

Astronomy I Essay 2011

The spacecraft Voyager 1 and 2 were launched by NASA in 1977. Their original 5-year mission was to fly past Jupiter and Saturn obtaining new information regarding these planets. Their missions were then extended to 12 years with flybys of Uranus and Neptune. In the 33rd year after their launch both Voyager 1 and 2 are now in the “Heliosheath” and are amazingly still continuing to send back scientific information. Describe how the information obtained by the Voyager missions has revolutionized planetary astronomy, what answers have been found and what new questions have they raised regarding the origin and evolution of the planets. What do you think is the most important discovery that Voyager has performed, explain your decision.

You may want to check the Library’s [Catalogue](#) to see if there are relevant books.

Check the Encyclopaedias as they generally give a history to a topic.

You may also want to search the electronic databases for more materials.

Search Logic for electronic databases

Before you begin a database search you may like to make a table to ensure that your search logic is appropriate.

Write down the main concepts and then list below them all the synonyms and alternative terms.

<i>Voyager 1</i>	<i>discovery</i>	<i>heliosheath</i>
<i>Voyager 2</i>	<i>exploration</i>	

Are there other terms that you can think of that are not included in the table?

Search techniques vary in different databases but they use the same search principles. Check the individual database's help screens to find out about techniques such as truncation etc.

Think of terms to cover each concept in your topic.

Gather useful terms from the first articles you retrieve. Use a thesaurus if the database has one.

Combine terms with **Boolean operators** unless the database has natural language searching.

Truncate terms (check the database's truncation symbol- * or ?) and check how to search phrases (e.g. with or without quotes - "*Voyager 1*")

Consider **limiting** searches to English language, review articles etc

Check how to **display references** or mark them for **saving, printing or emailing**.

Once your database search has given references to articles, look for the full text of the journal article.

Sometimes you can link directly through an html or pdf link within the database to the **electronic full text** of articles.

If not, always **search the journal title (NOT the article title)** in the [Library catalogue](#). You can also search [Summon](#) by putting the title in quotation marks e.g. "*Voyager 2 makes a shocking discovery*"

The catalogue lists the call numbers and holdings of print journals and also lists electronic journals with links to the electronic full text of articles.

The Barr Smith Library does not hold all journals indexed in databases. You can also try:

[Other libraries' catalogues](#)

[Libraries Australia](#), a database of journals & books held by libraries in Australia.

Report writing

If you need help writing an essay or report, try looking at the [essays and thesis writing style guides](#).

