



Stage 5 Graphics Technology

Core Modules 1 and 2 resources

Rather than provide resources for one unit of work I have attempted to provide sufficient resources to address the needs of all the units of work. The majority of the resources are web based as these provide current and readily accessible information for the teacher to view and decide how relevant they will be for their classes.

Existing drawing textbooks will provide sufficient information for the basic skills development work associated with each unit, however the web resources do also provide introduction to various techniques required by the syllabus.

Videos

Woodmill Craft and Education

- Architectural *Drawing* and Rendering in Industry No. 23
- CAD and CAM in Education and Industry No. 18

Classroom Video

- Architecture and Interior Design, Ken Canaille
- Design Elements and Principles
- Visual Design Elements and Principles Years 10–12 (30 min.)

Marcom Projects, Qld

- CAD and CAM in Education and Industry (25 min.)
- Rendering Techniques (100 min.)
- *Technical* Rendering (100 min.)

EMA, VHS

- Computer Aided Design

Video Education Australia

- Computer Aided Design (30 min.)
- Effective *Drawing* (15 min.)

Key Book Services, The Junior Design and Technology Series 3.

- Introduction to Perspective *Drawing*

Stuart Arden, Sydney College of Arts

(Education Media

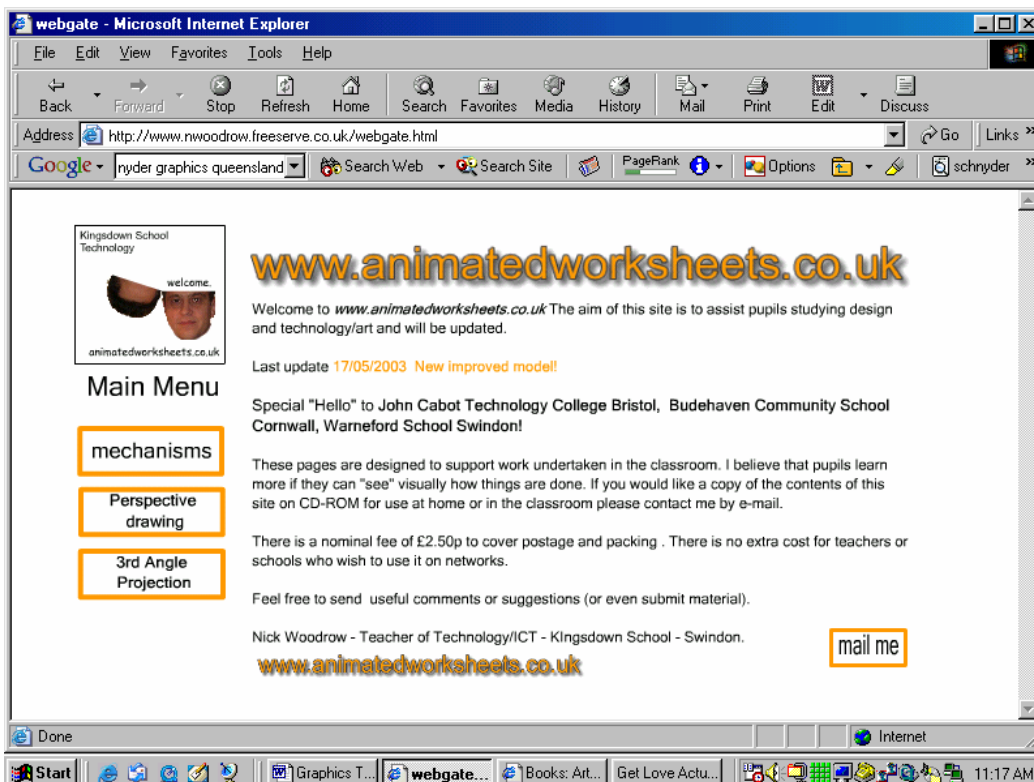
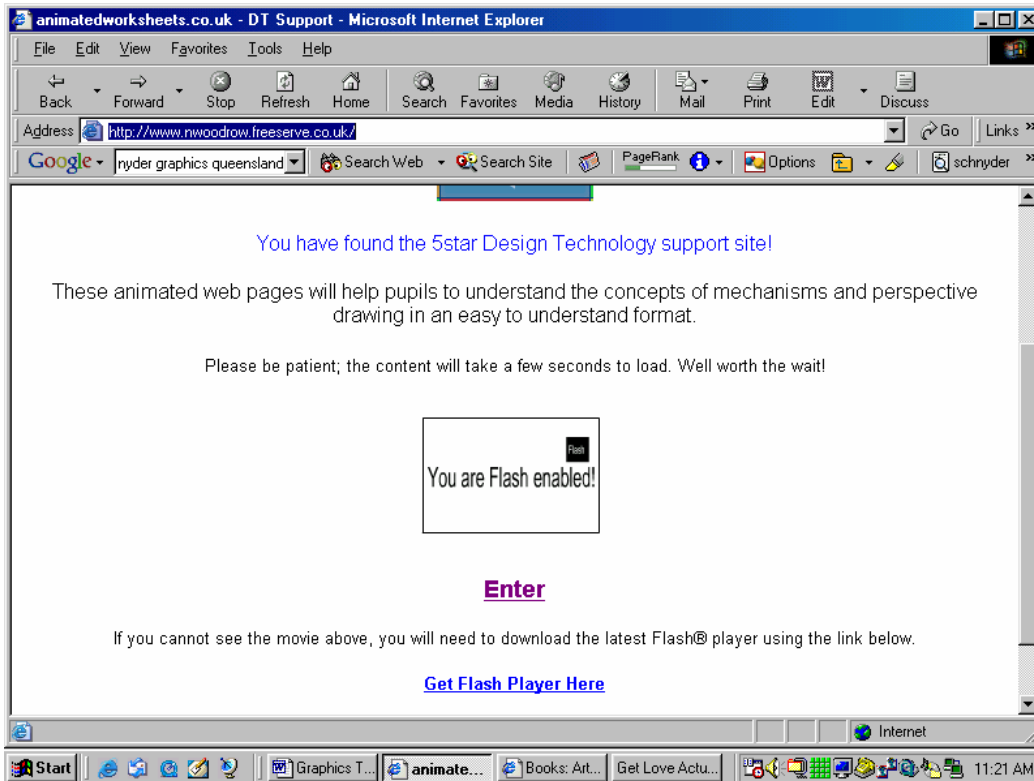
Supplies), Chandler.

