Running a Collaborative Research Project in Your Library

In *R is for Research* a class of students comes to the library to work with their teacher and their library media specialist on a research project about cats. Their learning focuses on Science, Language Arts, and Multiple Literacies (informational, digital, visual, textual, and technological).

Research Project: Domestic Cats

Overview

Researchers are guided by the essential question: **Why are cats well-suited to be pets?** Specific research questions include: What do we know about cats? How long have they lived on the planet? What are their physical characteristics, behavior, reproductive habits, history, and mythology? These research questions direct student learning in a research project that aids them in the discovery of the important aspects of cat history, physiology, and behavior that make them well-suited as pets. Students demonstrate skills as information-literate researchers in the library media center and the online environment. They demonstrate science learning and language arts abilities through the content presented in their final products. They also demonstrate their technology and media skills in the production of their final products. And, they have fun!

Time Frame

One week with daily library visits or five or more weeks with weekly library visits.

**Essential Question**

Why are cats well-suited to be pets?

**Specific Research Questions**

- What do we know about the various breeds of cats?
- What are a cat’s physical characteristics?
- How does a cat behave?
- What are the details of a cat’s family and young?
- What do we know about cat history and mythology?

**Cooperative Teaching Plan**

The Library Media Specialist Will:

- Identify, locate, and purchase print resources.
- Identify and bookmark electronic resources.
- With the teacher, initiate a Discovery-Learning Experience* for students by providing a variety of resources in which they can read about cats.
- Review location of resources in the library.
- Provide instruction on using library sources to locate information.
- Review use of nonfiction and reference resources (indexes, tables of contents, keywords).
- Guide students in their online search for information on cats.
• Assist students in locating facts about cats that answer the research questions.
• Review/teach note-taking skills with an emphasis on paraphrasing and answering research questions.
• Review/teach bibliography skills using the Bibliography Format sheet on page 8.
• Review/teach use of the Storyboard Sheet for planning a PowerPoint slide show on page 10.
• Review/teach the process for creating a PowerPoint slide show. See page 11.
• Contribute to the design of a rubric and checklists.
• With the teacher, assess student learning using the Rubric for Group PowerPoint, found on the back page of this guide.

The Teacher Will:
• Support student learning of key life science content such as physical characteristics and adaptations, behavior, and reproduction/family life.
• With the library media specialist, initiate a Discovery-Learning Experience* for students by providing a variety of resources in which they can read about cats.
• Support students in research in the library media center.
• Assist students in locating facts about cats.
• Continue to create a curriculum context for the learning students are doing in their individual research.
• Contribute to the design of a rubric and checklists.
• With the library media specialist, assess student learning using the Rubric for Group PowerPoint found on the back page.

*Discovery-Learning Experience
Supply students with a wide variety of resources about cats. (If you have a mobile lab or a bank of computers in the library media center, open several cat Web sites for investigation, as well). Ask them to begin by simply exploring the resources, gathering impressions by looking at photographs and graphic images and reading captions. After 15–20 minutes of open exploration, ask for their impressions and initial findings in an open discussion.

Now, ask them to work in table teams to complete the Fast Cat Facts form found on page 6.

Resources
Print
• Jeffrey, Laura S. *Cats: How to Choose and Care for a Cat*. Enslow, 2004.


**Electronic**

• “Cats: Wild to Mild!” *Natural History Museum,* www.nhm.org/cats/home.html

• “Domestic Cat.” *National Geographic,* animals.nationalgeographic.com/animals/mammals/domestic-cat.html

• *For Kids . . . About Cats,* kids.cfa.org

• *The World Almanac for Kids Online,* www.worldalmanacforkids.com (Search for “cats.”)

• *World Book Online,* www.worldbookonline.com (Requires subscription.)

**Equipment**

• computers for student use

• data projector

• screen

**Product or Culminating Activity**

In groups, students will create a PowerPoint presentation as well as a brief written report to demonstrate their knowledge.

**Assessment Overview**

The final PowerPoint slide show will be assessed using the Rubric for Group PowerPoint, found on the back page of this guide.

**Adaptations and Extensions**

• Invite a local veterinarian to speak to the class.

• Visit a local veterinarian’s office.

• Present PowerPoint slide shows to other classes at the same grade level or to younger students studying animals or pets.

• Ask able learners to defend the following statement: “Cats make better pets than dogs.”