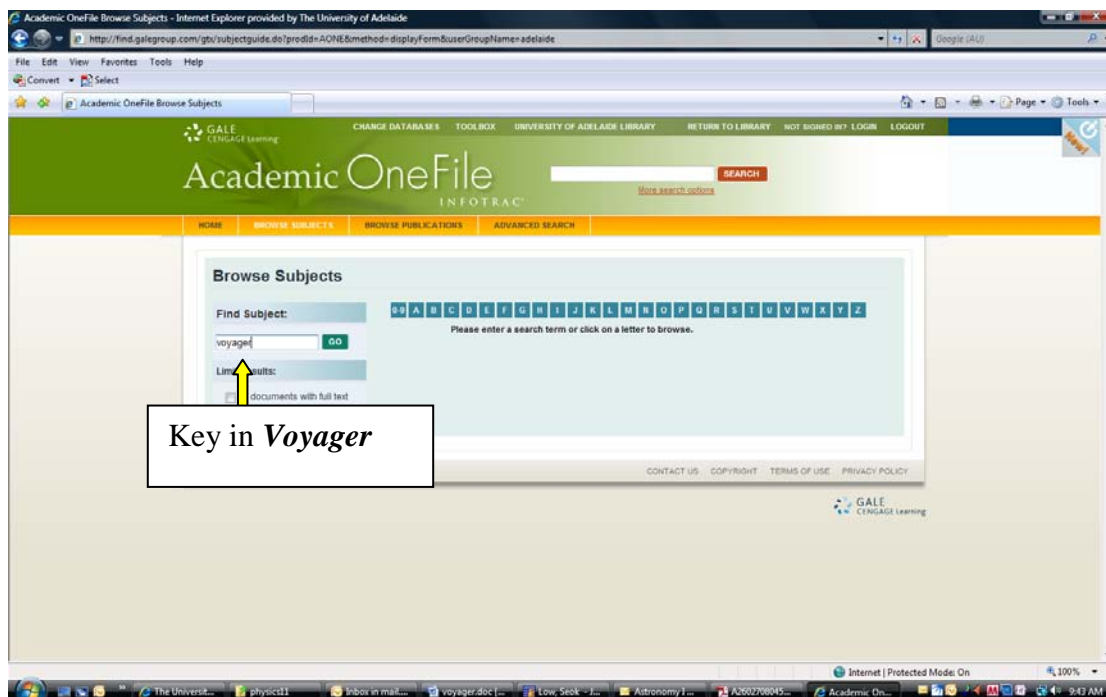
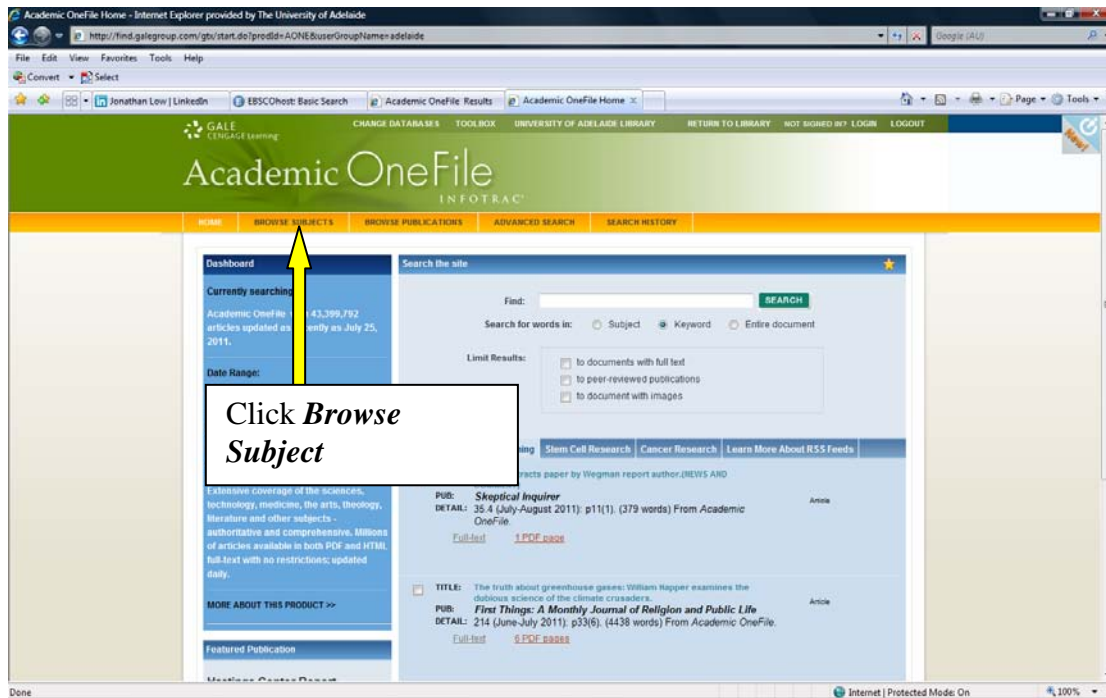
Suggested Databases

1. [Academic OneFile](#)