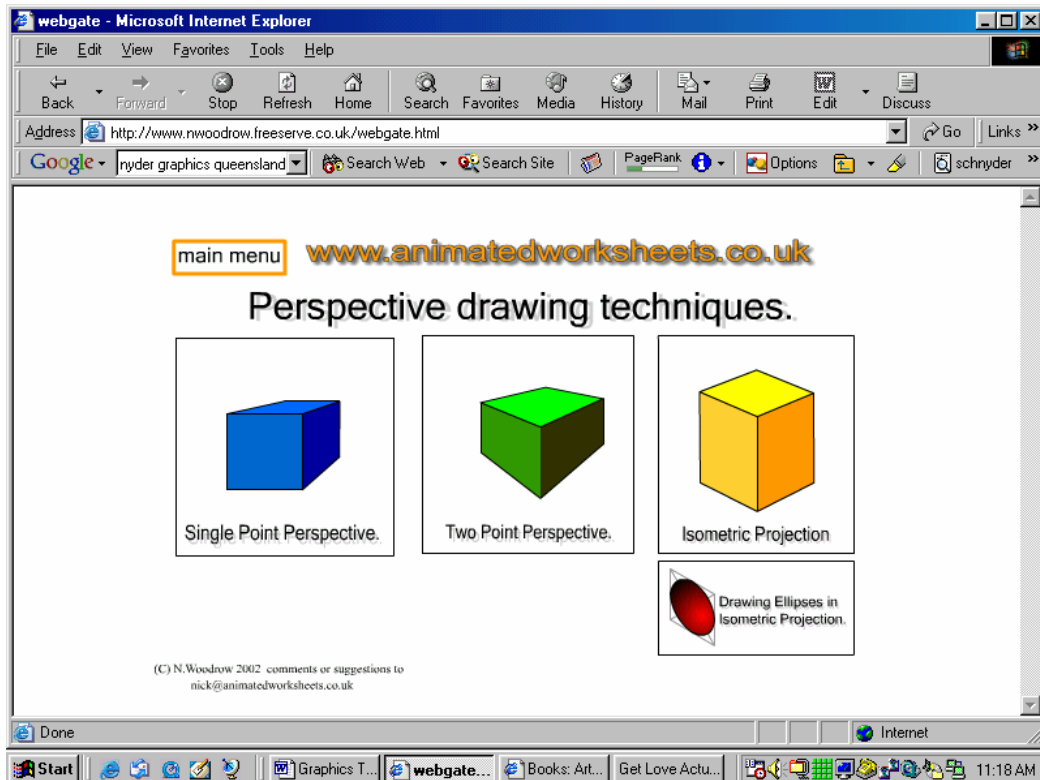
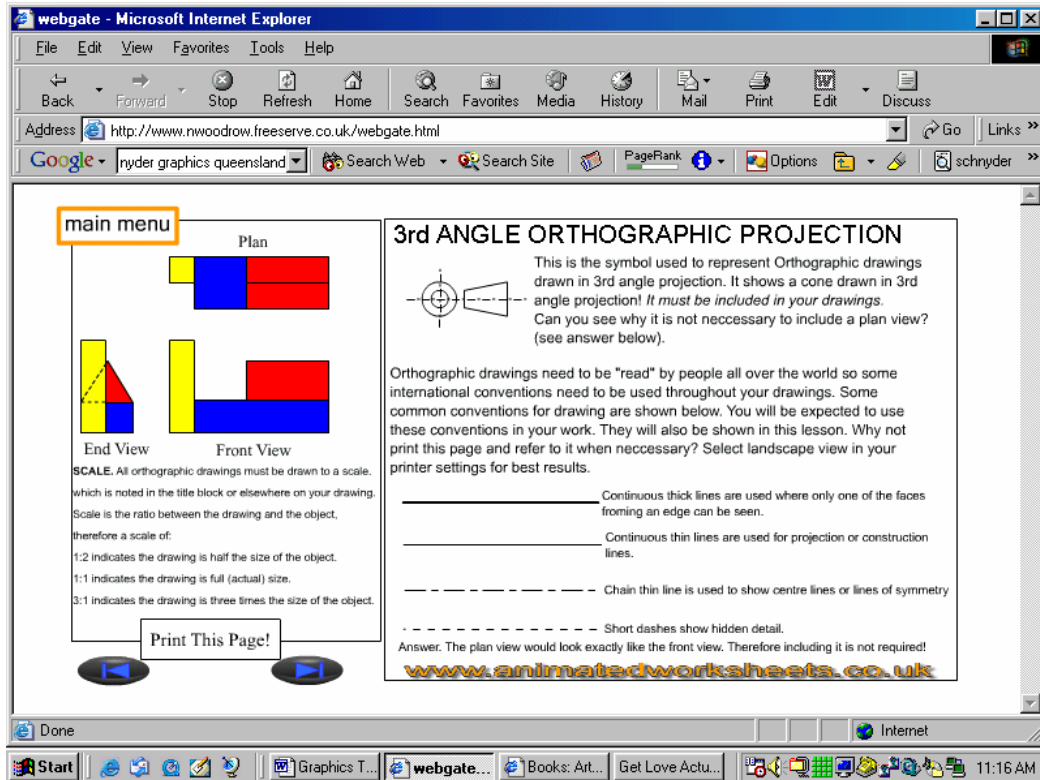
- Technical Graphics

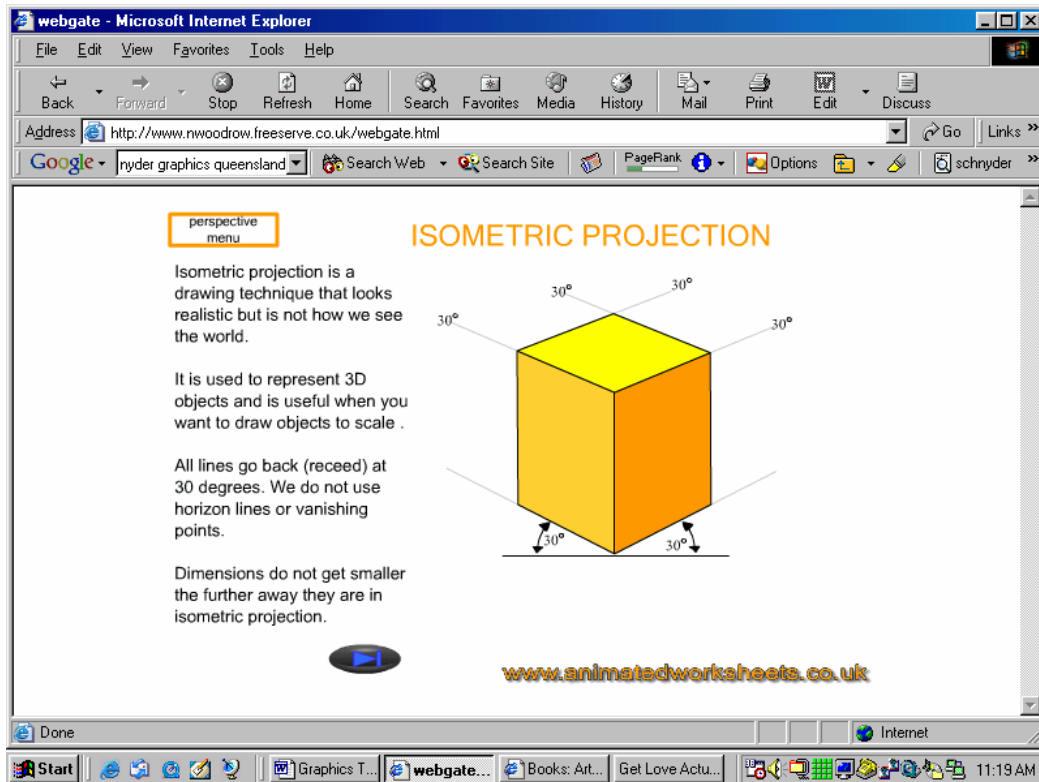
Web sites

On the following pages are various web sites with screen dumps to show the page, for those with a number of links within the page other screen dumps are shown to indicate some of the materials available.

