

# **ONLINE SEARCH STRATEGY**

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# HABITS

- How many people use Google?
- How many people accept the first 10 results Google provides? Do you click on 11 – 20 or next to see the next batch of web page listings?
- Do you know the difference between the terms “Internet” and “Web” or do you think they are exactly the same thing?
- Can you name 3 different web browsers?
- Can you name 5 different search engines?

# THE STRATEGY

- So many people take what they are given online. They accept the first piece of information, do not consider how to improve searches and probably waste time obtaining exactly the same as everyone else ... there is so much more to that massive resource.
- We will consider the internet user and their habits.



# BROWSER

There are a variety of browsers available to download free

- Microsoft Internet Explorer / Microsoft Edge
- Google Chrome
- Firefox
- Opera
- Safari

Web browsers might not directly help searching online but can make using the web easier, more secure and provide additional benefits. Some web pages operate better using one web browser as opposed to another. It can help having more than one web browser to accommodate poor web design and the applications therein.



# SEARCH ENGINE

- Everyone has a favourite search engine.
- What is your favourite search engine?
- What makes your favourite search engine your favourite?
- Have you tried any others?
- Be aware that there are many different types of search engine – they search very differently and can be useful for varying searches
- Think of Google, Bing but also discover meta-search engines and search directories
- When you search using your favourite search engine, try the search again on a different search engine and compare the results.
- Which one do you think gave you the better results?



# TYPES OF SEARCH ENGINES

**Crawler based search engines:** use software known as “spiders” or “crawlers” or “robots” or even “bots” to survey web pages to list them in order of closest to search criteria

- Google [www.google.com](http://www.google.com)
- Bing [www.bing.com](http://www.bing.com)
- Yahoo [www.yahoo.com](http://www.yahoo.com)

**Directories:** human editors decide upon the category and ranking of websites

- Go Guides Directory [www.goguides.org](http://www.goguides.org)
- Best of the Web [www.botw.org](http://www.botw.org)
- Open Directory [www.dmoz.org](http://www.dmoz.org)

**Meta search engines:** also known as an aggregator search tool produces results based upon various third party search engines

- Dogpile [www.dogpile.com](http://www.dogpile.com)
- Web Crawler [www.webcrawler.com](http://www.webcrawler.com)
- Metasearch [www.search.com](http://www.search.com)

# TERMINOLOGY

In the context of searching online:

- Boolean named after the great mathematician and algebraic designer, George Boole. It is the mathematical logic associated with true or false calculations.
- Keyword is a meaningful word for search purposes, a target word
- Search Engine is a service similar to directory enquiries to which you search using keywords to identify possible web pages containing relevant information
- Criteria is the words entered into a search engine database within the search field



# KEYWORDS

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What keywords do you intend using for your search?

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Do not type full sentences or word for word within the search dialog box

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Use the most important words and change their order as well as the actual keywords

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Avoid using words like “the”, “of”, “what” etc.

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It is best to use keywords – unless other smaller words are important of course

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Remember, the search engine matches keywords to the websites to avoid words you don't need and search engines tend to work on priorities within web pages for importance / ranking

# ADVANCED SEARCHING

- What operators do you intend using and how will they be used?
- Operators assist with advanced search technique, also known as “Boolean Searching”
- Use quotation marks to enclose a name or phrase, for example “West Coast Scotland” instead of searching for individual words ... it may make a big difference. Try out different keywords and try out Boolean searching, especially the use of quotation marks and note the difference

**“mark gillan” + photographer**

- Use a plus sign (+) to include information
- Use a minus sign (-) to exclude information

**“mark gillan” - formula**

# BOOLEAN EXAMPLES

- Use quotation marks along with operators
- Operators can be AND, OR, NOT as well as symbols
- Boolean search criteria examples:
  - “computer software” AND “computer apps”
  - “pc software” AND “windows application software”
  - “personal computer applications” AND “computer application software”
  - “windows application software” AND “Microsoft windows computer”
  - “computer application software” OR “personal computer applications”
  - “application software use” NOT “buy software”
  - “computer software” NOT “computer hardware”

# BOOLEAN OPERATORS - REMINDER

## AND

Use the operator AND to narrow the search

Explanation: Search engine returns web page listings for all sets of criteria

Example: “college education” AND “west Scotland”

Result: Return of any web page within listing containing both phrases

## OR

Use the operator OR to broaden the search

Explanation: Search engine returns web page listings for either set of criteria

Example: “college education” OR “further education courses”

Result: Return of any web page within listing containing either one or the other phrase

## NOT

Use the operator NOT to exclude from the search engine returns

Explanation: Search engine would exclude web pages containing the criteria

Example: “college education” NOT “private tuition”

Result: Return of any web page containing the first phrase but exclude any web page containing the latter phrase