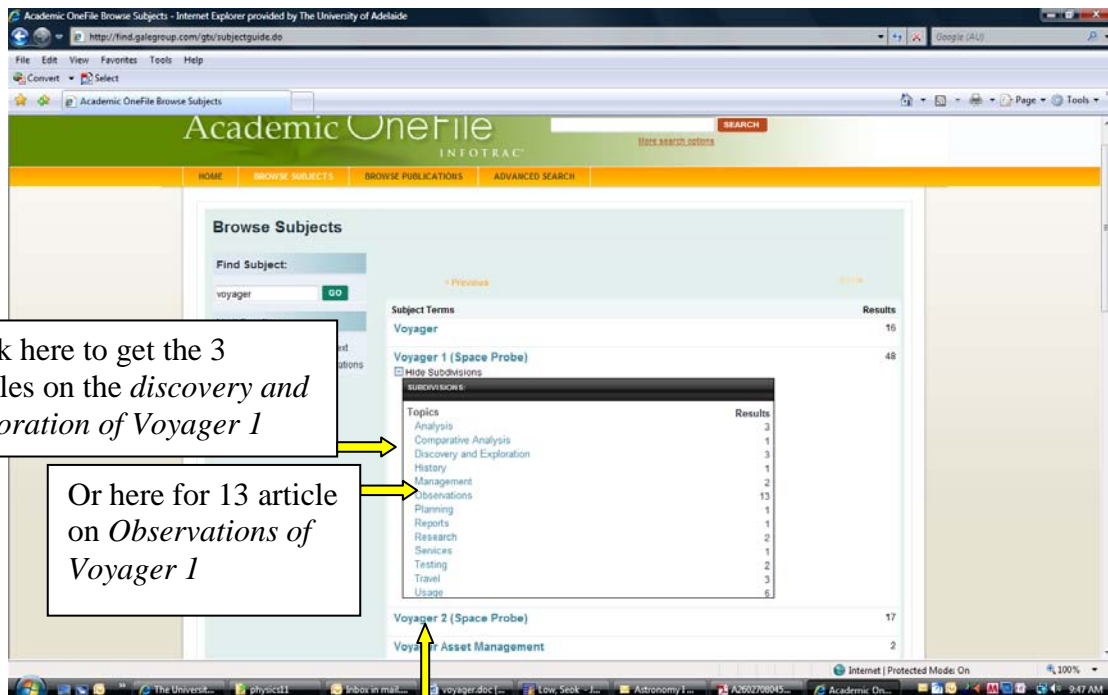
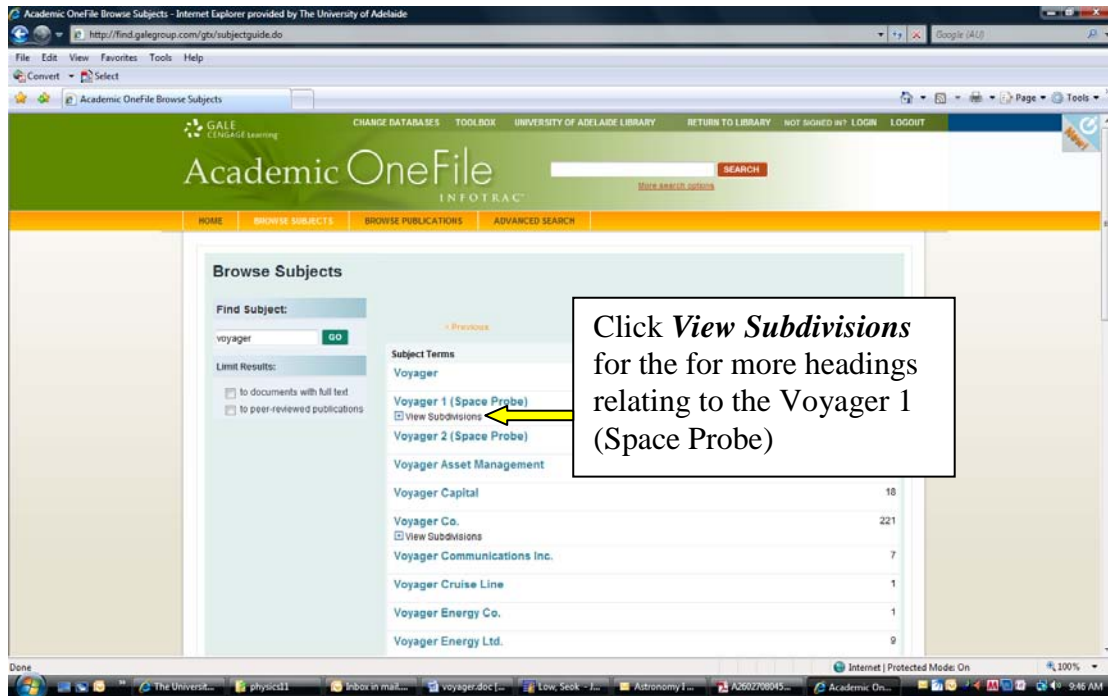
Full text articles are available in this database. This means you do not need to look for the article on the shelves in the Library.

I have given you some examples of how to search below. Use your imagination and try other ways of doing the search. The more you practice the better you get with your strategy.

Using *Voyager* in a keyword search will retrieve many irrelevant items. You may want to try *Browse Subjects* for this topic.



Doing it this way will give you articles more specific to Voyager. There should not be any irrelevant items.