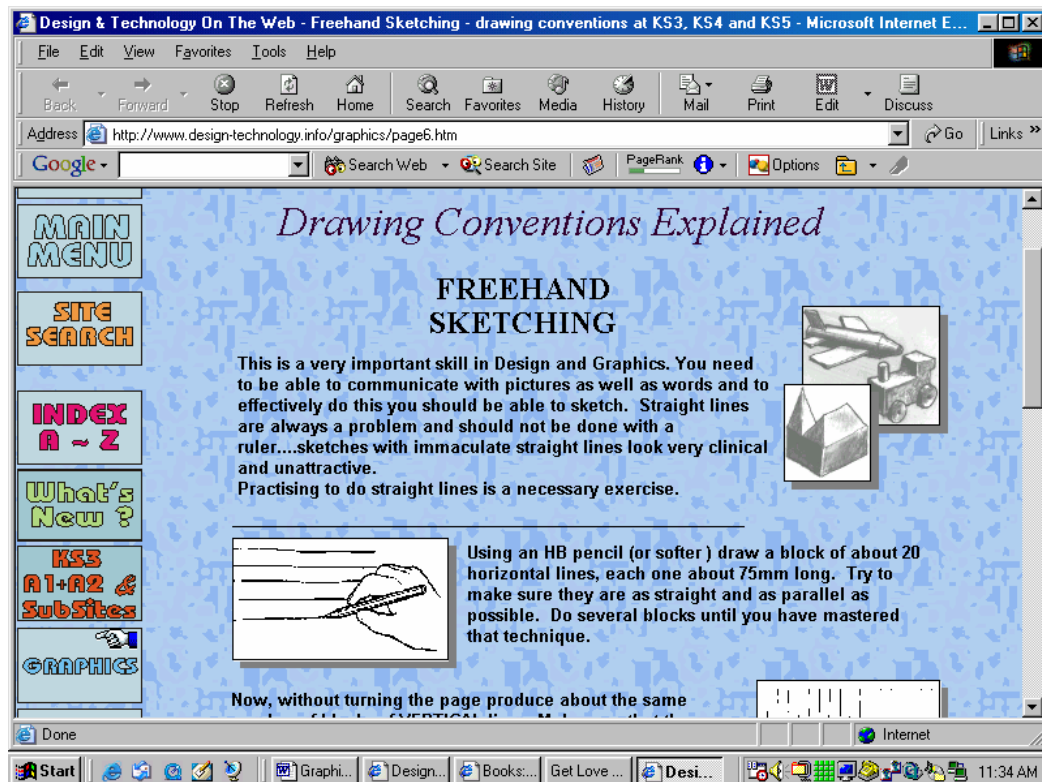
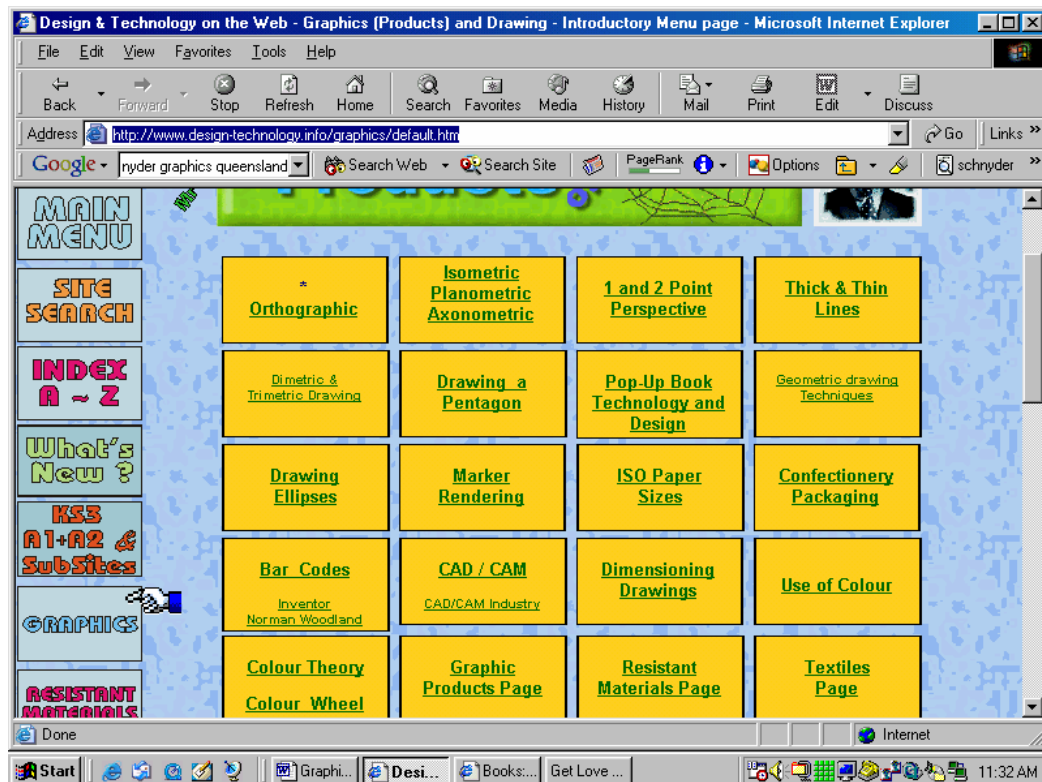
<http://www.nwoodrow.freeseve.co.uk/>

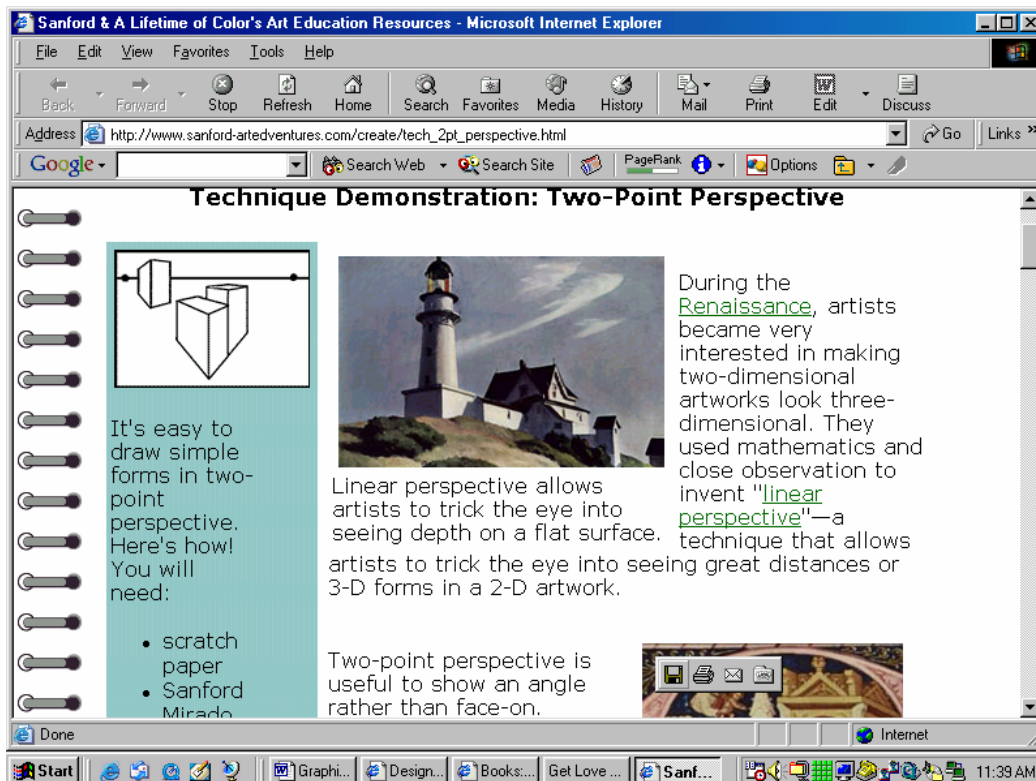






<http://www.design-technology.info/graphics/default.htm>





<http://ergonomics4schools.com/>

Ergonomics 4 Schools

Ever tried to eat soup with a fork?

It's not easy, is it? Well, ergonomics is about changing all that! We don't mean making it easy to eat soup with a fork, we mean giving you the right tools for the job. Ergonomics is about making your life simpler and safer by taking account of human characteristics when we design things.