# NARROW THE SEARCH OR EXPAND

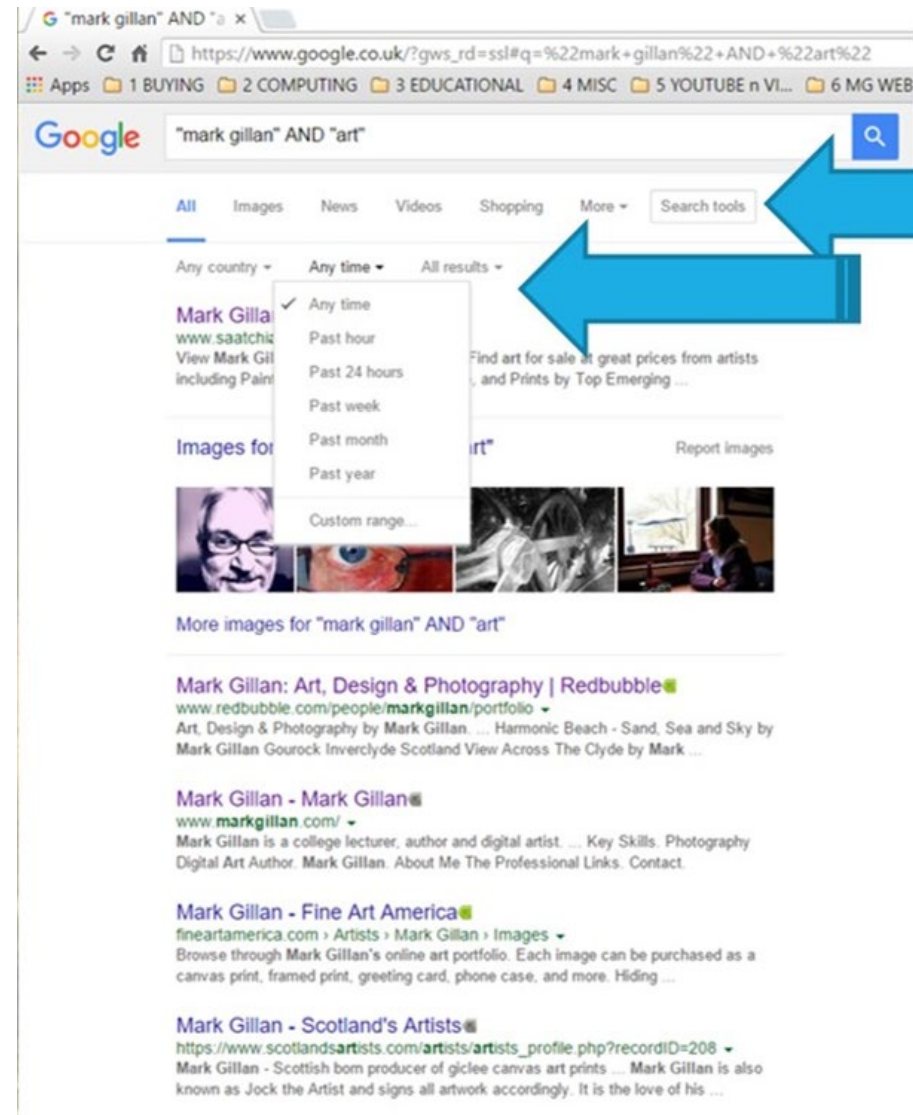
- Searching using advanced technique such as operators can help filter out and include in, although it can reduce and limit too much, so alter phrases and keywords along with the operators. Keep changing and trying new means of obtaining new information
- Keep a written record of your plan, how it worked or didn't work, what you did differently, how you improved the search using advanced technique

## Site:

- Use the site: to specify types of domain to which you want returned  
For example, Scotland Site:ac (for websites using the academic domain)  
Other site / domain restrictions could be Site:com (commercial), Site:org (Charitable) and Site:co.uk (for UK commercial websites)

# USE SEARCH TOOLS

- Search using Boolean
- Plan to use variants within keywords and phrases, ensuring a good list will be used
- Use advanced search tools, noting “News” and “More” as well as “Search tools” that allows to narrow down by country, time of publication or edit as well as other results
- Most search engines allow for advanced search techniques



# ADVANCED SEARCH TOOLS

| Find pages with...         |                                              | To do this in the search box.                                                                              |
|----------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| all these words:           | <input type="text"/>                         | Type the important words: tri-colour rat terrier                                                           |
| this exact word or phrase: | <input type="text"/>                         | Put exact words in quotes: "rat terrier"                                                                   |
| any of these words:        | <input type="text"/>                         | Type OR between all the words you want: miniature OR standard                                              |
| none of these words:       | <input type="text"/>                         | Put a minus sign just before words that you don't want:<br>-rodent, -"Jack Russell"                        |
| numbers ranging from:      | <input type="text"/> to <input type="text"/> | Put two full stops between the numbers and add a unit of measurement:<br>10..35 kg, £300..£500, 2010..2011 |

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Then narrow your results by...

|                  |                                                         |                                                                                                         |
|------------------|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| language:        | <input type="text" value="any language"/>               | Find pages in the language that you select.                                                             |
| region:          | <input type="text" value="any region"/>                 | Find pages published in a particular region.                                                            |
| last update:     | <input type="text" value="anytime"/>                    | Find pages updated within the time that you specify.                                                    |
| site or domain:  | <input type="text"/>                                    | Search one site (like wikipedia.org) or limit your results to a domain like .edu, .org or .gov          |
| terms appearing: | <input type="text" value="anywhere in the page"/>       | Search for terms in the whole page, page title or web address, or links to the page you're looking for. |
| SafeSearch:      | <input type="text" value="Show most relevant results"/> | Tell <a href="#">SafeSearch</a> whether to filter sexually explicit content.                            |
| file type:       | <input type="text" value="any format"/>                 | Find pages in the format that you prefer.                                                               |
| usage rights:    | <input type="text" value="not filtered by licence"/>    | Find pages that you are free to use yourself.                                                           |

Advanced Search

# PLAN VARIOUS SEARCH CRITERIA

- Notice the long list of alternative search criteria provided within the example
- Change keywords, phrases and use Boolean search technique
- Try using different search engines, different types of search engines and make good use of the advanced search technique



# IMPORTANT: PLAN AND RECORD

- Record everything you do.
  - Ensure you list your planned strategy prior to searching, consider as many varying keywords
  - List everything in the relevant format prior to searching
  - Make notes as you search as to how well your strategy is working and what you have altered to obtain better results also noting the actual results demonstrating your changing strategy as you go along
  - Be honest
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- Remember: Record your plan prior to searching
  - Remember: A plan must be recorded for each piece of information / task to which you are searching. The report must be in full, using the headings as supplied