Using ICT to Research

What are the main advantages of using computers to research?

Access to millions of websites and sources of information at a click of a button

Faster: Reduces time taken to gather information. Text and images can be seen on screen instantly

Clearer: Improves Communication

More Efficient: Specialist magazines can be viewed on-line- saves buying them

**This type of research is called secondary research*

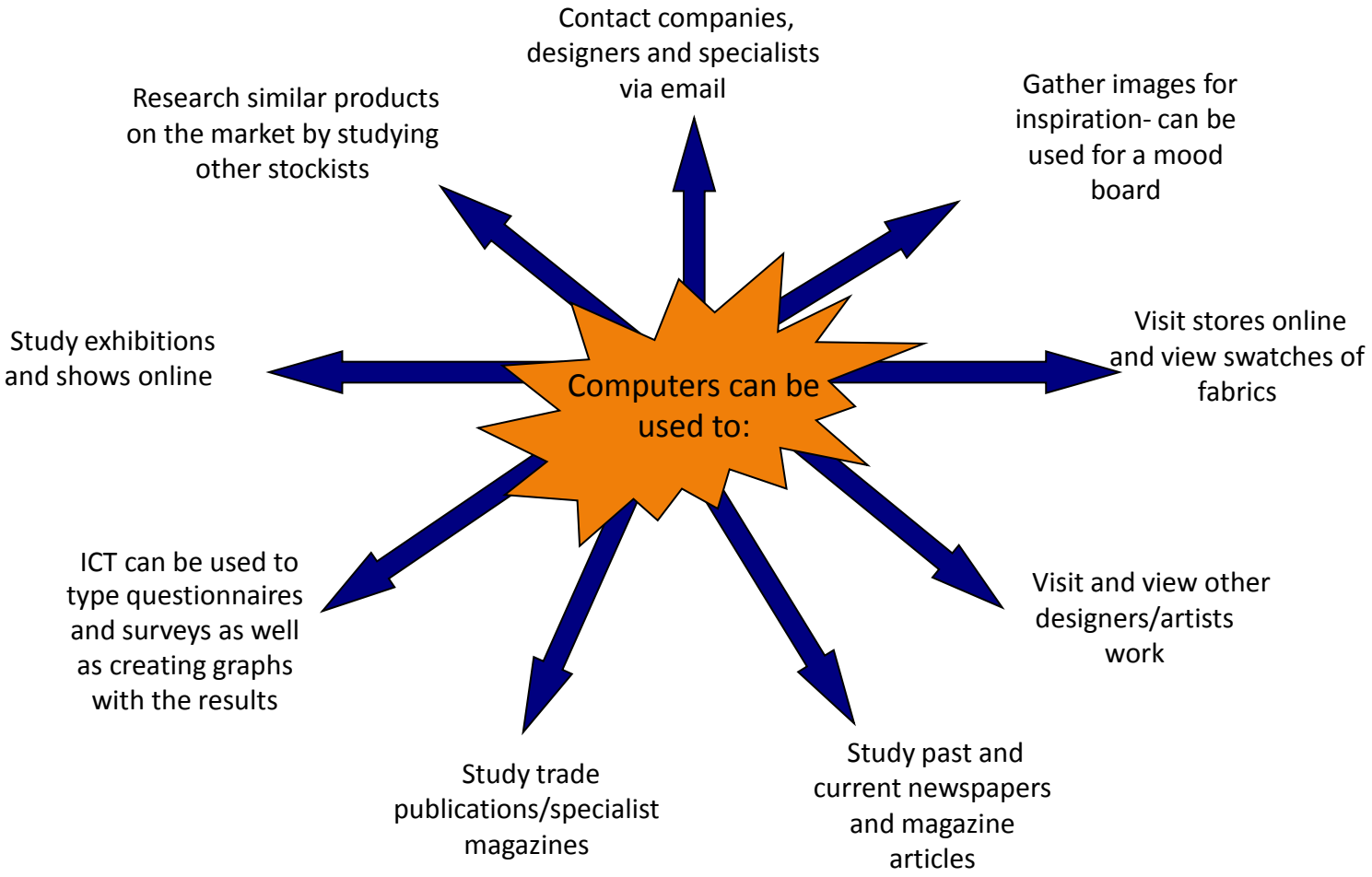
What are the main disadvantages of using computers to research?