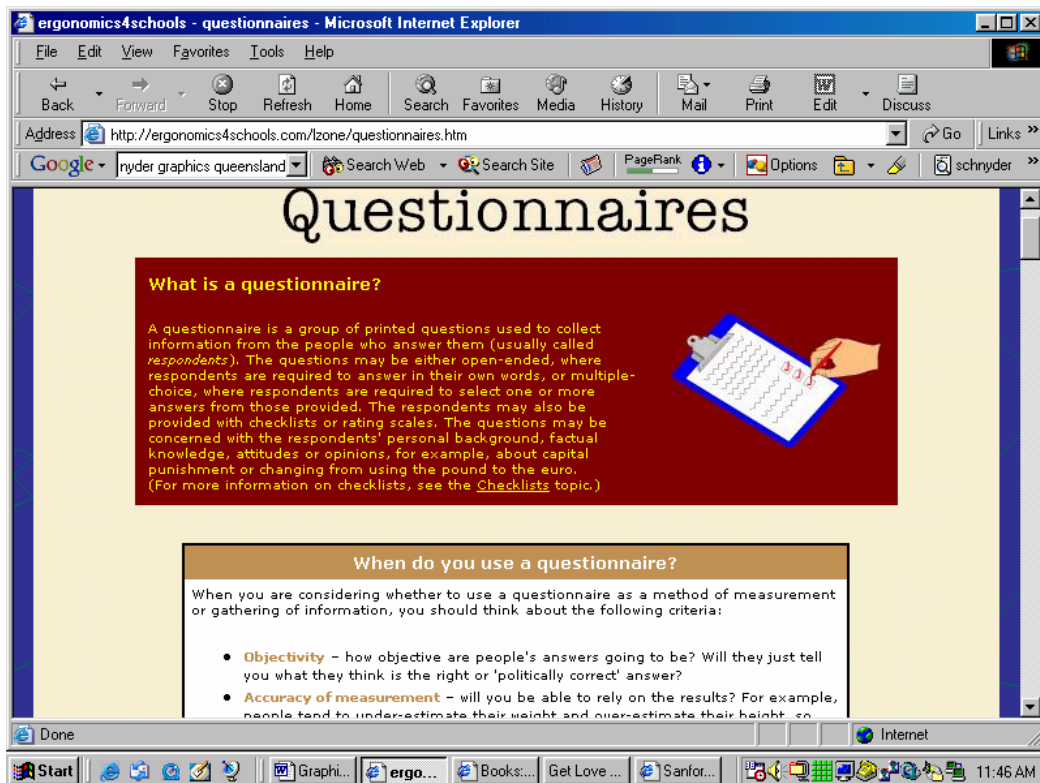
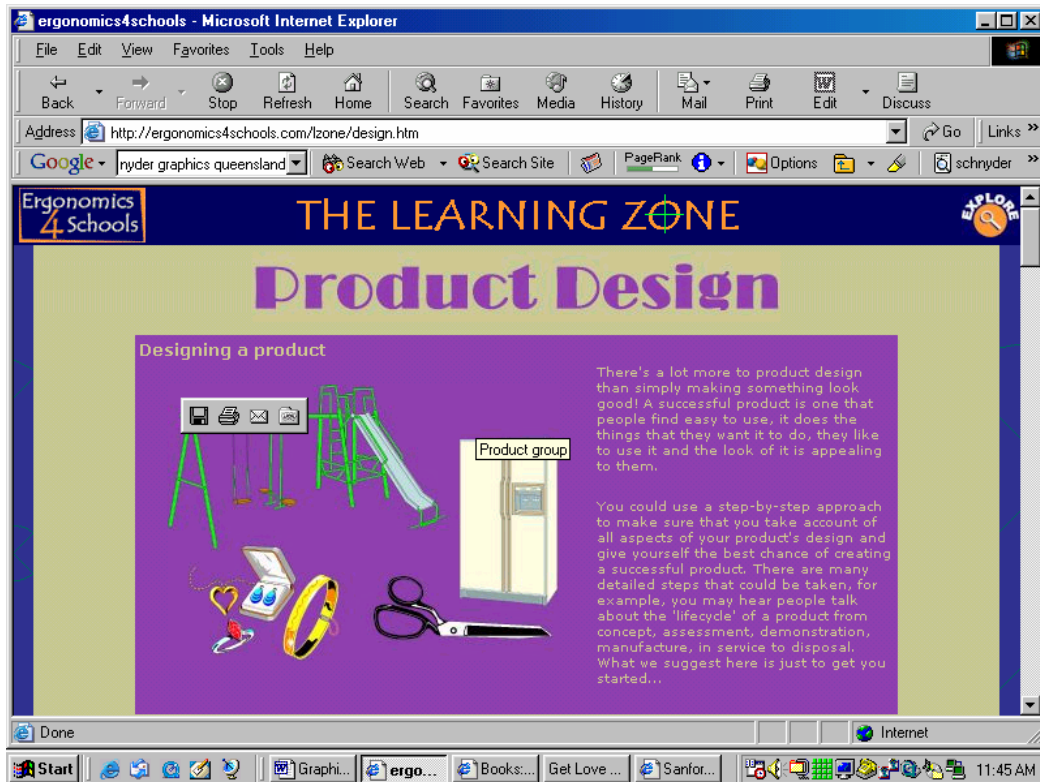
This site aims to answer all those questions about ergonomics that you haven't even thought of yet. Explore the Ergonomics 4 Schools [Learning Zone](#), read the [frequently asked questions](#), and if you still can't find the answers, simply [ask us!](#)

THE LEARNING ZONE

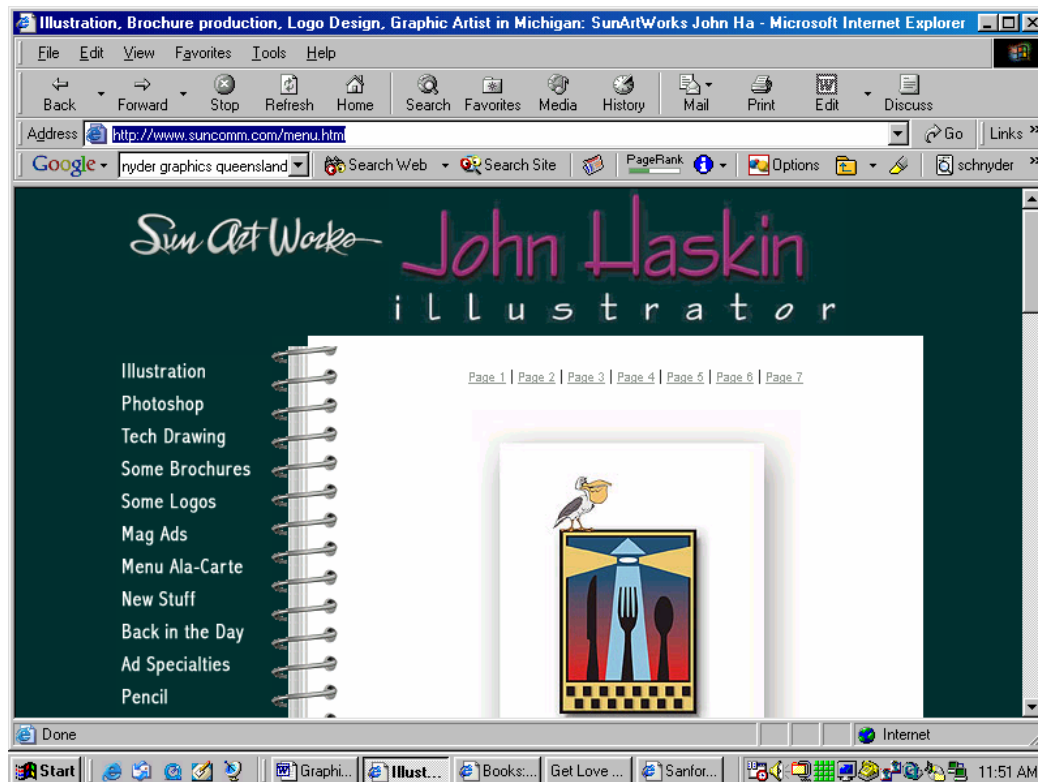
[What is ergonomics?](#) [See topic list](#) [See keyword list](#)