You may want to just look through the subdivisions. Scroll down for the rest of the subdivisions.

Now displaying the 4 items from Academic Journals

Click here if you want the 9 items from Magazines

Click here for the full text of this article

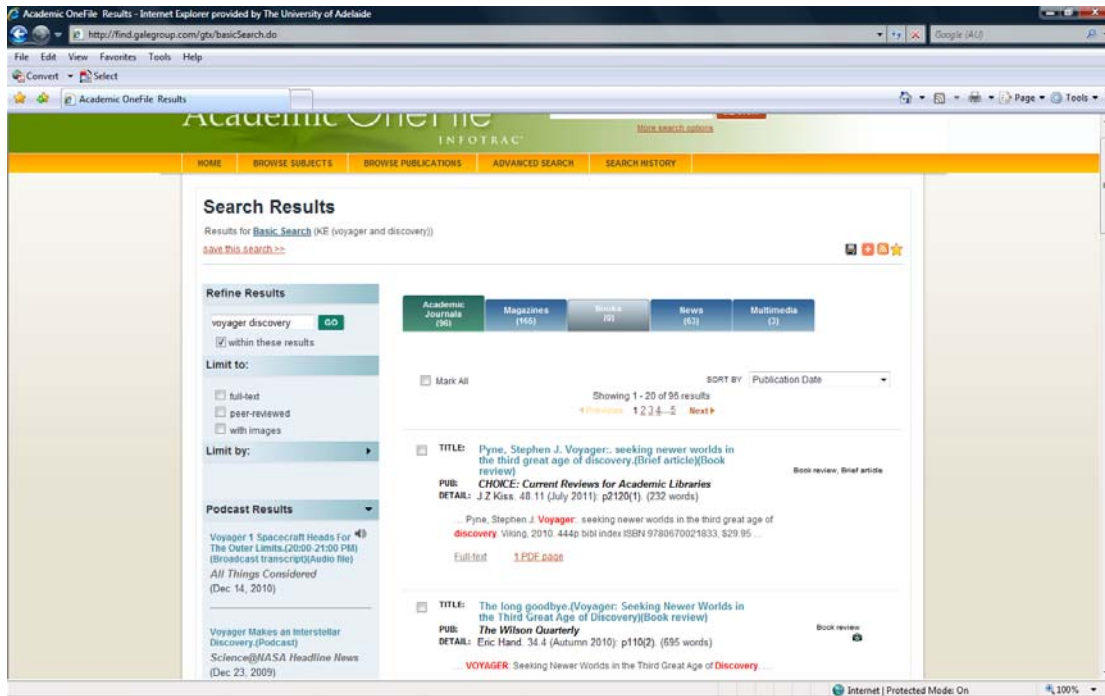
The screenshot shows a search results page for 'Voyager' on Academic OneFile. The results are filtered to 'Academic Journals (4)'. Three results are visible, each with a 'Full-text' link. A callout box points to the 'Full-text' link for the first article, 'Saturn's ring has a coiled spring'. Another callout box points to the 'Magazines (9)' filter button. A third callout box points to the 'Full-text' link for the second article, 'Voyager 1 explores the termination shock region and the heliopause beyond'.

Subject Guides Search will retrieve articles that are generally more specific to that subject area than keyword search.

You may now want to *Voyager and discovery* as a keyword search

Try *Voyager and discovery* in a Keyword search

The screenshot shows the Academic OneFile homepage. The search bar contains the text 'voyager and discovery'. A callout box points to the search bar with the text 'Try Voyager and discovery in a Keyword search'. The search results show two articles: 'Journal retracts paper by Wegman report author' and 'The truth about greenhouse gases: William Happer examines the dubious science of the climate crusaders'.



As you can see, this is just a start. You may think of another approach and other keywords that are relevant.

2. [Academic Search Premier](#)

This is another database with full-text articles that you may want to try. The search logic is the same although the screen looks very different. Again try the different ways of searching, using keywords, using keywords phrase, using truncation, etc.

