (tensile and absorbency) to inform materials choice for modelling a flood-resistant house.

Supports: OCR Cambridge Nationals in Engineering Manufacture Level 1/2
Unit R109, LO1 Know about properties and uses of engineering materials

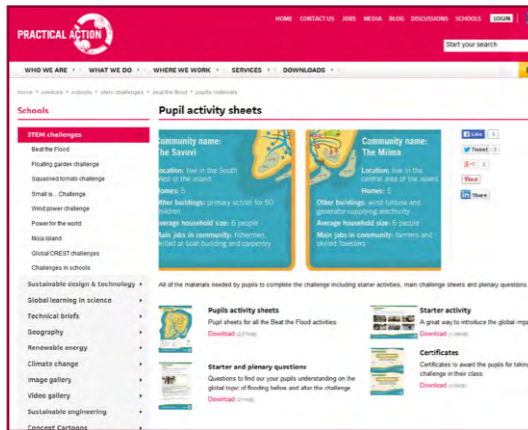
Cost: Free

Format: Website

<http://practicalaction.org/beatthefloodteachers>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Material information cards



Material cards with costing that enable students to calculate the cost of developing a flood-resistant house.

Supports: OCR Cambridge Nationals in Engineering Manufacture Level 1/2
Unit R109, LO1 Know about properties and uses of engineering materials

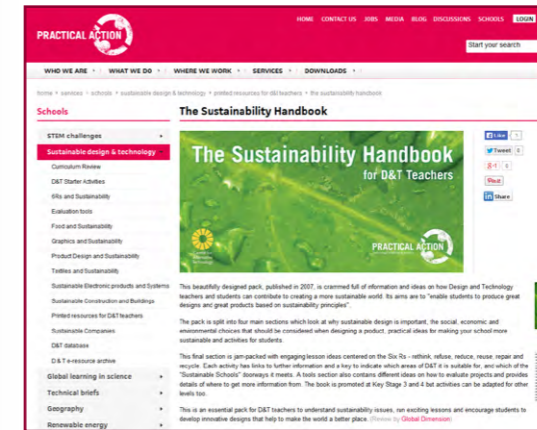
Cost: Free

Format: Website

<http://practicalaction.org/beatthefloodlearners>

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The Sustainability Handbook (4)



The Sustainability Handbook is a guide to help teachers familiarise themselves with the big sustainability issues, run exciting lessons and encourage students to develop innovative and sustainable products.

Supports: OCR Cambridge Nationals in Engineering Manufacture Level 1/2
Unit R109, LO1 Know about properties and uses of engineering materials

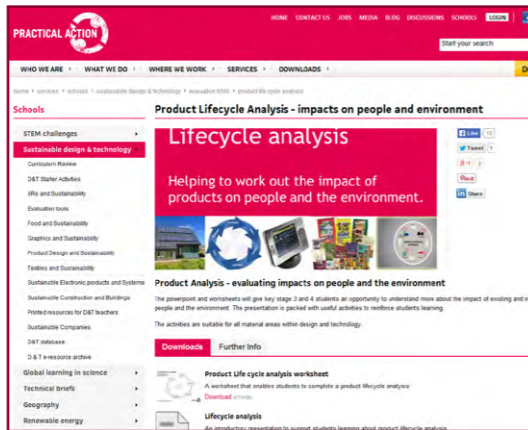
Cost: £9.71

Format: Website

<http://practicalaction.org/the-sustainability-handbook>

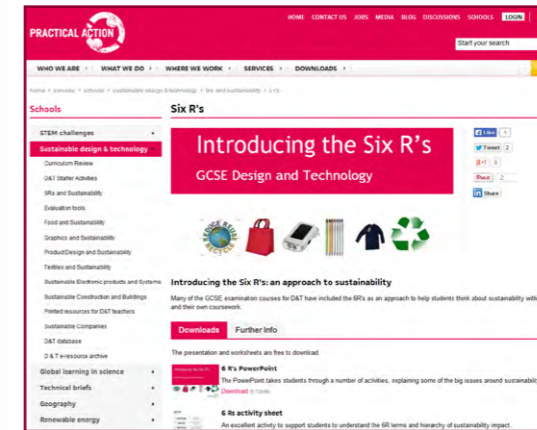
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Product Lifecycle Analysis - impacts on people and environment (4)



The lifecycle analysis activity with the Six R's definition activity highlighting the opportunities for reducing the impact of the product throughout its life-cycle.