What is it that you are aiming for with your design?	Design examples:	Examples of measurements to consider:	Users that your design should accommodate:
Easy reach	Vehicle dashboards, Shelving	Arm length, Shoulder height	Smallest user: 5th percentile
Adequate clearance to avoid unwanted contact or trapping	Manholes, Cinema seats	Shoulder or hip width, Thigh length	Largest user: 95th percentile
A good match between the user and the product	Seats, Cycle helmets, Pushchairs	Knee-floor height, Head circumference, Weight	Maximum range: 5th to 95th percentile
A comfortable and safe posture	Lawnmowers, Monitor positions, Worksurface heights	Elbow height, Sitting eye height, Elbow height (sitting or standing?)	Maximum range: 5th to 95th percentile
Easy operation	Screw bottle tops, Door handles, Light switches	Grip strength, Hand width, Height	Smallest or weakest user: 5th percentile
To ensure that an item can't be reached or operated	Machine guarding mesh, Distance of railings from hazard	Finger width, Arm length	Smallest user: 5th percentile Largest user: 95th percentile

Sometimes you can't accommodate all your users because there are conflicting solutions to your design. In this case, you will have to make a judgment about what is the most important feature. You must never compromise safety though, and if there



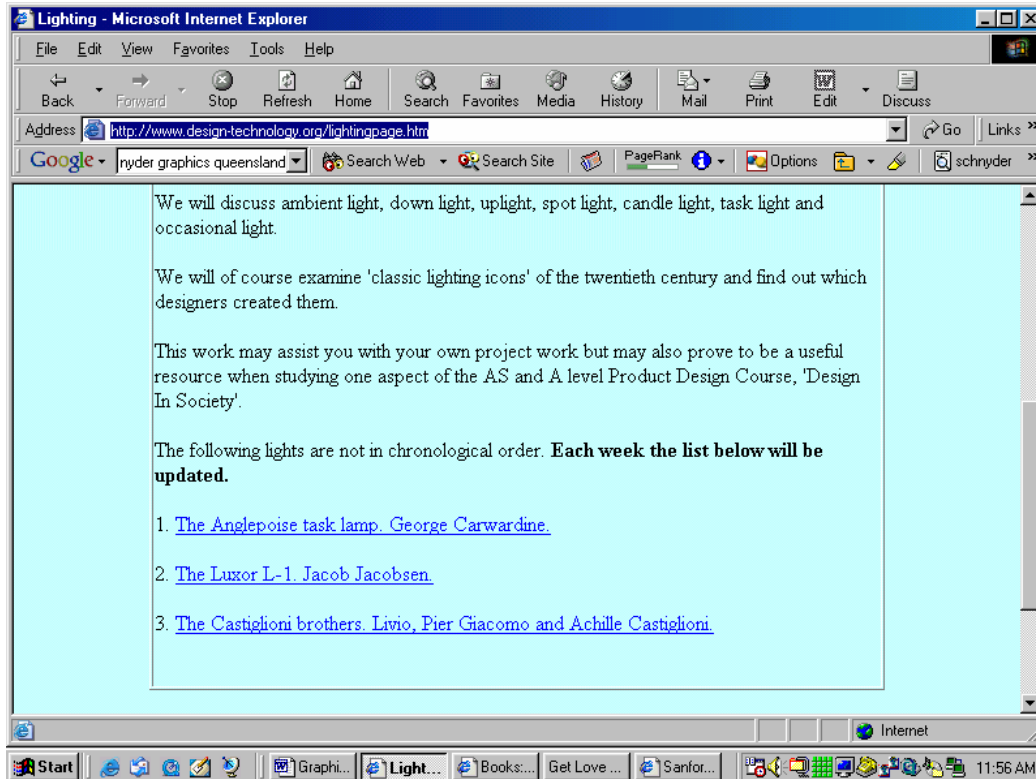
<http://www.suncomm.com/menu.html>



This site looks at the work of an illustrator, John Haskin. He explains the process he goes through for menu designs, a logo, a technical information brochure and various other publications as listed above.

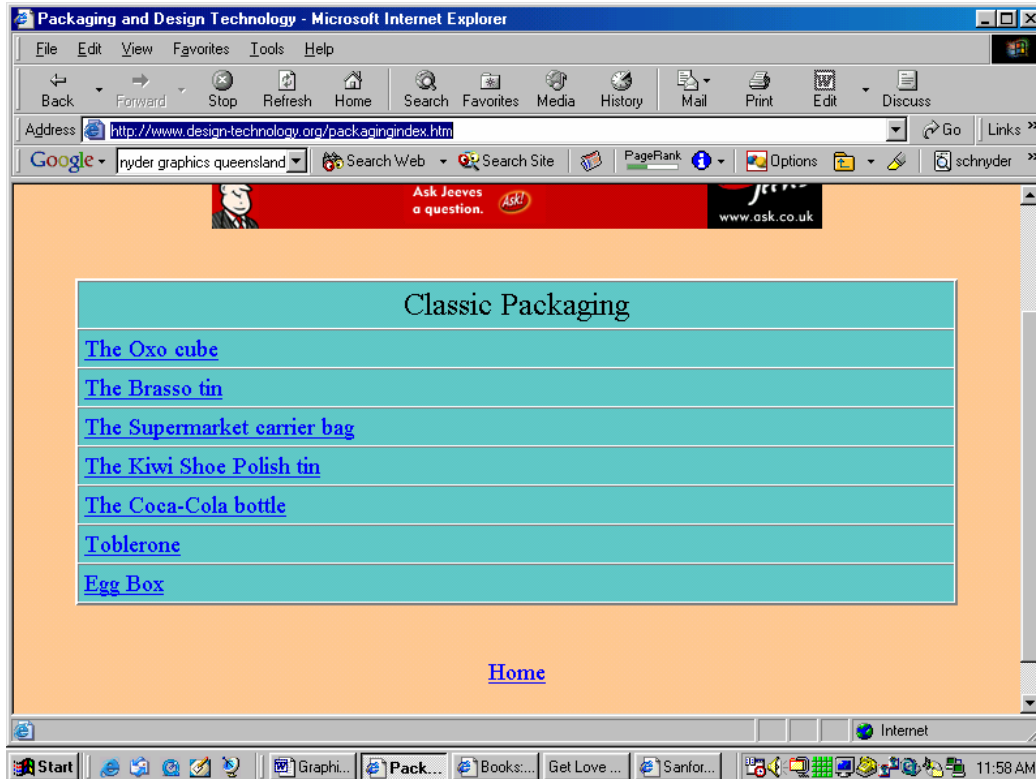
<http://www.design-technology.org/lightingpage.htm>

