Spring 2018 POWER Library User Conference

Mad Science!-
POWER Library Science eResources

This project is made possible in part by Library Services and Technology Act (LSTA) funds from the U.S. Institute of Museum and Library Services and through Library Access Funds administered by the Office of Commonwealth Libraries, Department of Education, Commonwealth of Pennsylvania, Tom Wolf, Governor.

Learning Goals

At the end of this session you will be able to

- Choose science products from the available POWER Library eResources
- Find lesson plans, activities, and downloadable materials available from
  - Science Reference Center
  - TrueFLIX
Science Reference Center

• A comprehensive research database that provides access to a multitude of full-text science-oriented content:
  • Full text reference books
  • Full text encyclopedias
  • Experiments, activities, and science fair projects
  • Biographies
  • And more!
Home Page

Features

• Search Options:
  • Keyword searching
  • Browsing by category
  • Browse popular sources
  • Advanced searching
  • Featured Science Topic
  • Dictionary

• Reference Shelf
  • Lesson plans
  • Science experiments
  • Citation help
  • Research guide
  • Curriculum standards
  • Worksheets
## Advanced Search Options

<table>
<thead>
<tr>
<th>Search Modes and Expressions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Search options:</td>
<td></td>
</tr>
<tr>
<td>Include all terms.</td>
<td></td>
</tr>
<tr>
<td>Include none of the terms.</td>
<td></td>
</tr>
<tr>
<td>Include any of the terms.</td>
<td></td>
</tr>
<tr>
<td>Include individual terms.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Limit your results</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td></td>
</tr>
<tr>
<td>Keywords</td>
<td></td>
</tr>
<tr>
<td>DOI</td>
<td></td>
</tr>
<tr>
<td>ISBN</td>
<td></td>
</tr>
<tr>
<td>Publisher</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Publication Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal</td>
<td></td>
</tr>
<tr>
<td>Conference Proceeding</td>
<td></td>
</tr>
<tr>
<td>Book</td>
<td></td>
</tr>
<tr>
<td>Report</td>
<td></td>
</tr>
</tbody>
</table>

## Search Publications

<table>
<thead>
<tr>
<th>Publications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td></td>
</tr>
<tr>
<td>Journal</td>
<td></td>
</tr>
<tr>
<td>ISBN</td>
<td></td>
</tr>
<tr>
<td>DOI</td>
<td></td>
</tr>
<tr>
<td>Publisher</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Search terms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>To search for:</td>
<td></td>
</tr>
<tr>
<td>Include all terms.</td>
<td></td>
</tr>
<tr>
<td>Include none of</td>
<td></td>
</tr>
<tr>
<td>Include any of</td>
<td></td>
</tr>
<tr>
<td>Include individual</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sort by</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td></td>
</tr>
<tr>
<td>Publication date</td>
<td></td>
</tr>
<tr>
<td>Publication type</td>
<td></td>
</tr>
<tr>
<td>Publisher</td>
<td></td>
</tr>
<tr>
<td>DOI</td>
<td></td>
</tr>
<tr>
<td>ISBN</td>
<td></td>
</tr>
</tbody>
</table>

4/10/2018
Dictionary

Search for a term, then view
- Broader terms
- Narrower terms
- Related terms
Search Images and Video

Browse by Category
Browse by Category

Lesson Plans
Reference books
List of articles, etc.
PDFs
Reference Shelf Continued

Citation Help

There are several styles and forms used to cite sources which support research papers. Most academic institutions have established standardized requirements for a preferred style. Three of the most widely used styles of citation are:

- Modern Language Association (MLA)
- Chicago Manual of Style
- American Psychological Association (APA)

Regardless of the style you are using, accuracy, clarity, and consistency are the most important factors to consider when citing various types of sources. Guidelines for citing electronic and on-line sources are not yet standardized in most citation styles, as the constantly-changing nature of electronic databases and sources on the Internet requires citation guidelines to be flexible in order to maintain their usefulness.

In general, most styles require that you not only identify reference sources within the text of your essay, but also provide a separate list of works used in your research.

Research Guide

Guide to Research, Writing and Critical Reading

Science Reference Center provides virtually all the information you will need to effectively conduct research on science topics and write research papers. Because there is a wealth of information contained in this database, this guide is provided to support your research and writing process, helping you to write the best possible paper. The following guides and tips are provided:

1. Peacemaker: How to Avoid Common Pitfalls
   - Step One: Understanding the Scope of Your Assignment
   - Step Two: Choosing Your Topic
   - Step Three: Developing Your Research
   - Step Four: Taking Notes
   - Step Five: Sorting Cards and Making a Working Outline
   - Step Six: Drafting: How to Integrate and Balance Your Paper
   - Step Seven: Revising
   - Step Eight: Editing and Proofreading

Curriculum Standards

EBSCOhost Curriculum Standards

Browse:

- State: Pennsylvania
- Standard: Academic Standards
- Subject: Science and Technology and Engineering
- Year: 2009
- Grade: 12

Standards:

- Biological Sciences
- Organisms and Cells
- Common Characteristics of Life
  - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.
Questions?