Start up cost (cost of equipment/computers) can be expensive

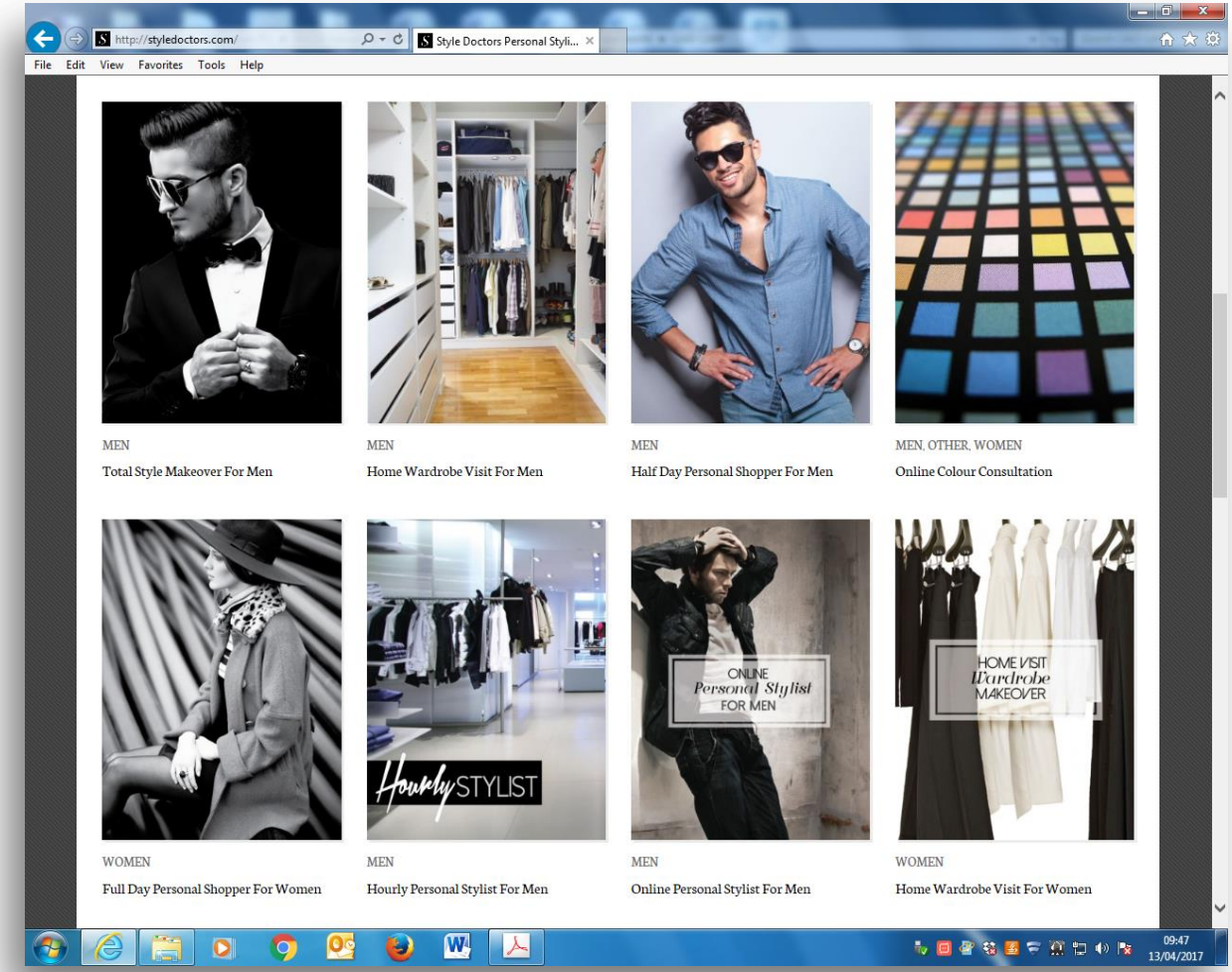
Viruses and power cuts can often destroy work

Not all information on the internet is reliable and accurate. Not all information can be trusted!

