

Slide 1

Chris Smith - [csmith@csmith.info](mailto:csmith@csmith.info) Science : Free Resources for T & L www.shambles.net

mission impossible  
hard day

ICASE International Conference  
The Jomtien Beach Hotel, Pattaya, THAILAND  
4 to 7 April 2005

Promoting Scientific & Technological Literacy (STL)  
through Science Toys and Out-of-School  
Science Activities

**“Finding & Using  
Free Science Resources  
(with an ICT bias)”**

Chris Smith  
[csmith@csmith.info](mailto:csmith@csmith.info)

Slide 2

Chris Smith - [csmith@csmith.info](mailto:csmith@csmith.info) Science : Free Resources for T & L www.shambles.net

**www.shambles.net/science**

Shambles Menu (Best viewed at 800 x 600 with ZEN) 10:46 am Tuesday 15 March 2005 <http://www.shambles.net>

science (Sc)

One-stop Shambles Science Page - The Science Department (a feedback form is in the top left menu)

Don't forget the search box just here ->>

Online Tools  
| Quiz Maker | Chemical Periodic Table | Visual Periodic Table | Periodic Table (Word Grid)  
| Today | Lenneth Periodic Table (with health aspects - in 5 languages) | Periodic Table Fun  
| Search (PDR) | Private | Laser Cool | Mr. Ronen | Calculator | Science terms in eight languages!  
| Search Scripts | Click&Go Watch | online market pan | Ciesaspector (to download)  
| Why Study Science | check spelling | dictionary | thesaurus | translate

Science areas on "Shambles":  
Science Curriculum	Science Policies and Admin	Science and ICT	Science and Assessment		
Scientific Enquirer	Science Games	Science in Society	Science Fair	Scientific	Forensic Science
Science Technicians	Science Equipment and Products	Science Toys	Science News	I.B.	
Science Department and Staff Websites	Designing Science Labs & Equipment				
Websites for Biology & Genetics staff	Websites for Biology students				
Websites for Chemistry staff	Websites for Chemistry students				
Websites for Physics staff	Websites for Physics students				
Websites for General Science staff	Websites for General Science students				

Listservs, newsletters, chats & forums - talk with other science teachers (& students):  
Amateur Science Groups	Ask A Chemist	Ask A Scientist	EGIS Science Library	
MSTE List of Science Laboratories	Lists of Listserv	Find out what's happening around		
Science Daily	Science Newsbeat	Science News	Science News for kids	Science Educ. Review
Science Across the World	Science by email	Science Groups	Whyville Virtual Community	
International Network for Info in Science & Technology Education	The Education Forum (Science)			

Topics:  
| Astronomy | Colour | Online Microscopes | Electricity & Magnetism | Energy | Flight | Inventions |  
| Light & Sound | Our Atmos & Our Bodies | Plants | Rocks & Soils | Space | Water | Simulations |

Search powered by Coolidge  
Add Shambles to my Favorites  
Add Shambles to my RSS  
Add Shambles to my Digg  
Add Shambles to my Technorati

RockWard Earth Science  
GIS & Map Software  
200+ programs for professionals & educators  
[www.rockward.com](http://www.rockward.com)

GCSE Exam Retakes  
Study from home or anywhere else with our tutor support  
[www.rockward.com](http://www.rockward.com)

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Slide 3

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Microsoft Internet Explorer

Address <http://www.shambles.net/pages/learning/science/ictovr/>

Shambles Menu (Best viewed at 800 x 600) 11:23 am Tuesday 15 March 2005 <http://www.shambles.net>

**Science Toys**

Science Toys resources at the NGfL (UK)  
<http://www.ngfl.com/starts>  
Science Toys teaching and learning resources at the National Grid for Learning NGfL (UK)

Science Explorer  
[http://www.exploratorium.edu/science\\_explorer/index.html](http://www.exploratorium.edu/science_explorer/index.html)  
Science Explorer - not really commercial toys - but you own activities that can be done at home with everyday objects.

Toys in Space (NASA)  
<http://serpssc.ecs.bnl.gov/nasa.gov/HAS/csm/s6/4.cfm>  
Toys in Space (NASA)  
The first two Toys in Space missions were flown on shuttle flights STS-51D and STS-54. They provided school children with a series of experiments that they could do in their classrooms using a toys that demonstrate the laws of physics. Students could experiment with the toys, study about microgravity, and predict what the toys would do in space. The astronauts on those flights experimented with the toys and videotaped their results. Students could then compare their results to what actually happened in space.