Useful for lighting design

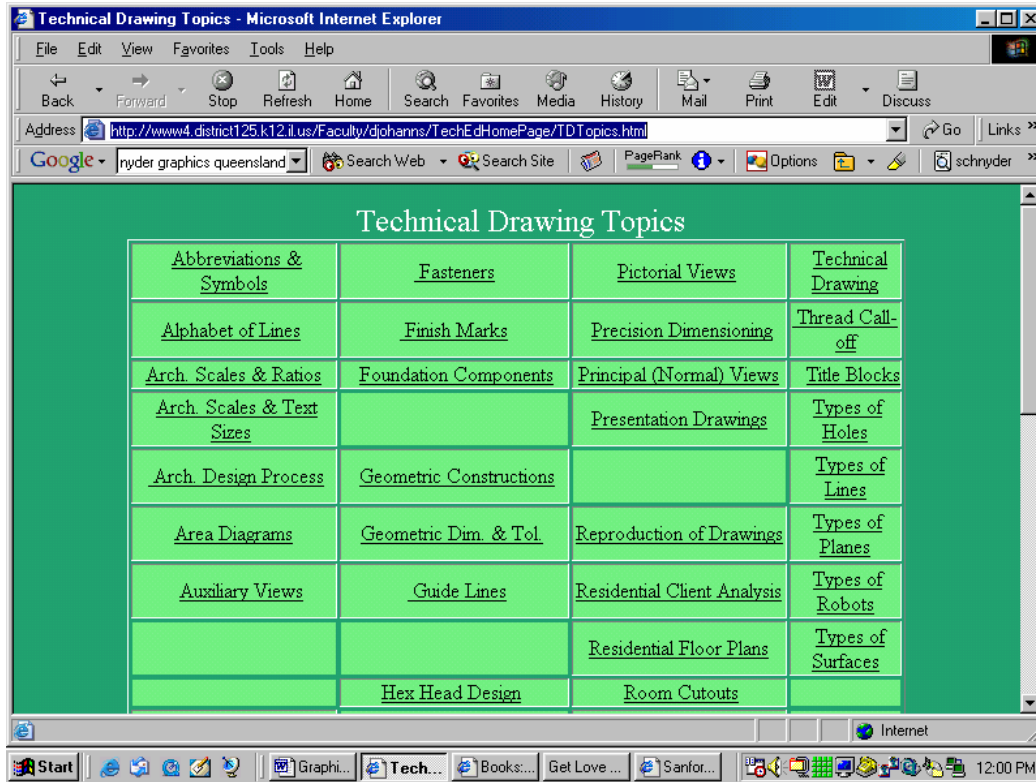


<http://www.design-technology.org/packagingindex.htm>

For packaging information



<http://www4.district125.k12.il.us/Faculty/djohanns/TechEdHomePage/TDTopics.html>



Geometric Constructions - Microsoft Internet Explorer

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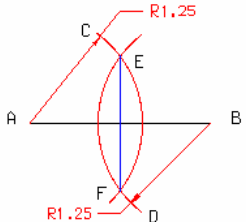
Address <http://www4.district125.k12.il.us/faculty/djohanns/TechEdHomePage/GeometricConstructions.html> Go Links

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GEOMETRIC CONSTRUCTIONS

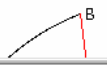
Geometric constructions allow the architect, engineer, designer or drafter to apply the principles of geometry in the creation of accurate drawings of objects using only a compass to draw arcs and a straight-edge to draw lines.

- Bisect a line - locates the midpoint of a line and creates a perpendicular line at the midpoint of the line.



Given Line AB, draw two arcs (red) AC & BD (AC=BD) and then draw a line (blue) at the points of intersection E & F.

- Bisect an arc - locates the midpoint of an arc and creates a line that passes through the center of the arc.



Done Internet

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Sketching Techniques - Microsoft Internet Explorer

File Edit View Favorites Tools Help

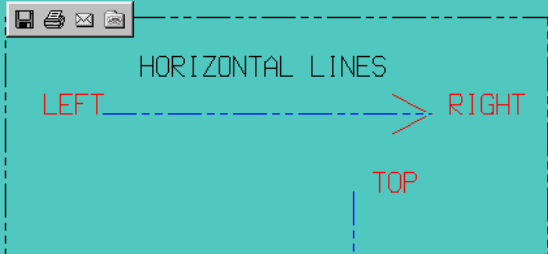
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Address <http://www4.district125.k12.il.us/Faculty/djohanns/TechEdHomePage/SketchingTechniques.html> Go Links

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SKETCHING TECHNIQUES

The ability to create fast, understandable views of objects with only a pencil and a piece of paper is extremely important to being successful as an engineer, designer, architect, builder, manufacturer or craftsman. All objects are composed of lines: horizontal lines, vertical lines, angular lines, circular lines, arcs and ellipses. The procedures shown below describe the movement of your hand for the sketching of lines, circles and ellipses. Very light construction lines should be used when doing arcs, circles and ellipses. Practicing these techniques will help you develop skill in the creation of lines, arcs, circles, ellipses, and views of objects.



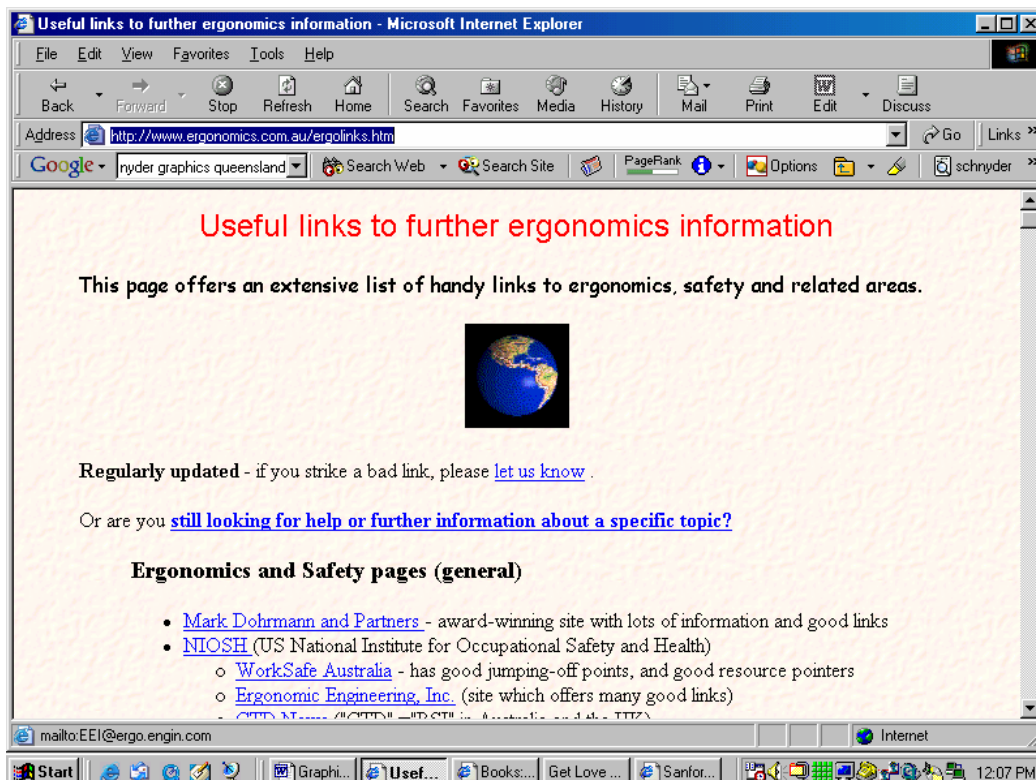
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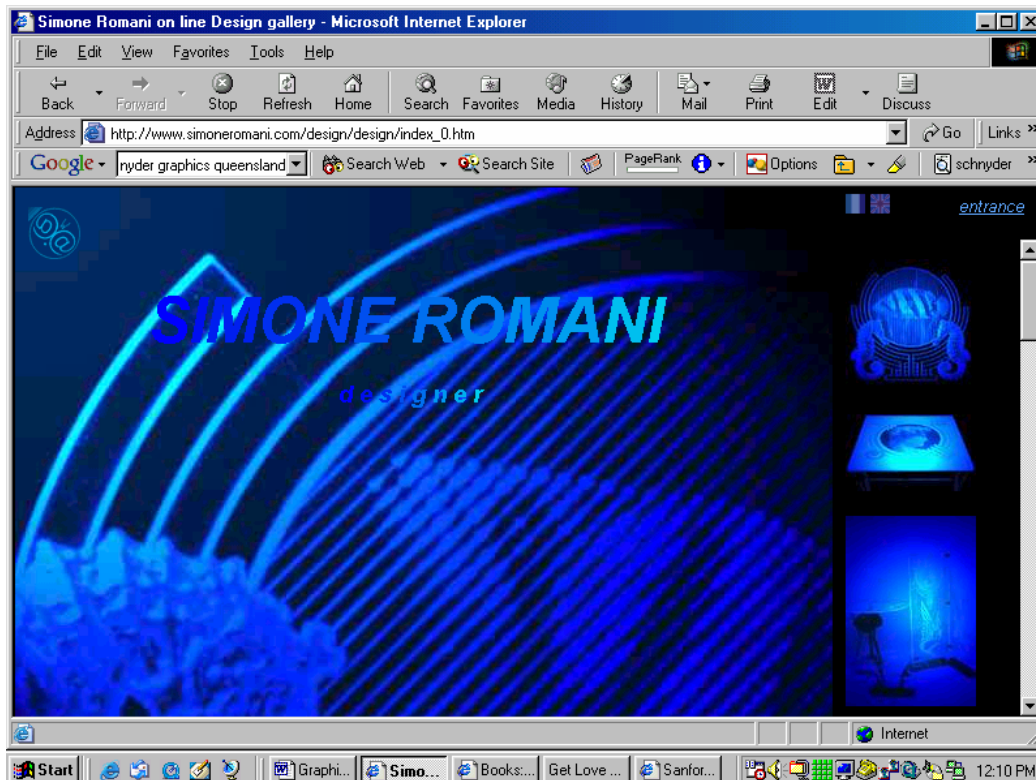
<http://www.ergonomics.com.au/ergolinks.htm>

