Effective Online Research
Effective Online Searches

The internet contains a wealth of information but to be of any use you have to be able to find it!

Online searches tend to turn up lots of irrelevant material but there are several things we can do to make our search more effective.
You probably have a topic or question in mind. This example shows how you might refine it.

Reducing plastic use.

• Start by thinking of lots of questions you could ask and write each one down.
• It will help to think about the ‘5Ws’: Who? What? Where? When? Why?
Choose one of your questions

You may have thought of questions like these:

**How can we reduce our use of plastic?**
**Why do we use so much plastic?**
**What alternatives are there to plastic?**

These are all good, but we will pick one and refine it to an even sharper focus.
Refine one question

**How can we reduce our use of plastic?**

- Attitudes
- Assumptions
- Behaviour
- Education

- Usage now
  - Mass/Volume/Items
  - Timescale
  - Examples

- Types
  - Biodegradable
  - (Non)Recyclable
  - Bioplastics

- Who?
  - Population
  - Consumers
  - Manufacturers

- Products
  - Packaging
  - Single use / reusable
  - Recycling
Precise Final Question

There are many ways the question can be refined, such as:

“How can manufacturers reduce the volume of single-use plastic packaging?”

This is a much better project title because it identifies precise key words and sharpens the focus of your research.
Search engines help us navigate the internet, but they each have limitations:

• **Not everything is on Google.** Academic articles may be behind pay walls.

• **Top search results are often adverts.** Websites may pay to appear higher in listings.

• **Google tailors your search results** based on your past history.
Almost 90% of web searches are made using Google but it isn’t the only search engine. It may be worth trying others to see if they yield different results.
Search engine shortcuts

___ NOT ___  Excludes a meaning of a word. For example ‘Bass -Fish’
gives results on music, not fish.

___ - ___  Returns results containing either one word or the other.

___ OR ___  Returns results with any suffix or variation.
E.g. Sculpt* gives sculpt, sculpting, sculptor, etc.

Define: ___  Returns a definition of the word.

“___ ___ ___”  Returns only results with all the words in that order.

___ · · ___  When used with numbers, returns a range
E.g. 1..10, 100mm..500mm, 2015..2020
Using shortcuts

Type shortcuts into the search bar, or use the Settings menu.

Was imperialism a cause of WW1?

Imperialism was a cause because building an empire needs manpower such as an army and a navy to conquer and keep the land that they colonised. The alliances system meant that a local conflict could easily result into an intimidating global one. 1 Feb 2016

medium.com > what-was-the-most-significant-cause-of-...
Select **Advanced search** from the **Settings** menu.
Google Advanced search

Find pages with...

all these words: Was imperialism a cause of WW1

this exact word or phrase:

any of these words:

none of these words:

numbers ranging from: to

Then narrow your results by...

language: any language

region: any region
Shortcut search challenge

Searching using this example question about the First World War produces well over half a million results.

Use shortcuts, settings, and rewording to narrow your search. You can use the grid on the next page to record this.
<table>
<thead>
<tr>
<th>Shortcut / Setting</th>
<th>Wording</th>
<th>Number of results</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Was imperialism a cause of WWI?</td>
<td>687,000</td>
</tr>
</tbody>
</table>

Which combination produces the lowest number of results?
Which produces the most relevant results?
What about Wikipedia?

Wikipedia pages often feature in web searches. This free online encyclopaedia can be a good source of information, but use it with caution.

Anyone can edit the pages. Theoretically, this means that any mistakes, biases, and deliberate hoaxes will be spotted and corrected. In reality this doesn’t happen and some misinformation stays online for years!
Follow up references

Always check the references. For example, in this excerpt from a page on the Peterloo Massacre, a quote [1] is cited:

Historian Robert Poole has called the Peterloo Massacre "the bloodiest political event of the 19th century in English soil", and "a political earthquake in the northern powerhouse of the industrial revolution". [1] The London and national papers shared the horror

We can look this up in the reference list at the foot of the page:

Citations [ edit ]

Identify primary sources

Always check that references are correct. Hoaxers may create false references or links that loop back to fake entries. Here we can see the book that the Poole citation is from:

Peterloo: the English uprising

Author: Robert Poole
Publisher: Oxford: Oxford University Press, 2019. ©2019
Summary: “On 16 August, 1819, at St Peter's Field, Manchester, armed cavalry attacked a peaceful rally of some 50,000 pro-democracy reformers. Under the eyes of the national press, 18 people were killed and some 700 injured, many of them by sabres, many of them women, some of them children. The ‘Peterloo massacre’, the subject of a recent feature film and a major commemoration in 2019, is famous as the central episode in...”

We would use this as our source, not Wikipedia.
Online Search Checklist

- My search is based on a precise question.
- I have tried out different search engines.
- I know the limitations of my chosen search engine.
- I can adjust the settings and use shortcuts to improve my search.
- I know how to cross-reference information.
- I know how to base my research on primary sources.
Find out More

Use the handy EPQ Study Guide – Effective Online Searches

Watch this video for more advice on effective web searches: How to Google Like a Pro!