Toy Challenge (USA)

All the Science Toys  
All the Science Toys, Big Savings!  
Smart Toy Shoppers Start Here  
Science Toys with fun

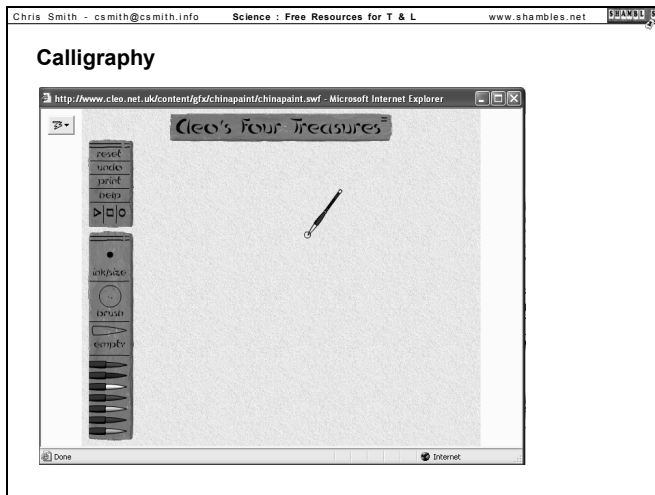
Science Kits  
Ready to use science kits in Chemistry, Physics, and Biology  
[www.2000ed.com](http://www.2000ed.com)

Free Workbook Pages, K-8  
Download activities & lessons from Learning Resources, trusted 20+ yrs





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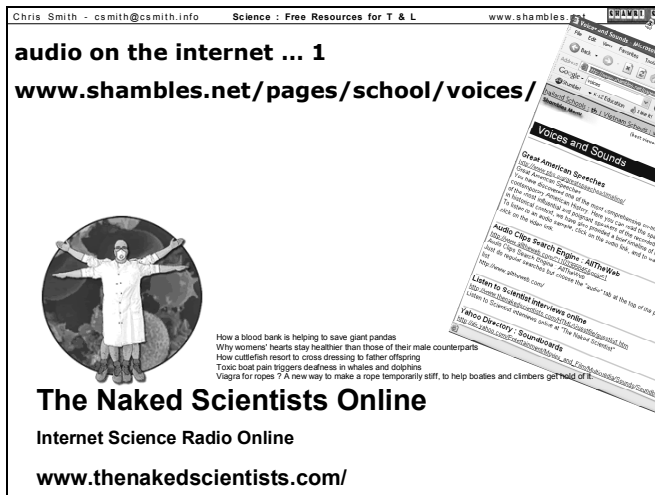
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Slide 8



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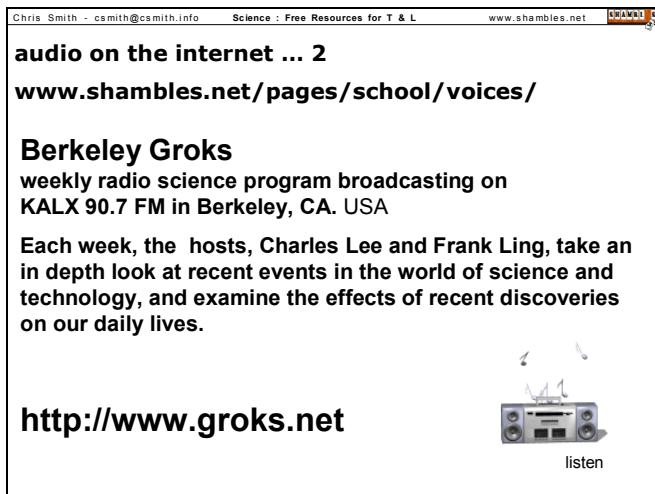
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Slide 9



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Slide 10


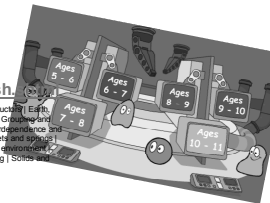
Chris Smith - [csmith@csmith.info](mailto:csmith@csmith.info) Science : Free Resources for T & L [www.shambles.net](http://www.shambles.net) DRAW

**video and multimedia online**

[www.shambles.net/pages/school/videoOL](http://www.shambles.net/pages/school/videoOL)  
[www.shambles.net/science](http://www.shambles.net/science)