Ergonomic and safety links



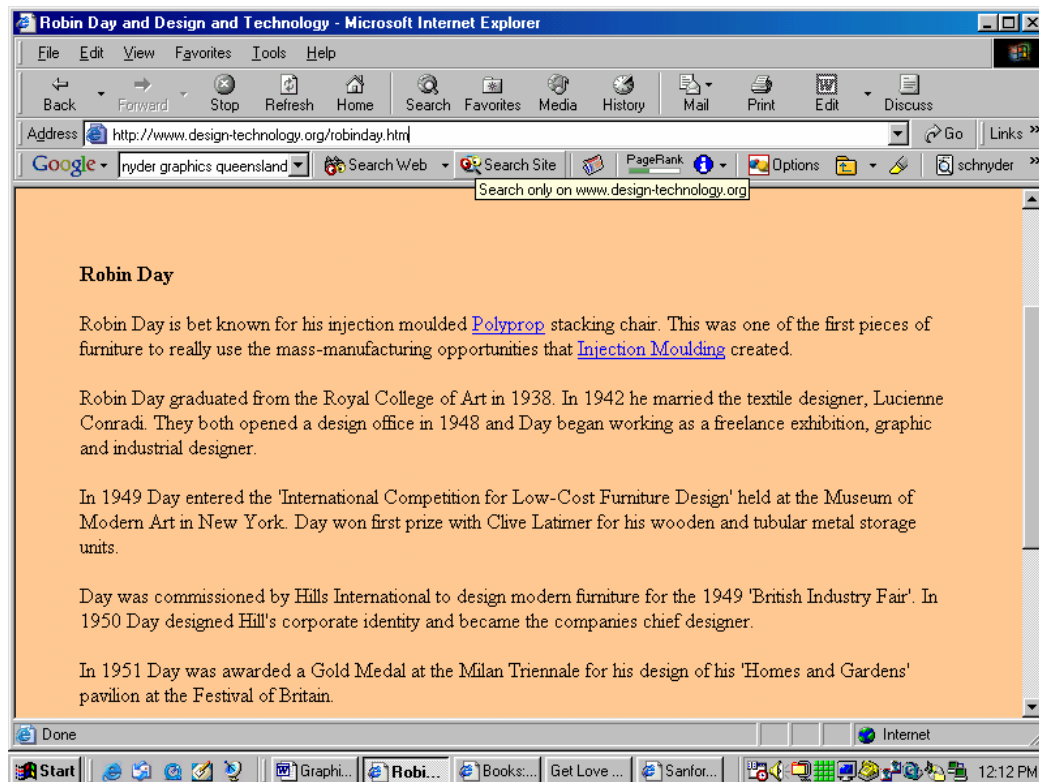
The following refer to specific designers and their work and would be useful in a number of areas of the syllabus.

http://www.simoneromani.com/design/design/index_0.htm

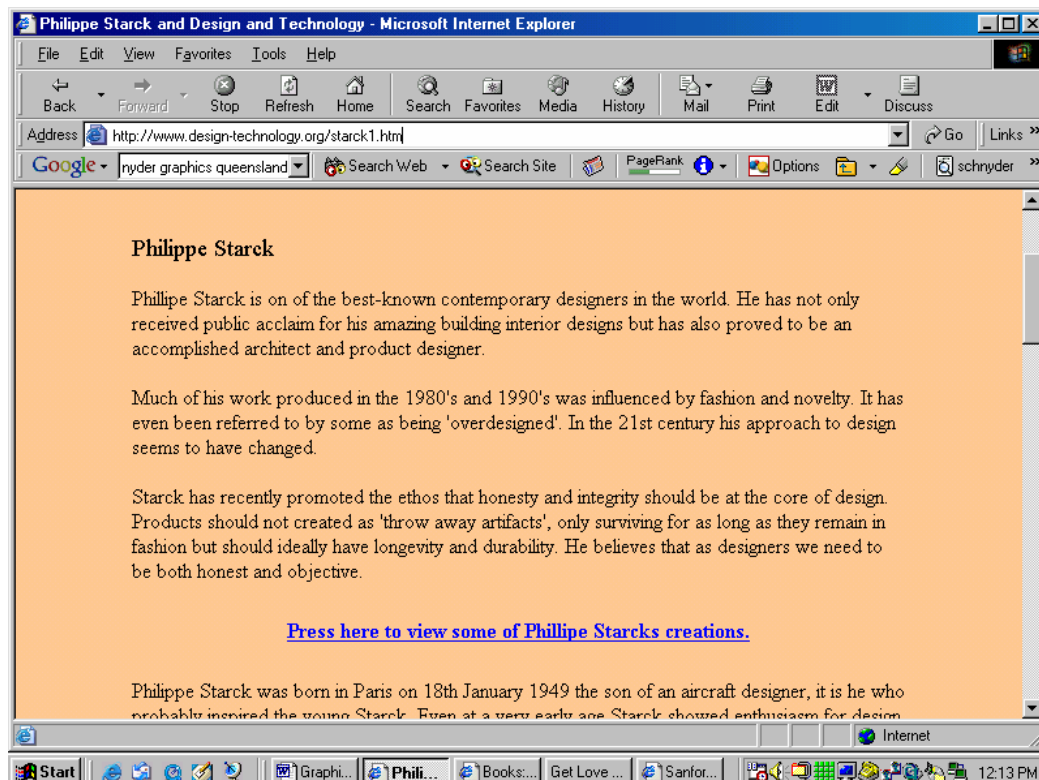


Scrolling down the page provides example of her work particularly relevant are the table top designs in a variety of materials

