



RESOURCES LINK

LEVEL 2 UNIT 3

VERSION 1 JANUARY 2014

SCIENCE

Level 2 and Level 3

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.

To give us feedback on, or ideas about the OCR resources you have used, email resourcesfeedback@ocr.org.uk

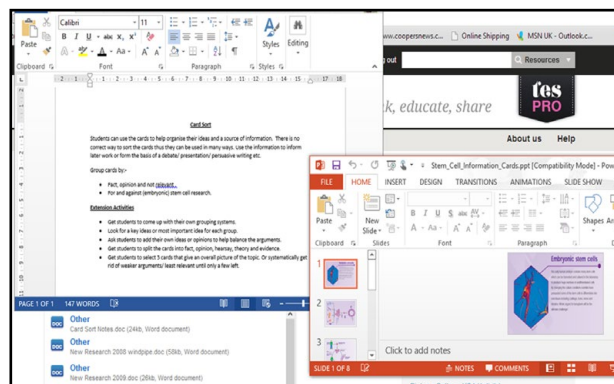
OCR Resources: *the small print*

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.

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Card Sort Activity Stem Cell Research



A set of cards to prompt discussion on the considerations of the nature of research into stem cells.

Supports: OCR Level 2 Cambridge Technical Certificate/Extended Certificate/
Diploma in Science - Unit 3 'Research and Development in Science' -
LO1 Understand how scientific concepts become useful applications

Cost: Free but involves registering then Login for Teacher

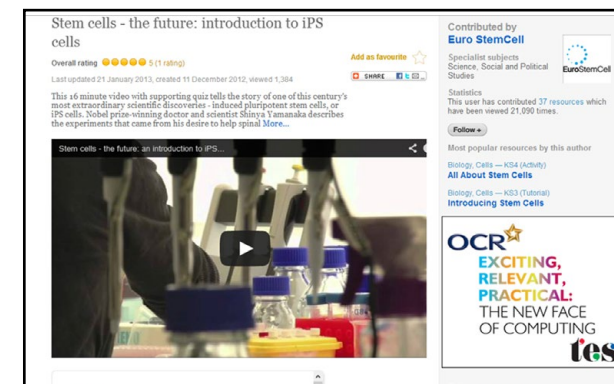
Format: Web page with a link to a PowerPoint and Word document

<http://www.tes.co.uk/teaching-resource/Stem-Cell-Activities-6036610/>

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Video and quiz on Stem Cell Research



This 16 minute video with supporting quiz tells the story of one of this century's most extraordinary scientific discoveries - induced pluripotent stem cells, or iPS cells. Nobel prize-winning doctor and scientist Shinya Yamanaka describes the experiments to treat incurable spinal cord injuries.

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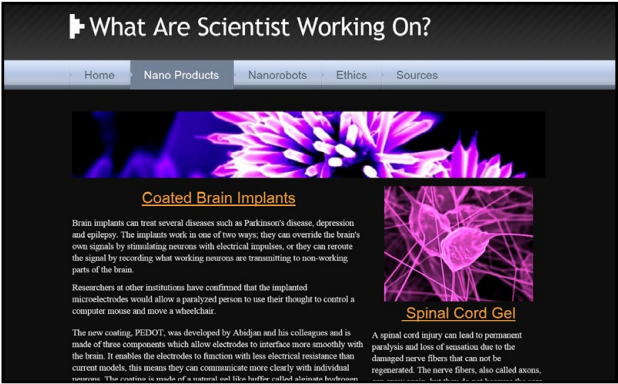
Format: Web page with an embedded video

<http://www.eurostemcell.org/toolkititem/stem-cells-future-introduction-ips-cells>

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Nano-engineered gel



A new product to help spinal injuries.

Supports: OCR Level 2 Cambridge Technical Certificate/Extended Certificate/
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LO1 Understand how scientific concepts become useful applications

Cost: Free

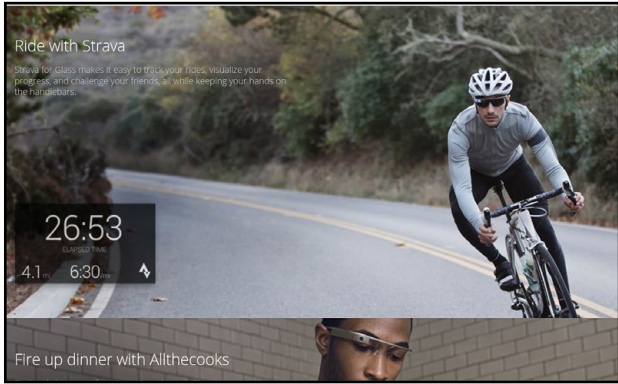
Format: Website

<http://biomedicalnanotechnology.yolasite.com/current-products.php>

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Google Glass



Google Glass website showing what this novel, new technology provides when a computer is embedded in a prism based optical device.

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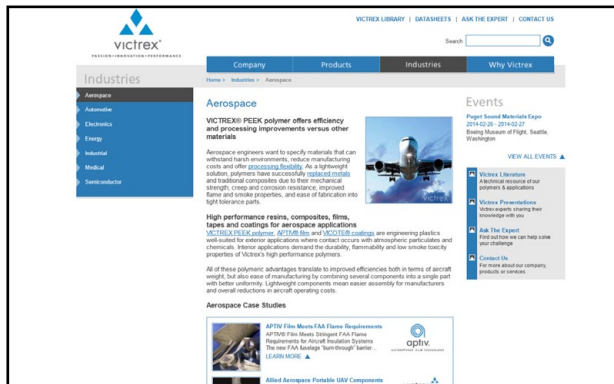
Format: Website

<http://www.google.com/glass/start/>

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High Performance Plastics produced by nanotechnology



Victrex website showing new high performance plastic technologies provided to the aerospace industries.