**Science Clips at the BBC**  
[www.bbc.co.uk/schools/scienceclips/index\\_flash](http://www.bbc.co.uk/schools/scienceclips/index_flash)

Characteristics of materials | Changing circuits | Changing sounds | Changing state | Circuits and conductors | Earth  
Sun and Moon Forces and movement | Forces in action | Friction | Gases around us | Growing plants | Growing and  
changing materials | Habitats | Health and growth | Helping plants grow well | How we see things | Interspecific and  
adaptation | Keeping healthy | Keeping warm | Life cycles | Light and dark | Light and shadows | Magnets and space |  
Micro organisms | Moving and growing | Ourselves | Pushes and pulls | Plants and animals in the local environment |  
Reversible and irreversible changes | Rocks and soils | Sorting and using materials | Sound and hearing | Some  
liquids | Teeth and eating | Using electricity | Variation



**Why Study Science (1955)**  
[www.open-video.org/details.php?videoid=4507](http://www.open-video.org/details.php?videoid=4507)

Family discusses how the study of science can help son and daughter make intelligent decisions on problems they will confront in the world.

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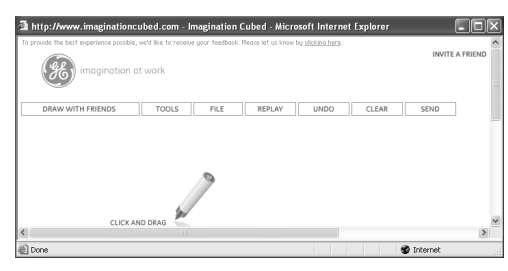
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**online marker pen**



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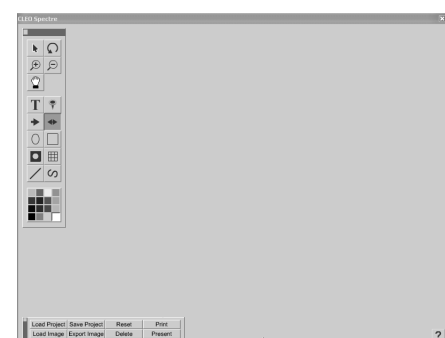
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**CLEOspecter**



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### Free Software

**FREEWARE :**  
Copyrighted software given away for free by the author. Although it is available for free, the author retains the copyright, which means that you cannot do anything with it that is not expressly allowed by the author. Usually, the author allows people to use the software, but not sell it.

**SHAREWARE :**  
Software distributed on the basis of an honor system. Most shareware is delivered free of charge, but the author usually requests that you pay a small fee if you like the program and use it regularly. By sending the small fee, you become registered with the producer so that you can receive service assistance and updates. You can copy shareware and pass it along to friends and colleagues, but they too are expected to pay a fee if they use the product.

Shareware is inexpensive because it is usually produced by a single programmer and is offered directly to customers.

**PUBLIC DOMAIN SOFTWARE :**  
Refers to any program that is not copyrighted. Public-domain software is free and can be used without restrictions.

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### www.shambles.net/pages/school/freesoft/

Free Software

NirSoft  
<http://www.nirsoft.net/>  
NirSoft web site provides a unique collection of small and useful freeware utilities, all of them developed by Nir Sofer.  
Password Recovery Utilities | ZipInstaller | CAM UnZip | Network Monitoring Tools | Internet Related Utilities | IECookiesView | MyPopupKiller | TurnFlash | MetaWeather utility

TheFreeSite  
<http://www.thefreesite.com/>  
Welcome to TheFreeSite.com, Home of the Web's Best Freebies.  
Sign up for TheFreeSite.com's free E-mail newsletter and get a weekly roundup of the Web's latest and greatest free stuff

SGI IRIX Freeware distribution list  
<http://thefreesite.sgi.com/index-by-alpha.html>  
SGI IRIX Freeware distribution list  
The open source software packages on this site are authored and provided by many generous individuals and organizations throughout the world. It is through their efforts that these useful and high-quality software packages exist.

Free CDSoftware  
Clarity ELT software  
fieldwork online training  
Posters READING  
FREE Resources  
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### Crocodile Clips : Elementary Software FREE

[http://www.crocodile-clips.com/s3\\_4.htm](http://www.crocodile-clips.com/s3_4.htm)

crocodile clips elementary

- circuits
- batteries
- flashlights
- dimmers
- doorbells
- fuses
- quiz
- series lamps
- motors
- parallel lamps
- create a circuit
- High School

Direct2U Lesson Plans (all curriculum areas) PRIMARY ... k-6  
<http://forum.ngfl.gov.uk/direct2u>

Year 2: Electrical circuits  
[http://forumfiles.ngfl.gov.uk/direct2u/w3\\_science\\_y2\\_electricalcircuits.rtf](http://forumfiles.ngfl.gov.uk/direct2u/w3_science_y2_electricalcircuits.rtf)

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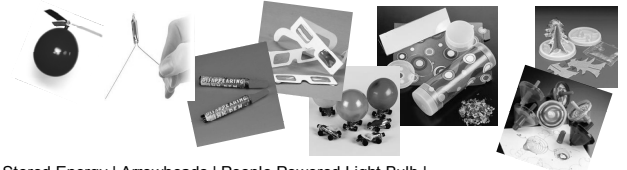
Slide 16

Chris Smith - [csmith@csmith.info](mailto:csmith@csmith.info) Science : Free Resources for T & L [www.shambles.net](http://www.shambles.net)

### Free Science Resources ... fun stuff

#### FREE Homeschool Curriculum Fun Kits

[www.homeschoolfunkits.com/html/index.html](http://www.homeschoolfunkits.com/html/index.html)



Stored Energy | Arrowheads | People Powered Light Bulb | Newton's Flying Balloon-O-Copter | Mini Steam Engine | Giganto Bag Of Air | Bernoulli Magical Floating Ball | Archimedes' Cartesian Squid | Ultra Violet Ray Detection Bracelet | Fortune Telling Fish | Thermal Influences On Chemical Rates of Reaction | Exploding Chemistry | Magnetic Connector Polarity Science | Helical Inclined Plane | Pencil Mechanical Force | Crystal Growing Tree | Super-Yo-Yo Balls Centripetal / Centrifugal Forces | MagnetoBalls Molecular Interaction | Kaleidoscope | Toy Gyroscope | Balloon Racer | 3D Glasses | Disappearing Ink Chemistry |

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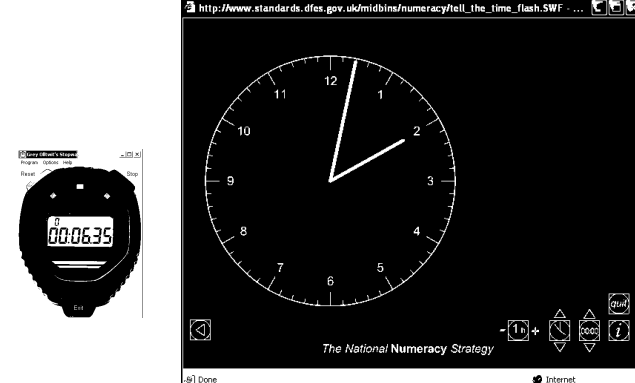
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### time and clocks



[www.shambles.net/pages/learning/primary/Time/](http://www.shambles.net/pages/learning/primary/Time/)

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### teacher continuing professional development CPD

[www.teacher.tv](http://www.teacher.tv)



teachers' tv

**RESOURCE REVIEW**  
Resources to help teach about microbes go under the microscope + Interactive Whiteboard  
15 mins

**How to demonstrate spectacular chemistry experiments safely**  
14 mins

**Introducing circuit diagrams at Key Stage 2 (grades 3-6)**  
15 mins

**CLEAPSS Chemistry**  
15 min

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**teacher continuing professional development CPD**

**A Practical Toolkit for Designing and Facilitating Professional Development Science and Maths (2004) .. CD ROM**



[www.learningpt.org/msc/products/pdcdrom.htm](http://www.learningpt.org/msc/products/pdcdrom.htm)

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**teacher continuing professional development CPD**

**Using web-based resources in secondary science** [Richard Hammond](#)  
(PowerPoint and pdf)  
<http://forum.ngfl.gov.uk/WebX?13@9.L2Vpa4t4si6.6@efa5592>



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**Fear of Physics**  
<http://www.fearofphysics.com/>

**Science Theatre Scripts**  
<http://gvc03c32.virtualclassroom.org/>

**Science Poems**  
<http://www.firstscience.com/SITE/poems.asp>

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