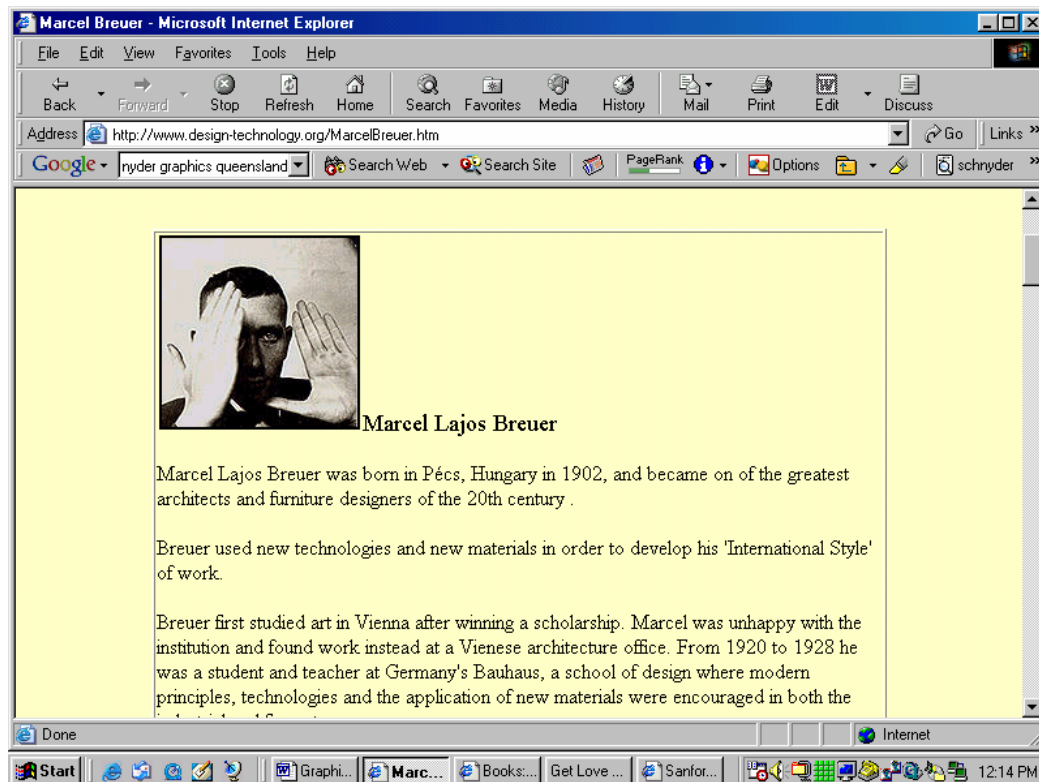
<http://www.design-technology.org/robinday.htm>



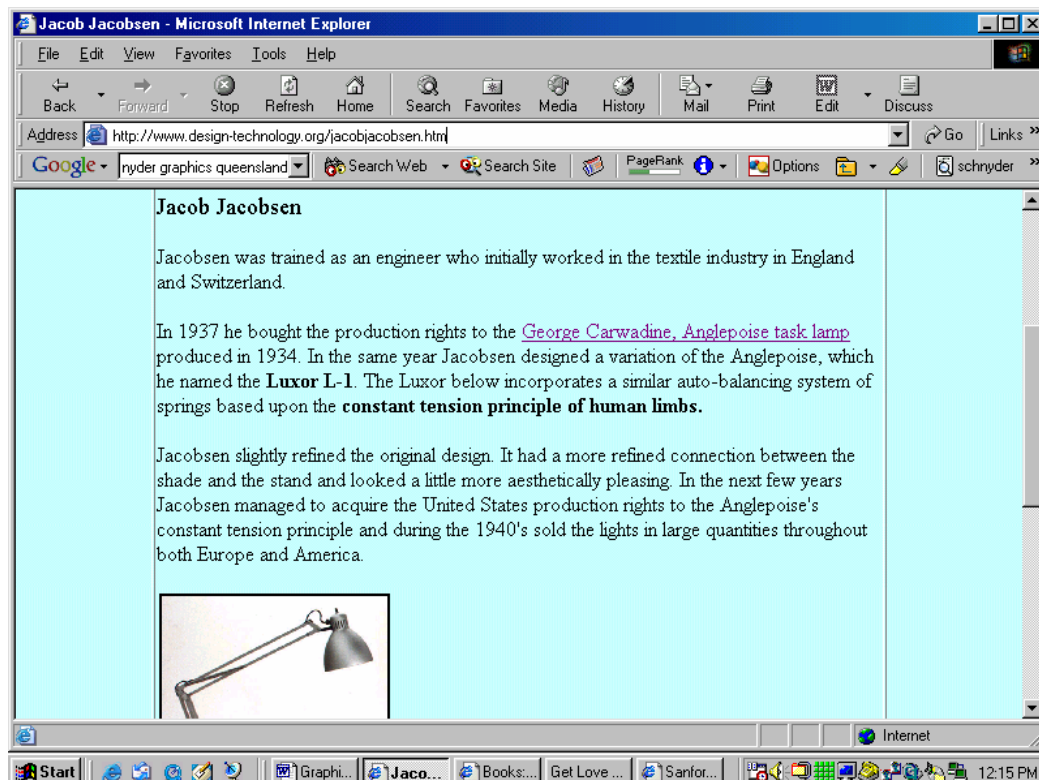
<http://www.design-technology.org/starck1.htm>



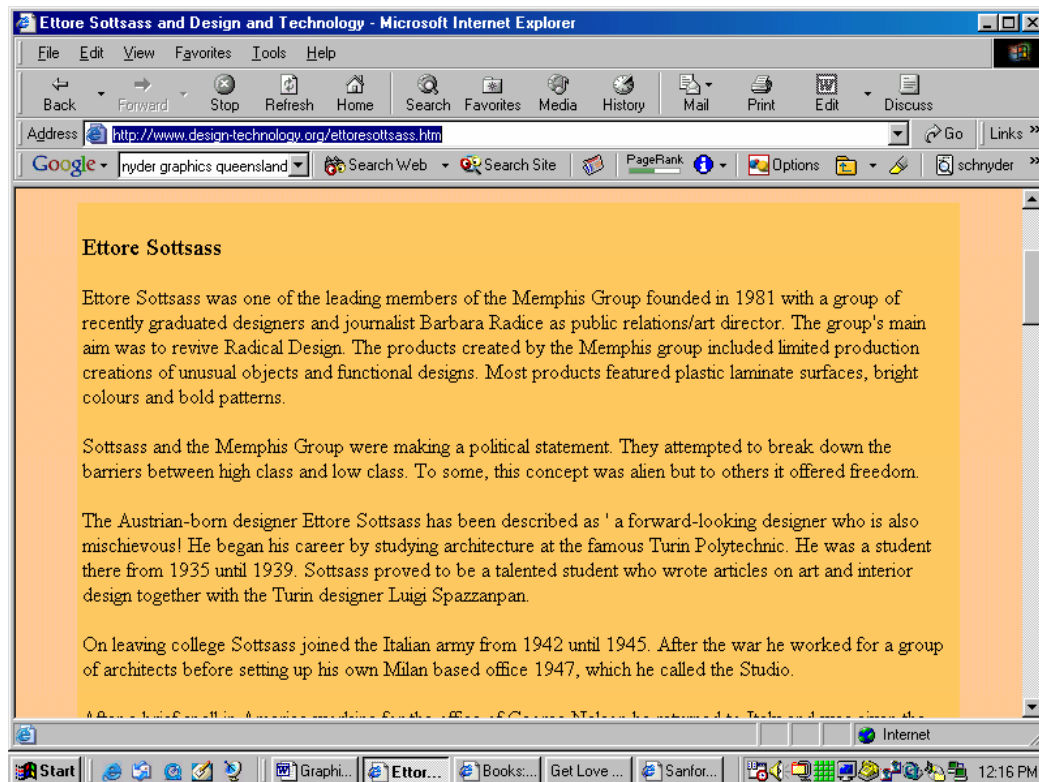
<http://www.design-technology.org/MarcelBreuer.htm>



<http://www.design-technology.org/jacobjacobsen.htm>



<http://www.design-technology.org/ettoresottsass.htm>



<http://www.design-technology.org/castiglioni.htm>