EBSCOhost: Basic Search - Internet Explorer provided by The University of Adelaide

http://web.ebscohost.com/ehost/search/basic?sid=54e39366-72f5-4071-b8a2-7c01aa0ace23%40sessionmgr115&vid=1&hid=119

File Edit View Favorites Tools Help

EBSCOhost: Basic Search

New Search Publications Subject Terms Cited

Start by using *Voyager and (discovery or exploration)* in a keyword search

Search Academic Search Premier Choose Databases

voyager and (discovery or exploration) Search Clear

Search Options Basic Search Advanced Search Visual Search Search History

Search Options

Search modes

- Boolean/Phrase
- Find all my search terms
- Find any of my search terms
- SmartText Searching [link](#)

Apply related words

Also search within the full text of the articles

Limit your results

Full Text

Scholarly (Peer Reviewed) Journals

Publication

References Available

Published Date from

Month Year to

Month Year

Publication Type

All

Periodical

Internet | Protected Mode: On

You may want to consider these search option

EBSCOhost: Result List: voyager and (discovery or exploration) - Internet Explorer provided by The University of Adelaide

http://web.ebscohost.com/ehost/results?sid=54e39366-72f5-4071-b8a2-7c01aa0ace23%40sessionmgr115&vid=2&hid=119&dbquery=(voyager+AND+(discovery+OR+exploration))&data=JmFk

File Edit View Favorites Tools Help

EBSCOhost: Result List: voyager and (discovery or exploration)

Source Types

- All Results
- Academic Journals
- Magazines
- Newspapers

Subject: Thesaurus Term

- OUTER space - Exploration
- SPACE vehicles
- SPACE probes
- PLANETS - Exploration
- ASTRONAUTICS
- BOOKS - Reviews

Subject

- SOLAR system
- PRIME, Stephen J.
- VOYAGER: Seeking Newer Worlds in the Third Great Age of Discovery (Book)
- NEPTUNE (Planet)
- URANUS (Planet)
- SATURN (Planet) - Exploration

Publication

Database: Academic Search Premier

Relevancy: *****

HTML Full Text PDF Full Text (1378)

Fulltext at eLibrary - copy and paste article title into search box at eLibrary

3. **Engineering Voyager Z's Encounter with Uranus.**

By: Laaser, Richard P.; McLaughlin, William L.; Wolff, Donna M.. Scientific American, Nov86, Vol. 255 Issue 5, p36, 10p, 3 Color Photographs, 2 Diagrams, 4 Graphs.

Subjects: SPACE probes; DISCOVERIES in geography; OUTER space - Exploration; Space Research and Technology; URANUS (Planet)

Database: Academic Search Premier

Relevancy: *****

4. **Love in a cold climate.**

(Cover story) By: Byrne, Jennifer. Australian Geographic, Jan-Mar2007, Issue 85, p66-85, 20p, 14 Color Photographs, 1 Graph, 2 Maps

Subjects: ADVENTURE & adventures; PENGUINS; ANIMAL species; POLAR regions - Discovery & exploration; EXPLORERS; ADVENTURE travel; ROSS Sea (Antarctica); ANTARCTICA; ANTARCTICA - Discovery & exploration; BYRNE, Jennifer

Database: Academic Search Premier

Relevancy: *****

5. **Voyagers to the End.**

By: Reed, Christina. Scientific American, Mar2008, Vol. 298 Issue 3, p26-28, 2p

Subjects: OUTER space - Exploration; ASTRONOMY; SOLAR wind; SPACE probes; RESEARCH; HELIOSPHERE (Astrophysics); SOLAR activity; Space Research and Technology; SOLAR system