• Ask for additional support for challenged students from resource room teachers.
Fast Cat Facts

What are some of the popular breeds of domestic cats?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

What does a domestic cat look like (physical characteristics)?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

What do domestic cats do (behavior)?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

What did you learn about domestic cat families and young?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

What did you learn about cat history and mythology?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
Cat Research Project

Research Category Topics
- Physical Characteristics
- Behavior
- Family and Young
- Breeds
- History and Mythology

Specific Research Questions
- What do we know about the various breeds of cats?
- What are a cat’s physical characteristics?
- How does a cat behave?
- What are the details of a cat’s family and young?
- What do we know about cat history and mythology?

Sources Criteria Sheet

Student’s Name___________________________     Student’s Name___________________________
Student’s Name___________________________     Student’s Name___________________________

We have located:

☐ at least one reference book on cats
☐ at least one nonfiction book on cats
☐ at least one newspaper or magazine article on cats
☐ at least one Web site or online article on cats
☐ a primary source about cats

Internet Search Terms
- cat
- cat*
  *wild card will retrieve both CAT and CATS
- kitten
- feline
- Felidae
- “wild cats”
- “domestic cats”
- “cat breeds”
- name of any specific breed
# Cat Research Project

## Bibliography Format Sheet

For a book with one author, follow this format.


<table>
<thead>
<tr>
<th>First Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Author’s last name, first name.</td>
</tr>
<tr>
<td>City of publication: Publisher, Date of Publication.</td>
</tr>
<tr>
<td>If you use a second line, you must indent five spaces.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Author’s last name, first name.</td>
</tr>
<tr>
<td>City of publication: Publisher, Date of Publication.</td>
</tr>
<tr>
<td>If you use a second line, you must indent five spaces.</td>
</tr>
</tbody>
</table>

For an unsigned magazine article, follow this format.


<table>
<thead>
<tr>
<th>Magazine</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Author’s last name, first name.</td>
</tr>
<tr>
<td>Title of magazine (underlined) Date (month and year): Page numbers.</td>
</tr>
<tr>
<td>If you use a second line, you must indent five spaces.</td>
</tr>
</tbody>
</table>
For an encyclopedia article, follow this format.

Brearley, Joan McDonald. “Cat, Domestic.” Funk & Wagnall’s New World Encyclopedia. 2002.

Encyclopedia

4. __________________________. “________________________.”
   Author’s last name, first name (if available). “Title of article.” (in quotation marks)

   __________________________. __________________________. __________________________.
   Title of encyclopedia. (underlined) Edition. (if available) Year.

If you use a second line, you must indent five spaces.

For a Web Site, follow this format.


First Web site

5. __________________________. “________________________.”
   Author’s last name, first name (if available). “Title of page.” (in quotation marks)

   __________________________. __________________________. __________________________.
   Title of Web site. (underlined) Today’s date. Date posted or updated.

   <________________________________________________>.<URL (Web address)>.

If you use a second line, you must indent.

Second Web site

6. __________________________. “________________________.”
   Author’s last name, first name (if available). “Title of page.” (in quotation marks)

   __________________________. __________________________. __________________________.
   Title of Web site. (underlined) Today’s date. Date posted or updated.

   <________________________________________________>.<URL (Web address)>.

If you use a second line, you must indent.
Note: You can learn more about creating PowerPoint slide shows using the “PowerPoint in the Classroom” tutorial produced by ACT360 Media Ltd. online at www.actden.com/pp2003.

- Place your most important information at the beginning.
- Storyboard your PowerPoint.
- Outline your PowerPoint from your storyboard.
- Develop content before adding sound, graphics, or design elements.
- Choose only pictures/graphics that match your point exactly.
- Choose only sounds that enhance your main ideas and details.
- Choose dark font on a light (or white) SIMPLE background.
- Choose a simple font like Arial or Verdana.
- Use at least 36 point font for headers.
- Use at least 24 point font for bullets.
- Use bold or italics for emphasis (no caps, no underlining).
- Use the Rule of Six:
  - six words per line (main ideas),
  - six lines/bullets per slide (details).
- Check all text for proper spelling and grammar.
## Rubric for Group PowerPoint®

**Feedback from: _____________________________**

<table>
<thead>
<tr>
<th>Partially Meets</th>
<th>Meets</th>
<th>Exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PowerPoint concept is creative, well-developed, and demonstrates answers to the five research questions as well as the essential question.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slides are well-organized and arranged logically with a main idea and supporting details.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slides accurately reflect research about cats.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The storyboard is complete and logical.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The PowerPoint follows the Rules of Effective PowerPoint.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A properly formatted bibliography slide is included.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narration is well-rehearsed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narration of the slide show is well-paced, clear, and informative.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrators maintain proper eye contact with the audience when presenting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grammar and oral language usage are correct throughout the narration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation with peers is evident throughout the project.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:**

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*Upstart Books*

Fort Atkinson, Wisconsin