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LO1 Understand how scientific concepts become useful applications

Cost: Free

Format: Website

<http://www.victrex.com/en/industries/aerospace/aerospace.php>

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Electronic e-skin



Physicsworld.com website showing new electronic e-skin and discussing its potential uses in robotics.

Supports: OCR Level 2 Cambridge Technical Certificate/Extended Certificate/
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LO1 Understand how scientific concepts become useful applications

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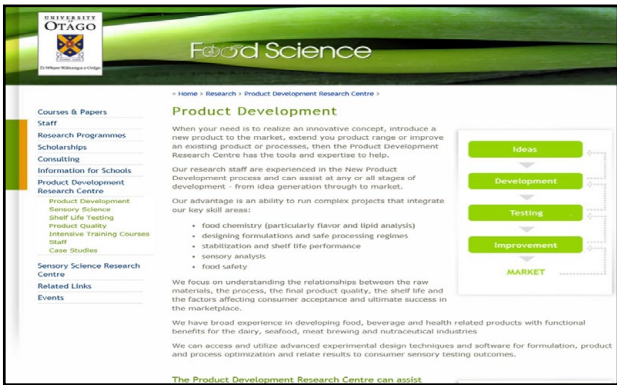
Format: Website

<http://physicsworld.com/cws/article/news/2013/jul/26/electronic-skin-lights-up-when-touched>

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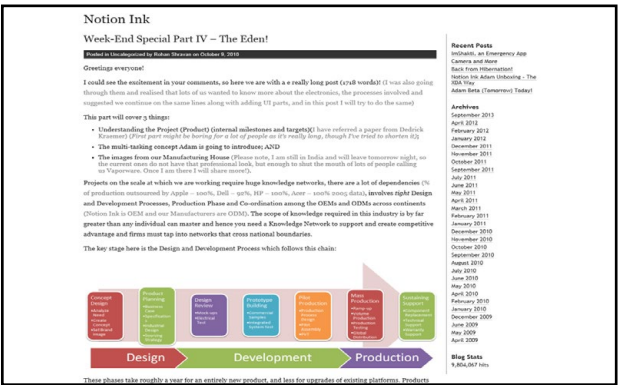
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A simplified view of how to design an application of science



Flow-chart diagram.

A flowchart to show the detailed design process as used in industry



Flow-chart diagram.

Supports: OCR Level 2 Cambridge Technical Certificate/Extended Certificate/ Diploma in Science - Unit 3 'Research and Development in Science' – LO2 Understand how scientific concepts become useful applications

Cost: Free

Format: Website

<http://www.otago.ac.nz/foodscience/productdevelopment/productdevelopment.html>

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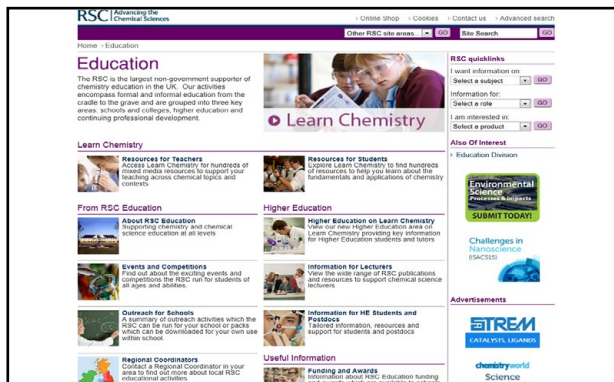
Format: Website

<http://notionink.wordpress.com/2010/10/page/3/>

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Royal Society of Chemistry - Education



Hundreds of resources to aid the teaching of chemistry. Features chemistry demonstrations, assessment tools, handouts and worksheets, from primary age to HE.

Supports: OCR Level 2 Cambridge Technical Certificate/Extended Certificate/
Diploma in Science - Unit 3 'Research and Development in Science' –
LO2 Understand how scientific concepts become useful applications

Cost: Free

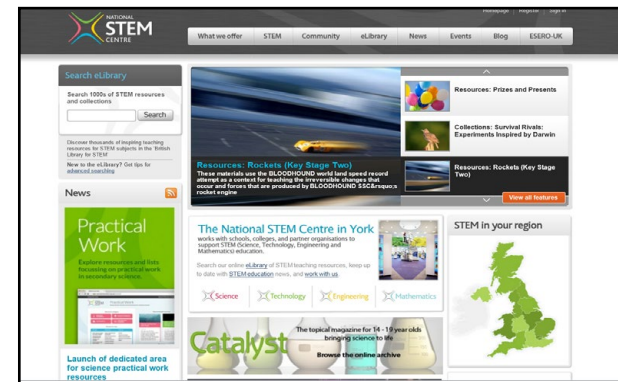
Format: Website

<http://www.rsc.org/education/>

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National STEM centre



UK's largest collection of STEM teaching and learning resources.

Supports: OCR Level 2 Cambridge Technical Certificate/Extended Certificate/
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LO2 Understand how scientific concepts become useful applications

Cost: Free

Format: Website

<http://www.nationalstemcentre.org.uk/>

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Resources Index

click on a resource to go to the appropriate page.

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- Video and quiz on Stem Cell Research
- Nano-engineered gel
- Google Glass
- High Performance Plastics produced by nanotechnology
- Electronic e-skin

LO2 - Understand how scientific concepts become useful applications

- A simplified view of how to design an application of science
- A flowchart to show the detailed design process as used in industry
- Royal Society of Chemistry - Education
- National STEM centre





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