- Digital Social Studies and Science units
- Contains 140 titles (MARC records available for download)
- For children grades 3 through 6
- Unlimited, simultaneous access
- Promotes the instruction and development of 21st Century information literacy skills
- Built-in lesson plans and project ideas
- Desktop icon and webpage buttons are available for easy access
Choosing a Book

Watch It
Read It

Flipbooks contain title page information just as a print book.

Table of Contents

Interactive Table of Contents
Read Along

- Optional Read Along
- Word-by-word highlighting

Built-in Dictionary

Hover over a highlighted word to show definition.
Glossary and Index

- Highlighted words in text are included in glossary
- Bold page numbers in Index indicate an illustration

Other Features

- True Statistics
- Places to Visit
- About the Author
- Explore More
- Project Idea
- Show What You Know
- Word Match
- Lesson Plans
- Curriculum Correlations
- Web Links
Explore More Feature

Curate list of age-appropriate online resources:
• Scholastic GO articles
• Profiles
• Primary sources
• Interviews
• Current Events
• Charts and tables
• And more!

Project Ideas

• Reports
• Experiments
• Letters and blogs
• Interviews
• Posters
Resources and Tools

Click on Resources and Tools link to access additional features:

- Browse All
- Web Links
- Resources

Lesson Plans

Extreme Science Careers

Content Area: Science
Grades: 5-6

Time
- Introduce the Topic: one 1-hour class period (two, if students need reading time)
- Classroom Activity: small groups, one 45-minute class period
- Project
- Wrap-Up: one 45-minute class period

Materials
- TrueFlix flipbook: Extreme Science Careers
- Computers with internet access
- Projector or whiteboard

Learning Objectives

Students will
- Watch a video about extreme science careers
- Build an invention
- Build knowledge by completing a small-group activity based on the flipbook
- Complete a project by creating and role-playing a hypothetical interview with a scientist whose career is in an extreme science
- Discuss and answer extension questions

I. Introduce the Topic

Tell students that they will be learning about extreme science careers. Explain that they will first watch a video about extreme science careers. They will also preview vocabulary before they read the TrueFlix flipbook: Extreme Science Careers

Watch the Video

Show the video Extreme Science Careers. Once finished, ask students to describe in their own words what the video was about. Discuss with students what they already knew about the extreme careers in science. Then have students tell what they would like to learn more about.

Preview Vocabulary

Show students the list of vocabulary words and their definitions in the flipbook. Pronounce each word, then help students read them. Remind students to pronounce unfamiliar words using what they already know about phonics and syllables.

Have students work with partners to read and discuss each definition and use each word in a sentence. Then hide the definitions, oral words, definitions, and have all students write their sentences on the whiteboard or overhead.
Browse All

Browse by:
- Title
- Subject
- Category
- Lexile
- ATOS (text complexity)

Can also see if a title is included in Accelerated Reader and Reading Counts

Questions?
eBook Download Link

Download eBook (Borrow)

To borrow this eBook, you will need to select a download duration and choose a format (if applicable).

Download duration:
- [ ] 7 days
- [ ] 14 days
- [ ] 30 days

Download format:
- [ ] PDF (Recommended for desktop)
- [ ] EPUB (Recommended for mobile devices)

I have Adobe Digital Editions or equivalent installed *

Download
eBook Download

Download eBook (Borrow)

Success!
Your file (HumphreyMarcPascolla_2015_Idiot'sGuideQuantumPhysics_acsm) will download shortly, and will be available for 7 days.

Download again

Viewing Requirements
Desktop
Adobe Digital Editions is required to view this eBook offline.
For more information on viewing requirements and applications, visit our help page.

Back       Close

Reading eBook in Adobe Digital Editions

Chapter 8: More Neat Tricks

This is a neat trick that allows you to perform calculations on quantum systems without needing to solve the Schrödinger equation. By using this trick, you can calculate the probabilities of various outcomes without having to solve for the wavefunction of the system.

Quantum Leap
Refine Results by Subject

Questions?
Hands-on time!

**eCard for using the eResources:**

2475 2000 1894 70
(no spaces)

- Browse Science Reference Center for content for an upcoming lesson
- Browse the lesson plans in the Science units in TrueFLIX
- View some of the projects included in TrueFLIX science flipbooks
- Browse the Sciences books available, and refine further by subject