Six R's (5)



The six R's definition activity together with the lifecycle analysis activity highlight the opportunities for reducing the impact of the product throughout its lifecycle.

Supports: OCR Cambridge Nationals in Engineering Manufacture Level 1/2
Unit R112, LO4 Know the principles of lean manufacturing

Cost: Free

Format: Website

<http://practicalaction.org/product-life-cycle-analysis>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Supports: OCR Cambridge Nationals in Engineering Manufacture Level 1/2
Unit R112, LO4 Know the principles of lean manufacturing

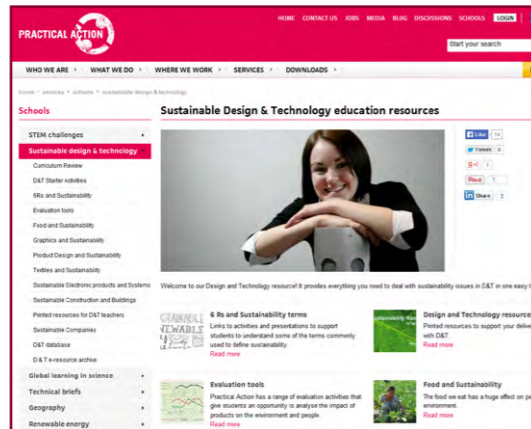
Cost: Free

Format: Website

<http://practicalaction.org/6rs>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Sustainable Design and Technology education resources



A website with links to design briefs, case studies and links to inspirational products and companies.

Supports: OCR Cambridge Nationals in Engineering Manufacture Level 1/2
Unit R112, LO4 Know the principles of lean manufacturing

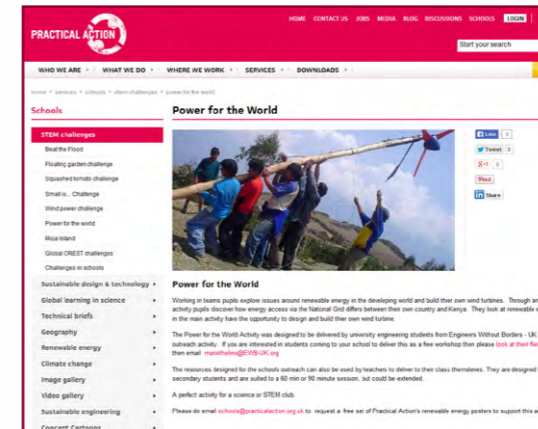
Cost: Free

Format: Website

<http://practicalaction.org/sustainable-design-technology>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Power for the World



A whole class activity that enables students to understand how mains electricity is available to some parts of the world and not others, and the basics of how a wind turbine works.

Supports: OCR Cambridge Nationals in Systems and Control Level 1/2
Unit R113, LO1 Understand basic electronic principles

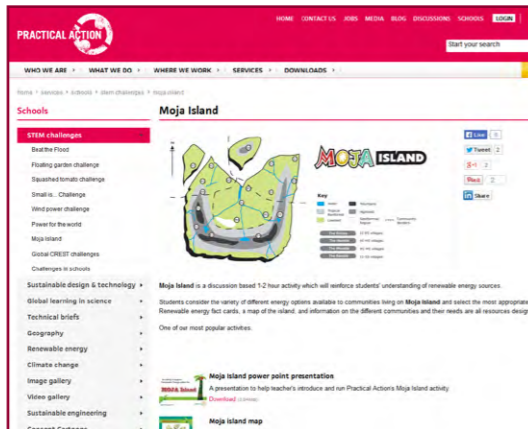
Cost: Free

Format: Website

<http://practicalaction.org/power-for-the-world>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Moja Island



Moja Island enables students to work in small teams to identify the best renewable energy option for an island community.