Some examples of how computers can be used to research……



Some examples of how computers can be used to research……



Research?

Within your folio

From the **Contex**t - A copy of your brief .

Write a description/profile of your target market in this space.

Write a summary of all the research you have carried out prior to starting the task. Try and identify the main factors which will influence the design and development of your product.

Research strategies might include:

- The evaluation of existing similar products
- The results of a questionnaire or interview (if appropriate).
- Where the product fits into the market place.
- All relevant details for example, colour, style, costs, materials.

A detailed analysis of a competitor product - ie, the probable specification of the product. Use the same criteria as you will use for the specification: *aesthetics; function; quality; size; safety; scale of manufacture; construction details; decorative techniques; materials; environmental /sustainability issues.*

Include a picture or sketch if you want to.

Consider all the important aspects that might influence your design thinking.

Once you have finished all the analysis and research, summarise your thoughts and write your own specific design brief outlining exactly what you will make and why.

Research

Product Analysis

There are many different ways of conducting research:
Primary research – things you find out for yourself – more reliable, but not always the best use of your time.
Secondary research – information gained from others – might be less reliable but quicker to find out what you need to know.
Whatever research you conduct, make sure it is **relevant** to your needs.
Collate your information in a sketch or note book.
You will need to analyse your findings to record on page 1.
Draw a mind map to help you decide what you need to find out, where you will find the information and the actions you need to take to find the information.

Designers often look at existing products to see what works well and what doesn't. This is an effective way of developing new products. Someone else has done some of the hard work for you. You can build on the good features and reject the poor ones. You need to find a product that is ***similar*** to the one you would like to make. Analyse it using the set criteria that you have practiced in class. You can refer to the same headings as set out in the ACCESS FM list.

- **AESTHETICS**- Comment on the appearance of the product, colour, style, texture, attractive……
- **FUNCTION –** What is the product meant to do? How does it function? What features has it got which will enable it to do the job?
- **QUALITY**- How well has it been made? Are the materials good quality / suitable? Why? Has it got a good finish? How can you tell?
- **SIZE –** What size is it? Is this appropriate? Consider anthropometric data; ergonomics…..
- **SAFETY –** How well has it been made? Can you identify any safety features? Labelling? Will it safely do the job it's intended to do? How can you tell?
- **SCALE OF MANUFACTURE –** What do you think is the most likely scale of manufacture? Why? Is this the best method?
- **CONSTRUCTION –** Is the construction straight forward? Could it be simplified? How? Why? Is the construction method used the best method? Are there alternative methods? How many parts has it got? How many different components can you identify? Does it need all these?
- **DECORATIVE TECHNIQUES –** Can you identify any decorative techniques? Which ones? Are these suitable or are there better alternatives that could have been used?
- **MATERIALS –** Identify the materials. Are they suitable? Why? Sustainable source?
- **ENVIRONMENTAL / SUSTAINABILITY –** Is it from a sustainable source? Can it be recycled? What is the environmental impact?
- **LIFE CYCLE –** Think about the 'cradle to the grave' - from fibre source, through use/care of the product, to final disposal**.**
- **PERFORMANCE –** What features has it got that will enable it to do its job? Will it perform as it should? How? Why?
- **TARGET MARKET –** Who is it designed for? Will it meet the needs of the target audience? Explain.
- **COST –** If you know the price, is it competitive/ cheap/expensive? Explain.

You do not need to write about all of the criteria listed above. Be selective and chose a criteria that will help you the most with your design!