Database: Academic Search Premier

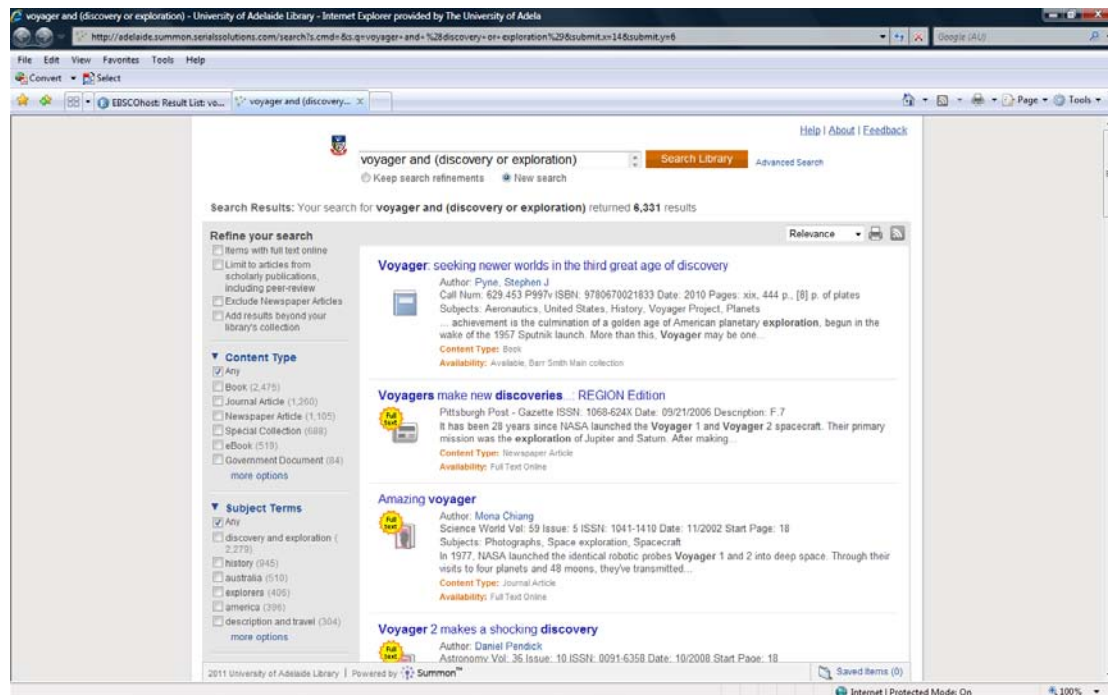
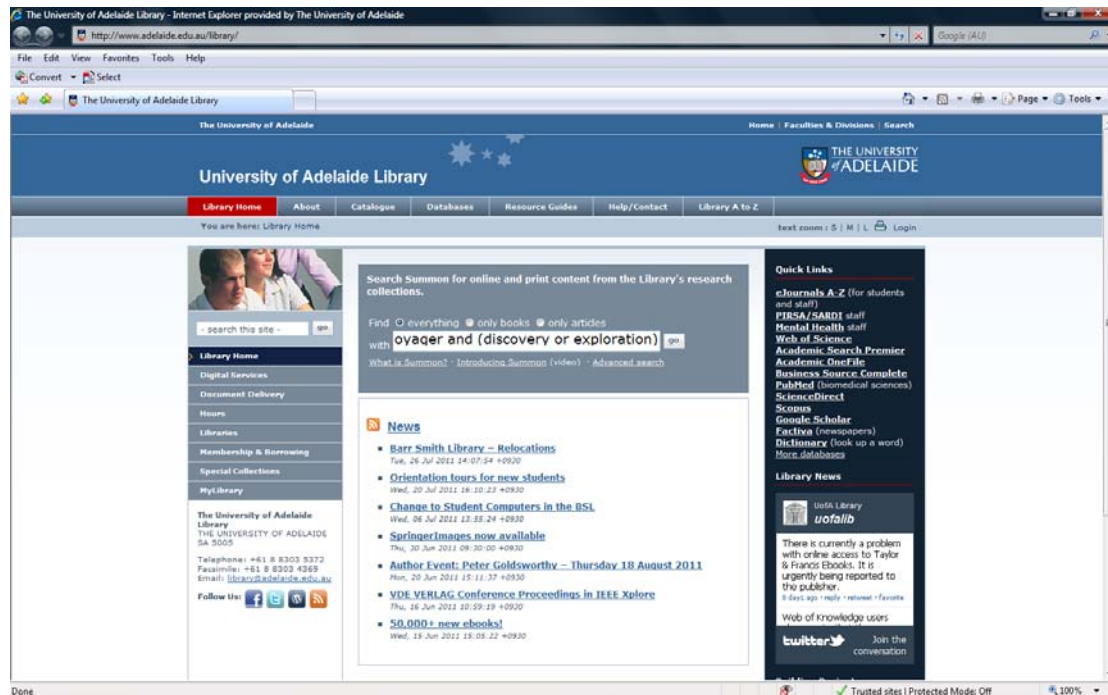
Relevancy: *****

Internet | Protected Mode: On

You can still refine your result by ticking the Subject Thesaurus Term and Subject

3. Summon

This is a bit like google that searches the Library's Collection. It will include all the electronic books, the printed books and all the journals articles indexed that we hold.



As you can see, you have retrieved 6,331 items. You will now have to decide how to narrow the search using the refine tools at the left hand side. You may try ticking the relevant *Subject Terms*.