Supports: OCR Cambridge Nationals in Systems and Control Level 1/2
Unit R113, LO1 Understand basic electronic principles

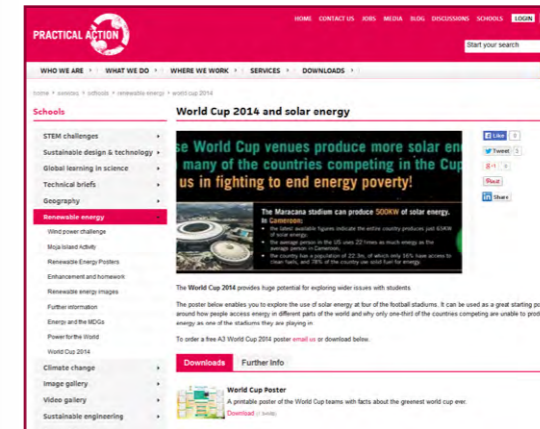
Cost: Free

Format: Website

<http://practicalaction.org/moja-island>

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World Cup 2014 and solar energy



World Cup poster highlighting the use of solar power to provide the energy required to host the World Cup 2014.

Supports: OCR Cambridge Nationals in Systems and Control Level 1/2
Unit R113, LO1 Understand basic electronic principles

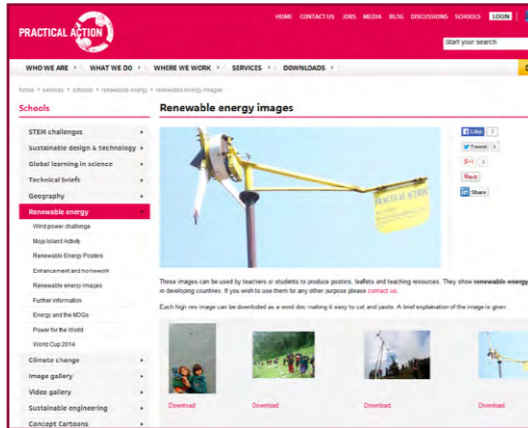
Cost: Free

Format: Website

<http://practicalaction.org/world-cup-2014>

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Renewable energy images



Photographs of renewable energy options including solar and other sustainable sources.

Supports: OCR Cambridge Nationals in Systems and Control Level 1/2
Unit R113, LO1 Understand basic electronic principles

Cost: Free

Format: Website

<http://practicalaction.org/energy-image-gallery>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Energy



Secondary source material: case studies with links to technical information of the generation and use of renewable energy options for people who don't have access to mains power.

Supports: OCR Cambridge Nationals in Systems and Control Level 1/2
Unit R113, LO1 Understand basic electronic principles

Cost: Free

Format: Website

<http://practicalaction.org/energy>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

Technical Briefs (3) - energy



Technical briefs on a range of power sources including batteries, solar and wind power.

Supports: OCR Cambridge Nationals in Systems and Control Level 1/2
Unit R113, LO1 Understand basic electronic principles

Cost: Free

Format: Website
<http://practicalaction.org/technical-briefs-schools-energy>

If you know of any resources that you think should appear here, or if you identify broken links please let us know. We would also like to hear from you with your feedback about your use of any of the resources listed here. Please contact us at resourcesfeedback@ocr.org.uk

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- World Cup 2014 and solar energy
- Renewable energy images
- Energy
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Contact us

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We're always delighted to answer questions and give advice.

Telephone 02476 851509

Email cambridgenationals@ocr.org.uk



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