**Keyword record**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | OR |  | OR |  | OR |  | OR |  |
|  |  |  |  | AND |  |  |  |  |
|  | OR |  | OR |  | OR |  | OR |  |
|  |  |  |  | AND |  |  |  |  |
|  | OR |  | OR |  | OR |  | OR |  |
|  |  |  |  | AND |  |  |  |  |
|  | OR |  | OR |  | OR |  | OR |  |
|  |  |  |  | AND |  |  |  |  |
|  | OR |  | OR |  | OR |  | OR |  |

NOT (for internet searches use the “-“ sign to exclude words and “-site:” to exclude whole websites.)

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**Notes on Boolean searching (searching using keywords and logic)**

Keep a record of the key words and phrases you use so you don’t waste time and can keep refining your search strategy to make it more efficient. This record will also help your supervisor and the Librarians to advise you if you are struggling to find information. The hints below will help you to refine your search. The AND, OR and NOT operators are standard in databases but not in most internet search engines – always use the Advanced Search options where available.

**Widening a search if you are getting too few results:**

* OR: Words and phrases across a row should be synonyms – they should all mean roughly the same thing e.g. *children OR kids OR juveniles OR minors*. Adding “OR” words to a search will broaden it out and give you **more results**.
* Another way to broaden your search is to use “truncation”. This means replacing the end of a word with a symbol, usually a \* to broaden options e.g. searches for *child\** will include any word that begins with child e.g. *child, children, childish, childlike, childhood*.
* Some databases also support the use of wildcard operators within a word e.g. *wom\*n* to search for *woman* OR *women*. The symbol used may vary, so check the database help pages, or experiment and see what happens!

**Narrowing your search if you are getting too many irrelevant results:**

* AND: Words and phrases down column are used to narrow your search e.g. *children* AND *reading* AND *attainment*. If you find you are getting too many search results, or a lot of irrelevant search results then you need to narrow your search.
* Quotation marks allow you to search for an exact word or phrase. E.g. “
* NOT: This narrows your search. Where you are getting a lot of irrelevant results in a database you might need to use NOT to exclude certain words. Internet search engines don’t recognise NOT, but you can use – instead.
  + E.g. if you are interested in database articles (or books on the Library catalogue) about genetic modification but not in humans try *genetic modification NOT human*
  + E.g. if you are searching for information on the internet about event horizons of black holes but are getting overwhelmed by results about the film Event Horizon, try *event horizon -film* (notice there is no space between the dash and the word film)
  + E.g if you want to see what other sites on the internet say about the site [www.breitbart.com](http://www.breitbart.com) and climate change, but are being overwhelmed by hits from the site itself, try *breitbart “climate change” -site:www.breitbart.com*

Using the **Advanced Search** option in databases and the library catalogue will also allow you to limit your search e.g. by field (should your search term be in the author or title field?), by date range and by type of source.