“Research is formalized curiosity. It is poking and prying with a purpose.”

Zora Neal Hurston

Science Fair Research 101

Important information to remember:

- You will need to print and / or photocopy the entire article (not just one paragraph or sentence)
- Each question must have at least two sources that answer the question.
- Each print source will need a source citation sheet. Reference books use Form B (beige) and non-fiction books use Form A (lavender)
- All of the information on the source citation sheet must be filled in at the time you find the source.
- All database sources must have the source citation at the end of the article highlighted. This includes the url.
- Use your tracking sources and annotation handouts to help you track your sources and write your annotations. Remember they are on the Libguides page if you need another copy.
- Source citation sheets should be stapled to the article (unless you are using a database)
- We are on a tight timeline. It is very important to meet the due dates.
- Ask for help if you need it, even if you are someone who finds it difficult to ask. All of your Science Fairies (your teachers) are here to help you.

Be curious!

Getting Started
“A journey of a thousand miles begins with a single step.” Lao-tzu

Congratulations on taking your first step in your journey!! Use the guide below to help you focus on Step 2 of the Big Six Research model: *Information Seeking Strategies*. You will use this guide to help you determine all the possible sources and select the best one for your questions. Keep in mind that this is a guide only; you might need to expand your sources by checking additional sources.

**Some Tips:**

- Search by keyword or subject
- Consult more than one source
- If your first keyword / subject search is unsuccessful, use a different keyword / subject
- Use the index
- When using Marshall Cavendish print reference, make sure that the index you are using is a comprehensive index and not the subject index
- Follow up the “see also” references at the end of the articles to locate additional sources that might answer your research question
- When searching on the databases and / or the e-books make sure that the source you locate is not a duplicate of the print source that you may already have
- Marshall Cavendish is a publishing company, not the name of an author or editor

**Biology sources:**

- *UXL Encyclopedia of Science*  REF 503 ENC  (available in print / Gale e-book & database)
- *Growing Up with Science*  REF 503 GRO  (available in print / Marshall Cavendish database)
- *New Book of Popular Science*  REF 503 NEW  (available in print / Grolier database)
- *Biology Matters!*  REF 570 BIO  (available in print)
- *Complete Life Science Encyclopedia*  REF 570 BRU  (available in print / Gale e-book)
- *Exploring Life Science*  REF 570 EXP  (available in print / Marshall Cavendish database)
- *Encyclopedia of Life Science*  REF 574.03 ENC  (available in print / Marshall Cavendish database)

**Notes:**

**Chemistry sources:**
Earth Science / Environment / Ecology

- **UXL Encyclopedia of Science**  REF 503 ENC  (available in print / Gale e-book & database)
- **Growing Up with Science**  REF 503 GRO  (available in print / Marshall Cavendish database)
- **New Book of Popular Science**  REF 503 NEW  (available in print / Grolier database)
- **Earth Science**  REF 550 EAR  (available in print)
- **Encyclopedia of Earth and Physical Science**  REF 500.2 ENC  (available in print / Marshall Cavendish database)
- **Exploring Earth Science**  REF 550 EXP  (available in print / Marshall Cavendish database)
- **Encyclopedia of Landforms**  REF 551.41 NAG  (available in print)
- **U-X-L Encyclopedia of Water Science**  REF 553.7 ENC  (available in print / Gale e-book)
- **Exploring the Oceans**  REF 551.46 DAY  (available in print)
- **Library of the Oceans**  REF 551.46 LIB  (available in print)
- **Extreme Earth**  REF 551.44 HAN

Notes:

Physics
UXL Encyclopedia of Science  REF 503 ENC  (available in print / Gale e-book & database)
Growing Up with Science  REF 503 GRO  (available in print / Marshall Cavendish database)
New Book of Popular Science  REF 503 NEW (available in print / Grolier database)
Encyclopedia of Technology and Applied Sciences  REF 603 ENC  (available in print / Marshall Cavendish database)
Exploring Technology  REF 606 EXP  (available in print / Marshall Cavendish database)
How It Works: Science and Technology  REF 603 HOW  (available in print / Marshall Cavendish database)
Physics Matters!  REF 530 PHY  (available in print)
Physics: An Illustrated Guide to Science  REF 530 PHY  (available in print)

See Also:

Experiment Central  REF 507.8 EXP (available in print)  Note: Even if your experiment did not come from this series, you should consult the index. This series includes articles on various scientific principles and there may be source information of value to you. If your experiment did come from this source, you should refer to the chapter where you found your experiment for additional source information

How Stuff Works  REF 600 BRA  (available in print)
More How Stuff Works  REF 600 BRA  (available in print)
Scientific American: How Things Work Today  REF 600 SCI  (available in print)
CD’s, Superglue and Salsa  REF 670 CDS  (available in print)
Science of Everyday Things (4 volumes – Chemistry / Biology / Physics / Earth Science)  REF 500 SCI  (available in print)  Note: these volumes are written on a technical, high school reading level)

Notes: