Capstone Inquiry Research Lessons

Task Definition

What needs to be done?

- Define the inquiry research topic
- Ask good questions
- Narrow and focus the inquiry questions

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The Big Idea: Students will learn to recognize and formulate appropriate questions based on Bloom’s Taxonomy.

Ongoing throughout the school year

We suggest that the lessons on “Asking Good Questions” be incorporated across the curriculum from the beginning of the year to create a basic language and form a foundation for inquiry.

Questioning is the basis for all learning. These question words and statements should be explicitly taught in lessons that might include the writing process, science experiments, current events, historical analysis, interviews, math problem solving, critical literacy, interpersonal connections and cooperative learning.
While questioning seems to be a natural part of our teaching, the students need to be equipped with the language to gain access to information in many ways. Make a poster of these questions, or a portion of them, to hang in your room, or provide each child with a sheet.

**Examples:**
- Provide children sentence strips with particular questions and let them practice asking questions on a certain topic, in small groups or pairs.
- Present prompts for writing and current events.
- Use these prompts with a KWL chart or essential questions at the beginning of a unit.
- Have children write interview questions for real people as well as fictional characters and historical figures. Class members analyze the question in a group discussion.
- Institute a question of the day. Each day challenge a student to come up with a sincere question about a class unit or subject under study. After the student asks the question, class members attempt to answer it as best they can. Class members analyze the question in a group discussion.

**Closed-Ended Questions / Red Light Questions / Fact Questions**
These kinds of questions are “yes” or “no” questions or have a specific answer. These questions help in recalling information. Usually these questions start with these words…

Who…  
What…  
Where…  
When…  
Did you…  
Do you…  
Can you…  
Could you…  
Have you…  
Are you…  
Will you…  
Should you…  
Would you…
Is there …
Does…

Who is the president of the United States?
What do sea turtles eat?
Are you going to camp this summer?

Now You Try! Write three questions using these prompts. Open-ended

Questions/Green Light Questions/Why Questions
These kinds of questions do not have a simple answer and require understanding of ideas or concepts.
Usually these questions start with the words…

Why…
How…
In what ways…
If you…
Which…
What…
What is meant by…

How do insects differ from reptiles?
Why do you need to learn to use a map?

Encourage Long Answers / Idea Questions and Statements

These kinds of questions and statements encourage longer answers and explain ideas or concepts
Usually these questions start with the words…

Tell me about the best…
Tell me about the worst…
Tell me about the happiest…
Tell me about the first time…
Tell me about the most interesting…
Tell me about the most embarrassing…
Tell me about the last time…
Tell me about the easiest…
Tell me about the hardest…
Tell me about the funniest…
Tell me about the saddest…
Tell me about the scariest…
Teach me how…
Show me…
Remind me about…
Introduce me to…
Describe…
Give me details about…
Explain…
Classify…
Discuss

**Comparative Questions**

These kinds of questions compare and contrast two situations or events related to a topic.

Usually these questions start with the words
How do you feel about _____ as compared to ____?
How do you compare...
How is ______ like/different from this________?
What are the characteristics of…?
How is this part of ______ different from this part of ______?

How do you compare a chicken egg to a butterfly chrysalis?
Encourage Follow-Up Questions
These kinds of questions relate to a previous answer and invite more details to use information in a different way.

Usually these questions start with the words…

How will...
Why will...
Describe...
Explain...
Why...
What happened before that...
What happened next...
Can you give me more details about…
How could you use…?
**Evaluative Questions**

These kinds of questions help develop opinion and evaluate situations.

Usually these questions start with the words…

Why do you agree/disagree that…
How would you decide about …
What do you think about …
What conclusion would you make…
So why does this matter…

1.

2.

3.

**Opinion Questions / Affect Questions**

These kinds of questions ask for an opinion or feelings,.

Usually these questions start with the words
What do you think about...
What is your opinion about...
How did you feel when...
Why did you feel that way...
What would you do if...
What would it be like...

*What is your opinion about having assigned seating during lunch?*

1.

2.

3.

**Scale / Rating Questions**

These kinds of questions put things in order of importance.

Usually these questions start with the words…
On a scale of 1 to 10,…
Would you give this an A?
What do you like the most … what do you like the least?

1.

2.
3.

Creating Questions / Idea Questions
These kinds of questions use past experiences to find out about new ideas.

Usually these questions start with the words…

What would you do if…
Imagine...
Suppose...
Predict...
If... then...
How might...
How would you create...
What are some possible consequences...
Explain
What plan can you develop for…

What are some possible consequences if people do not recycle?
What would you do if you were sailing and your boat capsized?

1.

2.

3
The Big Idea: A research organizer will provide students with structure to organize their thoughts and materials relating to the topic of research.
Students will hold everything they do relating to the topic in a research organizer. This organizer could be a 3 ring binder, a pocket folder, 3-ring folder with pockets, a 9x12 folder, or another organizer.

The first page of the research organizer is the research organizer sheet listing all the materials the organizer will contain as the research process unfolds. The sheet lists all the materials in order of use.

This organizer is a tool for students as well as an evaluation for teachers.

Student’s Name: Date:

EVALUATION CHECKLIST

The Research Process

PHASE 1: Task Definition – define the information problem
___ Asking Good Questions
___ Inquiry Survey complete
___ Curriculum Wheel complete
___ My Main Inquiry Questions Sheet complete
___ Journal Reflection #1 - Topic complete

PHASE 2: Information Seeking Strategies – determine possible sources
___ How People Learn About Anything List
___ How People Learn About Anything Chart
___ Parent letter signed / returned
___ Contract complete (deadlines and dates)
___ Reflection

PHASE 3: Location and Access – locating your sources
___ Resource Checklist
___ Skim and Scan Sheets for all Resources
___ Reflection

PHASE 4: Use of Information – extracting relevant information from your sources
___ Taking Notes Instruction Sheet
___ Taking Notes on Research Organizer Sheets
___ Interview arranged appropriately
___ Interview questions appropriate & valuable
___ Interview recorded comprehensively & insightfully
___ Site Visit arranged and conducted
___ Appropriate Artifact selected or created
___ Written Documents
___ Images
___ Other
__Reflection

PHASE 5: SYNTHESIS – organizing information from multiple sources
___Multiple Intelligences and Learning Styles Survey
___Inquiry Project Proposal
___Possible Product List
___Materials List
___Bibliography

PHASE 6: Evaluation and Reflection – judging the product’s effectiveness
___Final Reflection
___Evaluation Checklist – The Product (one for student, one for teacher)

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**Overall Organization Grade**

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>Evaluation</td>
<td>Binder is complete and follows</td>
<td>Binder is mostly</td>
<td>Binder is somewhat</td>
<td>Binder is disorganized, incomplete,</td>
</tr>
<tr>
<td>Checklist</td>
<td>evaluation checklist organization.</td>
<td>organized and mostly follows</td>
<td>organized. Attempts to follow research</td>
<td>documents are missing.</td>
</tr>
<tr>
<td></td>
<td>Neat presentation.</td>
<td>evaluation checklist.</td>
<td>binder organization.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Satisfactory presentation.</td>
<td>Little care put into presentation.</td>
<td></td>
</tr>
</tbody>
</table>

“The Big Idea: When students are interested in a topic, they are invested and engaged in their learning. Students will define their interests and will choose 2-3 possible topics for research.”
Approx. 2 days

The capstone experience is an inquiry research project based upon the students’ interests and curiosity. It is an independent research project whereby students demonstrate the research process, technology, reading and writing skills that they have learned during their elementary school experience using an organized, comprehensive method called The Big6. Inquiry research is a vehicle for differentiating the curriculum and provides optimal learning opportunities for students with diverse needs.

We suggest that the teacher go through the process of choosing a topic and narrowing his/her topic choice. This will be especially helpful when you model lessons for the students.

- To help students define their interests, provide each student with the Inquiry Research Survey. Prior to the students completing this, take time to fill it out yourself and model your answers with the students. Allow 1-2 lessons for the students to consider their answers.

- After the students complete this sheet, provide them with the following instructions to narrow down their topic choices.

  Tell the class to put a star next to any item they are passionate about.

  Next, Tell the students to put a star (or an additional star, if there is one there already) next to an item they know a lot about.

  Finally, tell the students to place a star (or another star) next to an item that the student wants to learn more about.

  Students will end up with 2-3 stars next to some items. If an item has two or more stars, have the child circle the topic. These will be their possible research topics.

- Once the items are circled provide students with a few days to think about the topics and choose TWO (one as a back-up) to research.

Name: ___________________________  Date: ______________________
Inquiry Research
“Okay, what do you want to learn about today?”

You are about to take the lead in your own learning. Before you start your individual inquiry, you need to think about what it is you are interested in. When you explore something you are interested in, you are invested and engaged in your learning. What are you passionate about? What do you want to explore? What do you want to learn more about? Let’s find our passions. Try to think about those things you know and care about and might want to explore further.

List at least three interests you have.
1.
2.
3.

List several areas of expertise you have.
1.
2.
3.

Is there a historical event you would like to become an expert on?

List several things you enjoy.
List several things you want to learn more about or something new you want to learn.

What kinds of books do you check out of the library?

What do you find yourself wondering about?

What do you collect?

What do you wish you collected?

If you could invent something, what would it be?

During your elementary school career, what topics did you really enjoy learning about?
During your elementary school career, what field trips did you really enjoy going on?

If you could take a field trip, you would go...

What current events make you think and move you?

Is there a person important to you that has made an impact on the world?

If you could conduct any experiment, what experiment would you like to do?

If you could study any two topics, you would choose...
1.
The Big Idea: WHAT IS RESEARCH?
Flow chart on edutopia- another way to look at the research process:

http://www.edutopia.org/blog/elementary-research-mary-beth-hertz

The Big Idea: HOW ONE CONDUCTS RESEARCH

Go to World Book Student:
“How to do Research” link takes teacher and students through the research process step by step.
1. Teaches you about the different resources that can help you with your research.
2. Helps you make sense of all the information that is available
3. Guides your research process from start to finish.
Begins with “What are Research Skills and Why do I need them?”
http://www.worldbookonline.com/student/howtoresearch?what_are_research_skills

The Big Idea: Researchers narrow general topic themes to specific inquiry questions. There are criteria for asking good questions.

1 day
Lesson 1- The Art of Questioning

Almost any topic can be the basis of an inquiry-based experience, but not every question is a good inquiry question. In this lesson, the students will discover the criteria needed for a compelling inquiry.
Once the students have circled two to three interests on their interest survey, they need to brainstorm specific questions on these topics so they can eventually define their main inquiry question. They will do this in Lesson 2.

Prior to brainstorming these questions, the students will practice writing questions according to a set of criteria.

- Tell students that almost any topic can be the basis of inquiry, but not all questions are compelling and open ended enough for research. Once the students have decided on a general topic, they must focus and narrow that choice. Researchers do this by asking good questions.

- Tell the students that good questions are ones they really care about and that fit the following criteria:

  **The questions must be practical.**
  - For example: “How many trees does it take to produce enough oxygen for one human being?” is not practical.

  **The questions must be answerable.**
  - For example: “Will Louisiana definitely be hit by a hurricane this year?” is not answerable.
  - “Why is the gulf region susceptible to hurricanes?” is answerable.

  **The answer to the question cannot be a simple fact.**
  - For example: “When was Lincoln shot?” is a simple fact.
  - “Why did Booth kill Lincoln?” is not a simple fact.

  **The answer to the question cannot already be known.**
  - For example: "What is rap music?" is a known answer.
  - “How has rap evolved and why?” does not have a known answer.

  **The questions must have an objective basis for an answer.**
  - For example: “Is snowboarding better than skiing?” requires a subjective answer.
  - “How do snowboarding skills compare to the skills required for skiing?” is objective.

  **The questions cannot be too personal.**
• For example: “Why do I love the Bronx Zoo?” is personal.
• “How does the Bronx Zoo differ from traditional zoos?” is not personal.

• After providing students with the above criteria, have pairs think of questions that are examples and non-examples of each category. You may provide them with a topic to guide their questions. Have them use their questions sheets to help them frame their questions.

Name: Date:

**Inquiry Research - The Art of Questioning**

Almost any topic can be the basis of inquiry, but not all questions are compelling and open ended enough for research. Once you have decided on a general topic, you must focus and narrow your topic choice. Researchers do this by asking good questions.

Good questions are ones you really care about and that fit the following criteria:

**The questions must be practical.**
For example: “How many trees does it take to produce enough oxygen for one human being?” is not practical.
“What are some effects on animals due to deforestation?” is a practical question.

**The questions must be answerable.**
For example: “Will Louisiana definitely be hit by a hurricane this year?” is not answerable.
“Why is the gulf region susceptible to hurricanes?” is answerable.

**The answer to the question cannot be a simple fact.**
For example: “When was Lincoln shot?” is a simple fact.
“Why did Booth kill Lincoln?” is not a simple fact.

**The answer to the question cannot already be known.**
For example: “What is rap music?” is a known answer.
"How has rap evolved and why?" does not have a known answer.

**The questions must have an objective basis for an answer.**
For example: “Is snowboarding better than skiing?” requires a subjective answer.
“How do snowboarding skills compare to the skills required for skiing?” is objective.

**The questions cannot be too personal.**
For example: “Why do I love the Bronx Zoo?” is personal.
“How does the Bronx Zoo differ from traditional zoos?” is not personal.

With a partner, think of questions that are examples and non-examples of each category.

Use the Asking Good Questions Sheet to help frame your questions.

**The Big Idea: Researchers narrow general topic themes to specific inquiry questions-brainstorming related questions.**

1 day

**Lesson 2- Brainstorming related questions**

Now that the students are aware that not every question is a good inquiry question, they will brainstorm possible questions about one of their topics on the Interest Survey.

In Lesson 3, students will categorize these questions according to curriculum areas, and will choose their final inquiry question using a curriculum wheel.

The teacher will model the skills required to narrow topics into viable inquiry questions in lessons 2 and 3.

- The teacher introduces his/her possible topic from the Interest Survey. With the class, using the “Asking Good Question” sheet, the teacher will model how to brainstorm specific questions related to the larger topic keeping in mind the criteria for good questions.

- List questions on chart paper.

- Students should repeat this brainstorming question process for their first choice topic.
The Big Idea: Researchers narrow general topic themes to specific inquiry questions-The Curriculum Wheel.

Approx 3-4 days
Lesson 3: The Curriculum Wheel

The following model of the curriculum wheel and student lesson should be conducted in conjunction with the computer teacher to facilitate understanding of the Inspiration program.

- As a class students categorize the questions brainstormed on the teacher’s topic according to curriculum areas. To do this, you will use the Curriculum Wheel found in the Capstone Folder in each student’s dock (on the computer).

- There is an example of a topic with specific inquiry questions attached.

- You could use the boxlight; create a poster or a bulletin board of the curriculum wheel. Have students identify where the brainstormed questions would be placed on the wheel, or if questions could be placed in more than one area. Have students justify their choices.

- Notice gaps in the wheel and try to generate questions for that area, if possible. Remind students that it may not be possible to write a question for each content area on the wheel, and that is okay.

- The Curriculum Wheel allows students to recognize that all topics are multifaceted and interrelated. It is strongly encouraged that you use the Wheel with other curricular areas such as electricity, fractions, geometry and models and designs, and learning to look.

Example for Curriculum Wheel
General research topic-Shoes

The teacher can insert one of the following questions under each category and brainstorm additional questions with the class.
Use the following example as the inquiry question. This question would have been generated from the brainstormed list of questions.

**When and why did people start to wear shoes?**

**Science:** Why are sneakers good for sports? How are sneakers designed? What are the new technologies for sneakers? Are there shoes for people who have disabilities?

**Culture:** Do all cultures wear shoes? How have shoe styles changed over time? How do shoes reflect social class?

**Geography:** How does geography influence the material shoes are made from? How does topography influence the shoes you wear?

**Economics:** Why do sneakers cost so much? Where are shoes made? Does the price you pay reflect the quality of the shoes?

**Math:** How are shoes measured and put together? Are shoe sizes different in different places?

**Politics:** Are there laws governing the safety of shoes? Are there dress codes in school?

**Literature:** The Old Lady that Lived in a Shoe, Cinderella

**Music:** Blue Suede Shoes, These Boots are made for Walking, What different types of shoes are there for different dances?

**Architecture/Design:** How are shoes designed?

**Art:** Andy Warhol, historical paintings, what do shoes say about history?

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**Example for Curriculum Wheel**

**General research topic based on a curriculum area- Electricity**

**Science:** How is electricity made? Is lightening electricity? Did Benjamin Franklin invent electricity? How does a battery work?

**Economics:** How much does electricity cost? How is the price determined?
Politics: Why are there blackouts and how do governments respond?

Daily Life: How much electricity do you use in a day? How many items do we use a day that require electricity? How did electricity changed daily life? What electrical appliances did your grandparents have?

Culture: In poor countries do people have electricity?

Geography: Which countries use the most electricity? How do natural resources effect electricity production? What other kinds of power is available?

Art: What is Neon art? How does natural light affect art? How has electricity changed pictures, video, motion pictures?

Literature: The City of Ember, Biography of Thomas Edison, Benjamin Franklin

Music: The Electric Slide, How have guitars and keyboards changed over time? How has listening to music changed? How has the recording of music changed?

After the process is modeled, the students categorize their own questions on the curriculum wheel located on each student’s dock.

The Big Idea: Researchers refine their questions and identify sub questions that are part of the larger question.

Main Questions and Sub-Question PPT
https://www.dropbox.com/s/ygk6zn7782jf5mc/main%20question%20and%20subquestion1.ppt

After completing the curriculum wheel, the children decide on a research topic. They will identify an inquiry question and sub-questions.

- The teacher will model choosing an inquiry topic by choosing one of the questions on the curriculum wheel as his/her main inquiry question. For example, in the electricity model, each question is a different research topic.

- Choose one topic that fits the criteria of the “Art of Questioning” as the main question (practical, objective, answerable, not a simple fact, not
(personal). Then choose 5 sub-questions for that topic. Some of the sub-questions may be more closed ended questions because sub-questions are related to the main question.

**Example:**
Main question-How has electricity changed people’s daily lives?

**Sub-questions-**
How many appliances do we use every day that require electricity? (As a note, this would not be a good main inquiry question because it is closed ended, however it is fine for a sub-question.)

    When were homes first wired for electricity?
    What did people do for power with out electricity?
    What appliances did my grandparents have and how did they work?
    Where in the world do people live without electricity?

- Have the students fill out the “**My Main Inquiry Question Sheet**”. This sheet lists the main inquiry question and sub-questions.

    My Main Inquiry Questions

    | My Main Question: | Sub-Question: |
    |-------------------|--------------|
    |                   |              |
The Big Idea: Researchers reflect for deeper understanding and to determine their next steps.

Students complete the Inquiry Project Journal Reflection Sheet.

**Rubric for Main Research Question** (Task Definition)

<table>
<thead>
<tr>
<th>Level 4 Question will</th>
<th>Level 3 Question will</th>
<th>Level 2 Question will</th>
<th>Level 1 Question will</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
- be of personal interest
- be independently developed after brainstorm and revision
- be related to topic
- not result in a simple fact
- be answerable
- be practical
- objective
- be comparative
- be evaluative in nature (evaluates information, behavior, situation, etc.)
- result in a call to action or change in behavior
- lead to designing/creating something new

- be of some personal interest
- be independently developed after brainstorm and revision
- be related to the topic
- not result in a simple fact
- be answerable
- be practical
- objective
- open-ended

- be of some personal interest
- developed with guidance
- related to topic
- result in a simple fact
- be answerable
- be practical
- objective
- closed-ended
- purpose of research is simply to answer the question
- too broad

<table>
<thead>
<tr>
<th>Elementary example</th>
<th>Elementary example</th>
<th>Elementary example</th>
<th>Elementary example</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does Sea World create dolphin habitats to learn about dolphin behavior and how can that habitat be improved? How can our school help stop the growth in unwanted and abandoned animals in our community? How does Social Networking affect daily lives and how can people use it safely?</td>
<td>How does Sea World create dolphin habitats and learn about dolphin behavior? How have teen dance styles changed over the years?</td>
<td>What do dolphins do at Sea World?</td>
<td>What is a dolphin? Describe my ten favorite constellations</td>
</tr>
</tbody>
</table>

Name | Date:

Inquiry Project Journal Reflection #1

Be sure to answer the following questions in your response:

- Why did you choose this topic?
- What was the most helpful step in choosing your main question?
- What did you find challenging about choosing a topic and main question? Explain.
- What did you discover about yourself as a learner?

Rubric for Reflections (throughout)
Information Seeking Strategies

What can I use to find what I need?

- Determine all possible sources
- Recognize that information can be gathered from a variety of sources
- Select the best sources

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The Big Idea: There are resources in our community and school.

Post the Expertise Notice in the office or teacher lounge for your faculty and staff to list areas of expertise that they or a friend are willing to share.

Also post a list of your students’ inquiry questions to elicit involvement from the staff. You can decide, as a grade level how to present this to your colleagues.

<table>
<thead>
<tr>
<th>Name of Teacher</th>
<th>Area of Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Name of Student</th>
<th>Inquiry Topic</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
The Big Idea: WHAT IS THE INTERNET?

- **Background Knowledge**
  - Here is a website to give the teacher background knowledge about the Internet. After discussing the research process, students may be aware of the Internet as a viable source but they may not understand what it is. This website explains how the network is set up both virtually and physically.
    - [http://www.findingdulcinea.com/guides/Technology/Internet/Dulcineas-Guide-to-Searching-on-the-Web.pg_0.html#0](http://www.findingdulcinea.com/guides/Technology/Internet/Dulcineas-Guide-to-Searching-on-the-Web.pg_0.html#0)

- This video (from Common Craft) is easy to follow to help understand the “web.”

Big Idea: People gather information in a variety of ways, using multiple sources.

**Lesson 1:** Class goes on a scavenger hunt to identify possible resources in the school.

- The teacher asks: How does one go about gathering information to learn about any question? Create a generic list with the class. Most students list books and websites and no other sources. DO NOT elicit more responses from the students at this point. The goal is for partners to circulate around the classroom and school to gather a list of different types of resources.

  **Some examples from the classroom are:**
Maps, globes, pictures, posters, charts, graphs, people, signs, labels, instructions, certificates, word walls, photographs, files, artifacts like pencil sharpeners.

- Once students exhaust the sources in the room, they can leave the room to search the halls of the schools. Give them 15 minutes.

  **Some examples from the school may be:**
  - Timelines, pottery, students work posted outside classes, room signs, directions, experts, charts, flags, etc.

- Reconvene as a class to share student findings and add to master class list. Then have the class categorize their findings according to:

  - **Text** (books, computers)
  - **Images** (photos, videos, political cartoons etc.)
  - **Written documents** (manuals, tickets)
  - **Manipulatives**- (artifacts, tools)
  - **Interviews**
  - **Site visits**
  - **Quotes**

- Discuss the findings and have the students write a conclusion about where they can find resources.

- Provide students with the “How do People Learn About Anything?” sheet. Discuss how adults as well as children attempt to learn about any questions.

- Provide the class with an example from your life or ask the class how they would go about learning how to bake a perfect cake, or snowboard, or some other topic.

**Big Idea:** People gather information in a variety of ways, using multiple sources.
1 day

Lesson 2: Finding information on a question using multiple resources.

- You will model how to find resources on a topic. We will use the example of researching the question, “Why do Labradors have a better reputation as a family pet than a pit bull?”

- For whatever question you choose, round up resources from the resource categories on the “How do People Learn About Anything” sheet.

- For the question, “Why do Labradors have a better reputation as a family pet than a pit bull?” you might find the following resources:

  **Text:**
  - Books on raising and training Labs and Pit Bulls
  - Books on the dispositions of various types of dogs
  - Dog magazines

  **Websites**
  - Websites about training Labs and Pit Bulls
  - News articles about Pit Bull attacks
  - YouTube Videos about Labs playing or being trained
  - American Kennel Association website
  - ASPCA website
  - Animal Planet website

  **Images:**
  - Pictures of different kinds of Labs and Pit Bulls
  - Drawings of dog training
  - Video showing training techniques
  - Westminster Dog Show images

  **Artifacts:**
  - Training materials (leashes, collars, muzzles)

  **Written Documents:**
  - Pamphlets from Vet office
Advertisements from pet stores
News articles about Labs or Pit Bulls
Graphs or data related to injuries from Labs or Pit Bulls
Therapy dog statistics

**Quotes:**
Many quotes from owners of Labs and Pit Bulls
(Quotegarden.com, or one of the many quote sites on the web)
Quote from ASPCA, Vets, Humane Society, shelters or pet stores regarding Labs and Pit Bulls

**Interviews:**
Pet store owners, pet owners, Vets, dog trainers, obedience school workers, shelter workers, etc.

**Site visits:**
Shelters, Vets, families, training schools, Humane Society

- Once you have gathered the resources set them out on several tables.
- On each table, place at least two different types of resources.
- The idea is to provide the students with multiple resources. In small groups, the students will observe, read, listen and look at the information on their tables.
- Then, have the students write down what they have learned about the question from their resources.
- When you share the information as a class, have the students reflect on how they felt about their resources. Did they like listening to the video, reading the articles, going through artifacts?
- Discuss how researchers use multiple resources available to investigate a question and how each resource provides different information as well as perspective.

**Big Idea:** People gather information in a variety of ways, using multiple sources.

* 1 day
Lesson 3:
In this lesson, have students rotate through the tables to interact with all the resources. When students have had a chance to look at most of the resources, debrief discussing the importance of consulting multiple resources when researching.

1 day

Lesson 4:
Provide a blank organizer of “How Do People Learn About Anything” to each student. Have the students write in the topic they chose to research and brainstorm possible sources from each category. Encourage students to think outside the box and be as specific as they can. This sheet will be the starting point for knowing where to go to actually find resources.

How Do People Learn About Anything

People learn about topics in many different ways. Some of the ways people find out information include:

Text
- Books
- Periodicals (magazines)
- Encyclopedias
- Websites

Images
- Photos
- Sketches
- Drawings
- Paintings
- Portraits
- Video
- TV
- Movies
- Cartoons
- Political cartoons

Artifacts
- Sculptures
- Collections
- Tools
Written documents
- Letter
- Journals
- Gov’t documents
- Signs
- Tickets
- Newspapers
- Contracts
- Money
- Stories
- Poems
- Advertisements
- Posters

Quotes
- Books
- Interviewees
- Famous person
- Poem
- Articles
- Songs

Interviews

Site visit

Observations/experiments

Name

How do people learn about (Main Research Question)

<table>
<thead>
<tr>
<th>✓</th>
<th>General Sources Brainstormed/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Text</td>
</tr>
<tr>
<td>Images</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>Artifacts</td>
<td></td>
</tr>
<tr>
<td>Written Documents</td>
<td></td>
</tr>
<tr>
<td>Quotes</td>
<td></td>
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<tr>
<td>-----------</td>
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</tr>
<tr>
<td>Songs</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
</tr>
</tbody>
</table>
Big Idea: Researchers need to gather multiple sources to problem solve and answer inquiry questions.

After students have brainstormed their sources on the ”How do People Learn About Anything?” sheet, they begin their actual search for sources. The actual sources they have found will be cited on the appropriate section on the ”How do People Learn About Anything?” sheet.

This is when the parent letter and the contract and schedule are sent home. Teachers’ determine the dates due. Make two copies of the contract, one for home and one for the binder.

Rubric for Information Seeking Strategies

<table>
<thead>
<tr>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Dear Parents,

As you know, the 5th grade is participating in an inquiry based research project. This project begins with the learner. Inquiry based learning asks the children what they know and what they want to learn more about. Students learn best when they are motivated and invested in their learning. The inquiry process capitalizes on this idea.

Students will self select, with my approval, a topic they are keenly interested in to complete an intensive, fully integrated study of their chosen topic. Examples of some possible topics from which a child may choose an inquiry question are: a new skill he/she would like to learn, an invention, a person he/she would like to know more about, a scientific wondering, a particular historical event, or a curriculum topic from elementary school that student may want to explore in depth. We have taken three weeks in class to discuss the process of choosing a topic, narrowing down the topic, and creating a compelling, open ended, and sophisticated research question and sub-questions.

Next, the students will investigate and research this topic. This step begins with identifying and locating resources, and selecting and evaluating the best possible resources. In this phase, the students brainstorm resources and conduct pre-research to ensure there are appropriate and reliable sources available. In our effort to expose the children to a variety of primary and secondary sources, the children will generate a list of possible sources and examples of each. The minimum sources are:

3 books
2 computer sites
3 images
1 written document
1 interview
The research will be conducted in school, however, as you can see, some aspects of research will have to be done outside of school. The teachers will approve the interview and the site visit, however, you will have to take your child to the site and accompany your child on the interview so that you are also a partner in your child’s learning.

Finally, the children will synthesize their information and create a product based upon their learning style. This product will be created at school ONLY. The students will create a list of materials they will need to complete this product. Your child may need supplies that I do not have. If so, I would appreciate your support by providing these items.

When people attempt to find out information about a topic, they go through these same stages. These are essential life skills that we hope the children will apply across subject areas and life situations for many years to come.

Thank you very much,

Mrs. Kenney

---

**Inquiry Project Contract & Schedule**

Put a check next to each completed item.

**Task Definition**

<table>
<thead>
<tr>
<th>Topic Choice Decision Making/ Pre-research</th>
<th>May 9 - May 18</th>
</tr>
</thead>
</table>

| Final Topic Choice and Curriculum Wheel Due | May 19            |

**Information Seeking Strategies**

Location and Access

Use
<table>
<thead>
<tr>
<th>Event</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Class Research</td>
<td>May 19 - June 5</td>
</tr>
<tr>
<td>All Research Due (including interview and site visit)</td>
<td>June 5</td>
</tr>
<tr>
<td><strong>Synthesis</strong></td>
<td></td>
</tr>
<tr>
<td>Project Proposal Due</td>
<td>June 1</td>
</tr>
<tr>
<td>Project Materials Due</td>
<td>June 6</td>
</tr>
<tr>
<td>In Class Work on Final Project</td>
<td>June 6 - June 16</td>
</tr>
<tr>
<td>Project Presentations</td>
<td>June 19</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td></td>
</tr>
<tr>
<td>Weekly/Final reflections</td>
<td>June 19</td>
</tr>
</tbody>
</table>

After careful consideration and pre-research, _____________ has chosen the topic of ________________________________.

(Please tear off and return by Tuesday, May 23)

I have read the inquiry project schedule. I agree to put forth my best effort to adhere to the deadlines.

Student Signature ____________________ Date _____________

Parent Signature ____________________ Date _____________

**Big Idea:** Researchers need to gather multiple sources to problem solve and answer inquiry questions.

There is a parent/community resource letter that can be sent out to help gather more resources. In addition to the parent letter, this letter can be sent home to solicit individuals who have some knowledge about the inquiry topics chosen in your class.

**Parent as Resource Letter**
Dear Parents,

As you are aware, the students in our class are conducting research projects on multiple topics of interest. Below is a list of topics that have been chosen by the class. If you or anyone you know has any knowledge about one of the topics and is willing to be a resource to a student, please return the form below.

Name:

Contact Information:

Area of Expertise:

**The Big Idea: Teacher Management of the Inquiry Process**

Included are various management tools. Feel free to use any or all, or create your own.

**Inquiry Project Planner:** This management tool is meant to be placed in the class as a poster to help students and teachers monitor student progress. Prior to students’ checking off a source, the teacher will confirm the student work in each area. The chart also helps teachers recognize those students that require conferences.

**Status of the Class Daily:** This management tool will allow the teacher to track student progress on a daily basis. This will allow the teacher to determine who needs to move on. Teachers should have students’ names written on the sheet, and copy sheets for each day. The idea is that every day, the teacher takes an inventory of each student’s progress. This is the same idea used in writer’s workshop.
**Status of the Class Weekly:** This is an alternative management tool to be done weekly.

**Resource Organizer Checklist:** This management tool is for the students. They will keep this checklist in their research binders. It should be updated once the students start to gather resources. Set aside a few minutes at the end of each research period for the students to update this sheet. This is an area where the teacher must be flexible with respect to resources. Some topics do not lend themselves to some of the resource categories. For example, if the child could not conduct an interview, the teacher could waive that requirement.

**Contract and Schedule:** This contract was sent home with the parent letter. The due dates should be posted in the class, and the students should be reminded of the dates frequently.

**Reflections:** These student reflections should be completed weekly. This can be completed for homework. These reflections are especially helpful for informing the teacher.

**Inquiry Project Planner**

*Place a check in each box after you have completed each step of the inquiry process.*

**Sources**

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Student Name</th>
<th>Skim and Scan</th>
<th>Note-Taking</th>
<th>Comp. Sites/Books</th>
<th>Images</th>
<th>Written Documents</th>
<th>Interview</th>
<th>Site Visit</th>
<th>Quote</th>
<th>Artifact</th>
<th>Project Proposal</th>
</tr>
</thead>
</table>
Status of the Class *(daily)*

Day / Date: ___
<table>
<thead>
<tr>
<th>Name</th>
<th>Current activity</th>
<th>Teacher’s Comments</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**Status of the Class** *(weekly)*

Week of: ____
<table>
<thead>
<tr>
<th>Name</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Teacher’s Comments</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

**Location and Access**

*Where can I find these resources?*
• Locate sources
• Independently gather sources
• Skim and scan sources to determine relevancy

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The Big Idea: The Library Home Page has a variety of appropriate resources for elementary school students

1. There are different types of resources on the web. The home page has a selection of resources for students. These include:
   • Search engines- Search engines: websites that search other websites based on key words. “It is the bus to take you to the website.”
   • Databases
     • Media databases
     • WebPath Express

NOTE: REVISED LIBRARY HOME PAGE:
On FM Library page, added:
   • SweetSearch
   • SweetSearch4Me
   • SweetSearch2Day
   • SweetSearch Biographies
   • FactCite (subscription may be added in the fall)
Sites to be added to ALL school’s library homepage.

Review the different types of resources appropriate to the students’ levels.

2. Different research tools are best for different subjects.

<table>
<thead>
<tr>
<th>Books</th>
<th>various</th>
<th>links to school and public libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encyclopedias</td>
<td>Grolier subscription</td>
<td>general encyclopedia articles and atlas includes 3 levels of encyclopedias (Grolier Multimedia, New Book of Knowledge, Encyclopedia Americana) plus Grolier Amazing Animals</td>
</tr>
<tr>
<td>World Book</td>
<td>subscription</td>
<td>general encyclopedia articles and atlas includes WBDiscove, WBAvanced, WBStudent,</td>
</tr>
<tr>
<td>Category</td>
<td>Service</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Search Engines / Directories</td>
<td>PebbleGo subscription</td>
<td>easier (K-3) encyclopedia articles on Animals, Earth &amp; Space</td>
</tr>
<tr>
<td></td>
<td>WebPath Express subscription</td>
<td>search engine/directory - use keywords to find websites (screened, readability levels noted)</td>
</tr>
<tr>
<td></td>
<td>NetTrekker subscription</td>
<td>search engine/directory - use keywords to find websites include image search (screened, readability levels noted)</td>
</tr>
<tr>
<td></td>
<td>KidsClick</td>
<td>search engine/directory - use keywords to find websites (screened, readability levels noted)</td>
</tr>
<tr>
<td></td>
<td>KidsSpace</td>
<td>search engine/directory from Internet Public Library - use keywords to find websites (screened)</td>
</tr>
<tr>
<td>Newspapers / Magazines</td>
<td>Searchasaurus subscription</td>
<td>database of children’s magazines such as Ranger Rick, National Geographic Kids, Highlights for Children, Weekly Reader as well as encyclopedia articles (includes image search)</td>
</tr>
<tr>
<td></td>
<td>Kids Search subscription</td>
<td>database of children’s magazines, books &amp; encyclopedias, biographies, and primary sources</td>
</tr>
<tr>
<td></td>
<td>ProQuest (InfoTrac) subscription</td>
<td>database of general children’s &amp; adult newspapers, magazines and journals (i.e., NYTimes 2008-present, Time, TFK, Newsweek, National Geo., etc.) (can limit the publications to search)</td>
</tr>
<tr>
<td></td>
<td>Cobblestone subscription</td>
<td>database of articles from magazines covering history, world culture, geography, general social studies and science topics. (can limit the publications to search)</td>
</tr>
<tr>
<td>Images</td>
<td>Pics 4 Learning</td>
<td>copyright friendly</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>AP Photo Archive</td>
<td>Associated Press Images historical and recent photos (subscription)</td>
<td></td>
</tr>
<tr>
<td>Artstor</td>
<td>Collections from museums, artists, photographers, special collections, and photo archives</td>
<td></td>
</tr>
<tr>
<td>Life Photo Archive</td>
<td>images from <em>Life Magazine</em> 1750s to present; hosted by Google</td>
<td></td>
</tr>
<tr>
<td>New York Public Library Digital Gallery</td>
<td>images from original and rare holdings of the NY Public Library</td>
<td></td>
</tr>
<tr>
<td>Arkive</td>
<td>images/video of endangered animals, plants and fungi</td>
<td></td>
</tr>
<tr>
<td>BrainPop</td>
<td>instructional videos on math, science, social studies, english, technology, arts &amp; music, and health</td>
<td></td>
</tr>
<tr>
<td>Ancestry.com</td>
<td>family history resource including historical census and immigration records, photos, stories, family trees, etc.</td>
<td></td>
</tr>
<tr>
<td>Heritage Quest</td>
<td>family history resource including census, genealogy, local history, and revolutionary war records, etc.</td>
<td></td>
</tr>
<tr>
<td>Family Search</td>
<td>worldwide geneological and census records</td>
<td></td>
</tr>
</tbody>
</table>

3. **Follow-up activity:**

Students will explore how search engines/databases work.

Students will determine whether the sites are search engines or databases or both. Students will use an example from the site to support their conclusions. Share as a class to discuss findings.

- School library catalogue on the library home page for each school (database)
- Grolier on Line on library home page (both database and search engine because it has links to the world)
- [www.Askkids.com](http://www.Askkids.com) (search engine)
- [http://www.westchesterlibraries.org/](http://www.westchesterlibraries.org/) (list of many search engines available to Westchester residents)
- [www.nara.gov](http://www.nara.gov) (database)
Clarification:
- **Google** is a useful tool that students can use after exhausting the library homepage resources. The use of Google should be facilitated by the teacher.
- **Wikipedia** is a secondary source that children can use to find info with the understanding that anyone can post info and that goes to the reliability of the site. The use of Wikipedia must be monitored by the teacher.

The Big Idea: **Keywords help you define your subject and narrow your search on the Internet.**

Part 1
1. **Define Keywords** with children.
   - Use their ideas to define keywords as important words that define your subject. These are words that the computer will look for on a website.

2. **Kentucky Library Page- How to do Research**
   [http://www.kyvl.org/kids/homebase.html](http://www.kyvl.org/kids/homebase.html)
   - Ask students to create an idea list based on their topic of interest. The students write down anything that the subject reminds them of, even if it seems silly.
   - Create a second list of what they already know about the subject, even if they think it is silly.
   - Go through both lists and group like items.
   - Find synonyms for words on the list.
   - Make a list of keywords and phrases.

3. **The Key to Key Words**
   Amazing lessons and student worksheets to teach kids about using synonyms and describing words to extend their keywords and phrases.

4. **Google Advanced Search**
   - Go to Google.
   - Click on Settings at the bottom of the page.
   - Click Advanced Search.
   - Fill in “Find Pages With.”
   - Then Narrow Search Results- Go to Reading Level and click “Basic Search.”
• If finding information about a place, for example while doing current events, write the place or the name of the current event article in “Finding Pages With”.
  • Then scroll down to “File Type” and choose Google Earth format.
  • Examine google search results and find the relevant URL.
  • Click on the URL and the file will download to the computer. The file will open in Google Earth.
  • Double click on the link in Temporary Places and the information will pop up on the computer.

5. Boolean Searches for Kids
http://www.kyvl.org/kids/p2_web/web.html

Part 2:
Provide a question to the class and model brainstorming keywords that will help find information about the question.
  • Brainstorm different keywords that support your question. Think of synonyms, related words as well as phrases.
  • Use Inspiration to web keywords

3. Introduce AskKids on the library home page.
  • Define Search Engine with the children. Search engines provide websites. It is not a source in and of itself.
  • Explore the different aspects of AskKids site.
  • Introduce the search box.

4. Model using keywords within the AskKids search engine.
  • To illustrate the concept that you should not type an entire question into a search box, type the question, “Why do Labs have a better reputation as a family dog than Pit Bulls?” in search box. Show the children the different images and links. Discuss.
  • Now, ask the children what keywords can be used to get information about this question. List the possible keywords and phrases.
  • First type in “Labradors” and discuss findings.
  • Next, type in some of these keywords and phrases and explore the different links here. Some examples are “pet Labradors” and “Labradors and children.”
  • Discuss the different results and how keywords help you narrow down your search.

Follow-up activity:
Children, in pairs, practice using keywords for a topic. Some good topics include: Ex: New York City, planets, government, endangered species, voting, elections
The Big Idea: Each Website has an address called a URL. There are links on websites that take you to different websites.

1. What is a URL?
A URL is a Universal Resource Locator. It is an address for a particular page on the web. Compare a URL to one’s address on an envelope.
USE the handout “ANATOMY OF A URL” to dissect a URL with the class.
my-ecoch.com/guides/sample/326-1anatomyurl.pdf

2. Look at embedded clues in the URL that shed light on the value of the resource. URL endings. Brainstorm what kids think the URL endings are or directly instruct. Endings are found on Anatomy of URL sheet.

3. World Book Student- Reading URL lesson

4. Addresses and Address Bar Lesson
http://www.basicsbee.com/lesson3.html

5. What are Links? Model looking at number of links on a website. The links are in blue and typically underlined. Demonstrate how clicking on a link takes you out of the current site to a completely new site.

4. Break down a few links according to the Anatomy of URL sheet. Look at the brief description of the site.
www.enchantedlearning.com
www.bbc.co.uk/
www.nasa.gov
www.scarsdaleschools.k12.ny.us
www.pbs.org
www.sikids.com/
www.RedCross.org
www.law.pace.edu/
www.web-japan.org/kidsweb/

Browse links to determine relevance. Students should read the description of the link, and interpret the relevance of the link just based on the URL and brief description.

The Big Idea: All websites have an organization that is similar.

1. After you have determined if the site is worthwhile, you must figure out how the site is
organized in order to find the information you need. Model how to use the following parts of a site to help you use the site effectively:

- Read title of page
- Layout of site—is the information in columns, article format, etc.?
- Menus—horizontal, vertical, special menu items and what each will give you Ex: FAQ
- Search Box within the site (internal search engine)
- About Us
- Printer Friendly Version
- Links within a site (usually blue and underlined, a different color shows a link you visited already)
- Explore interactive features
- Finally, make a judgment about whether to explore site further. If site is worthwhile, decide which areas of the site to explore first.

Follow-up activity: Website Exploration
- Use the site from PBS –The History of Big Apple to explore the organization of a website. [http://pbskids.org/bigapplehistory/index-flash.html](http://pbskids.org/bigapplehistory/index-flash.html)
- Students will explore this site in a guided lesson. The activity provides students with an opportunity to navigate a website.
- Students will receive a handout with various questions about the site. Students explore the site using the questions and come together to discuss the different parts of the site and purpose of each part.

The Big Idea: Informational text contains certain features that help us find our way through the text.

1. Ask the class:
   - What is informational text?
   - How is it different from fictional text?
   - Where do we find informational text?

2. Discuss:

Informational text (what we read to learn information, pursue your interests and questions) has many FEATURES (parts) that are designed to help readers navigate (find his/her way through) the resource and make the information friendly to the reader.

When a reader expects these features and knows how to use them, he/she can move in and out of the text. You can select the pages/sections you need for your topic, connect your topic with pictures, explore captions, diagrams, learn about the author…and so much more!

Both informational books and websites have an organization and have specific features that help the reader navigate (find your way through) the information.

Probably more familiar with the organization of an informational book than a website because although we use websites a lot, we don’t really spend a lot of time thinking about the features (parts) of the site that can help us find info.
3. Ask:
- What are some features (parts) of informational text that can help the reader navigate (find his/her way) through the text?
- Show a book to help trigger some ideas.
- Turn and talk

Examples:
- Title
- Contents
- Glossary
- Bold

4. Why are these parts (features) important to the reader? How do they help the reader when the reader is looking at the information?

Ask:
- What are some features (parts) of informational text FROM A WEBSITE that can help the reader navigate (find his/her way) through the text?
- Show a site to help trigger some ideas.
- Turn and talk

(Tell students they may not know the exact name of the feature…That’s Ok, just describe it.)

Examples:
- Title
- Links
- Menu
- About Us

5. Why are these parts (features) important to the reader? How do they help the reader when the reader is looking at the information?

Follow Up Activity:

1. Create an online class Venn Diagram or partner Venn Diagram comparing text and websites using the interactive Venn Diagram on Read Write Think


(Lesson plan for comparing Internet and Text)

http://www.readwritethink.org/classroom-resources/student-interactives/venn-diagram-30973.html

(Link to interactive Venn Diagram)

2. Students examine books and websites. Students will search for the features of each and compare the features of books to websites.
Split the class in half. Half the class will review informational books to discover its features, half the class will look at a website www.history.org.

On the organizers, students list each feature found.

Switch groups. The books reviewers will look at the website and the website reviewers will look at the books.

Students will formulate a conclusion based on their observations.

Name: Date:

Making the Most of Informational Text

Informational text (what we read to learn information and pursue our interests and questions) has many FEATURES (parts) that are designed to help readers NAVIGATE (find his/her way through) the resource and make the information friendly to the reader.

When a reader expects these features and knows how to use them, he/she can move in and out of the text. You can select the pages/sections you need for your topic, connect your topic with pictures, explore captions, diagrams, learn about the author…and so much more!

TASK:
• Review an informational book and an informational website to discover various informational text features.
• Record the features you find on the organizer.
• Compare the features of an informational book to that of an informational website

SOURCES:
• Books
• Website- www.history.org

SYNTHESIS: (organizing your ideas)
• Compare and contrast the features of an informational book with those of the website.
• State a conclusion about your findings.

Name: Date:

Informational Text Scavenger Hunt!
Books vs. Websites!! How do the features compare?
I reviewed __________________________________. (Write the title of the book or website.)

<table>
<thead>
<tr>
<th>Informational Text Feature</th>
<th>Purpose of the Feature</th>
<th>Informational Web Site Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Big Idea: Researchers need to know if the resource is relevant and appropriate.

- How do you know if your source is reliable? How do you know if the information is true/accurate?

Websites for instructional lessons are:

Dulcinea - a website created by librarians; the link below takes you to a page that teaches about website credibility and what to look for:
http://www.findingdulcinea.com/guides/Technology/Internet/Dulcinea-Guide-to-Searching-on-the-Web.pg_00.html#00

Tree Octopus: http://zapatopi.net/treeoctopus/media.html
For student practice, guide students to the Tree Octopus [a realistic website that contains false information].
Have children work with partners exploring the website and spend time listening to their conversations; finish with a discussion as to whether the information is true or not - why do you think so? Children should then revisit the website. Now that you know the site is a spoof, what makes the site less convincing?

Tree Octopus Student Sheet
https://docs.google.com/a/elem.scarsdaleschools.net/document/d/1REkTSc_cJCsX8y1X9_IUWjTwsWD0ALNVJ0mlgh5xc/edit

List of fake websites… some are hilarious, some are for age 16+ so be careful:)
http://www.philb.com/fakesites.htm

All About Explorers
http://allaboutexplorers.com/
A marvelous site developed by a group of teachers as a means of teaching students about the Internet - contains false information that should be obvious!

Follow Up:
- Hand out the “Things to Look For” sheet and discuss and review.
- Model sources that have the features listed on the sheet “Things to Look For” as well as sources that do not have these features. This will help the children recognize and choose just right resources.

*Skim & Scan for Information*

Things to look for:

- Contents page
- Index
- Your Topic & Question’s Keywords/Treasure Words
- Guidewords
- Words in Bold or Italics
- Pictures & their Captions
- Charts
- Graphs
- Maps
- Statistics
- Summary Boxes
- Timeline/Chronology
Glossary

“The Big Idea: SEARCH ENGINES TO SUPPORT STUDENT RESEARCH”

Sweet Search: this search engine has been created especially for children and provides information from 35,000 websites that have been vetted as appropriate. Use the link: http://www.sweetsearch.com/
and select from the menu; recommended is SweetSearch4Me [created specifically for emerging learners]

Internet Detective is another great site that explains why you need to make sure the sources that you are using are both appropriate and contain accurate information.
http://www.vtstutorials.ac.uk/detective/

The Kentucky Virtual Library: http://www.kyvl.org/kids/p4_use/ForReal.html
This is another great site that has examples of “true” and “bogus” internet sites for children. How can you tell if a website is credible? Great examples to promote class discussions.

All About Explorers: http://allaboutexplorers.com/
This website also contains inaccurate information, yet appears very realistic and credible. Students can work with partners researching various explorers. Discuss reasons why website is not credible.

Worldbook Online:
http://www.worldbookonline.com/student/howtoresearch?evaluate_your_sources
This website provides information about how to evaluate sources. The first page relates to books; select ‘next’ and move through: decoding websites; reading URLs; and truncating URLs.

Google Research Assistant:
When a google doc is open, students highlight a word they want to know more about; from the menu bar, select ‘Tools’; from the list, select ‘Research’; and a side bar will pop up to the right of the document with instant reference sources to browse through.

WebPath Express:
This is on each elementary school library page within the library catalog. This has a wealth of information often in short sections taken from magazines; sources are cited and the
‘details and rating’ information shows which grade level the information is appropriate for.

Google Images - finding similar images or related images:
If students want to find an image similar to one they already have, using the Chrome browser (it will only work in Chrome), they select ‘image’. Once students begin to drag an image on to the page, a box will appear in order to receive it, and then other similar or related images will appear.
Students should select the image they want and wait for the larger image to appear; they should use the larger one so the photo is clearer.

It is also helpful to select ‘Search tools’ and choose from the menu that pops up:

Size: allows children to choose size - large provides a better image
Color offers: B & W; color or transparent
Type offers: face, photo, clip art, line drawing, animated
Time: allows a search for recent images or within a timeframe
Usage rights: filters different usage possibilities
More tools: choose to see the size of each portrayed image

The Big Ideas: Once you find a website you think will answer your question, you must skim and scan the site to confirm the site actually contains the information you seek.

Skimming and Scanning for Specific Information
- Skimming requires the reader to read quickly and look for main ideas or supporting details in a paragraph (Phipps, 1983, 4-5). Skimming requires the reader to take in large chunks of text at one time. The reader is concerned with getting an idea of the whole passage. Comprehension does not depend on reading every word. Teach students to read the first and last paragraph of sections for summaries of the content and the first and last sentences of paragraphs to gain an impression of the topic (Cheek and Collins, 1985).
- Scanning requires the student to “move his or her eyes quickly over a piece of reading material looking for one specific point, the words they are looking for jump off the page at them. It is employed for pinpointing needed facts or ideas from the text or the index. It involves skipping words, but the emphasis is on recognition the reader knows what to look for and rapidly scans until words are found and closer reading can occur (Phipps, 1983. 4-5). Here is where students will look for keywords and related words.

1. SKIM AND SCAN Lessons-
   - Key Words and Phrases http://www.kyvl.org/kids/p1_plan/keywords.html
   - Super Search Tips and Tricks http://www.kyvl.org/kids/p2_web/se_super.html
   - Using Table of Contents and Index to Scan for Relevance http://www.kyvl.org/kids/p2_search/TOCindex.html
• **What If You Can’t Find Anything? Tips to Try:**
  http://www.kyvl.org/kids/p2_search/cantFind.html

• **Assessing If/How to Use Information** (i.e., Scan First; Five Finger Test; True or Bogus; Compare/Contrast; Organize Information; Your Own Words; Put in Order; Your Conclusion)
  http://www.kyvl.org/kids/p4_use/use.html

2. **With the class list features of a book that help people know the book has information about the topic they are interested in.** Things to look for:
   - Contents page
   - Index
   - Guidewords
   - Words in Bold or Italics
   - Pictures & their Captions
   - Charts
   - Graphs
   - Maps
   - Statistics
   - Summary Boxes
   - Timeline/Chronology
   - Glossary

2. **List the features in a website that would help determine if site is good for a topic.** List. COMPARE features to those in a book.

4. Students **will now actually skim a site and record the parts of site that would help determine relevance related to keywords.** Ex: Title, menus, bold, links, contents. Show the students the “Find” feature- Go to EDIT and click “find in this page.” Demonstrate this feature for the class. Demonstrate how to use an internal search engine to locate information at a site.

5. **Follow-up activity:**
   Students practice skimming and scanning for key words and phrases. Use the handout on the next page.

Skim & Scan – Previewing Text

NAME: ______ Date: ______

**Topic I am studying:** ______

**Author of Document** (last name, first name) ______

**Title of document** ______
Preview, or skim, the document for important information. You will be given 10 minutes to do this.

During those ten minutes, search for treasure/key words and phrases that answer any of your inquiry questions. Only choose words that you understand and can explain.

List the words and phrases below.

If you found no words or phrases, or just a few, that answer your inquiry questions, this is not a good source for your project.

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The Big Idea: Once you determine the site has keywords and phrases, skim the site using the Stop, Think and Check strategy for relevancy.
1. Model stopping and going back to original question or keyword and ask, “Is this site relevant to my question?” Use the “Stop, Think and Check” strategy.
This strategy suggests you:
  • Read the title of site
  • Skim and scan menu, bold, pictures, keyword search etc.
  • Model your thought process.

Follow-up activity:
Students will break into small groups. Print out a few websites and have groups practice the Stop, Think and Check strategy.
Model explicitly and have the students practice until internalized.

Example questions and Websites:
Grade 3: How tall is the Empire State building? Have children look at these sites:
http://www.pbs.org/wgbh/buildingbig/wonder/structure/empire_state.html

http://www.iloveny.com/CitiesTowns/ProfileDetails.aspx?gid=c5291a8b-f5d6-4bdd-82bc-86a9cc25ebdb
(NOTE: This site DOES NOT have the answer to our question)

Grade 4: What is the habitat of a jaguar?
http://www.bbc.co.uk/nature/wildfacts/factfiles/18.shtml

www.defenders.org/wildlife_and_habitat/wildflife/jaguar.php

www.jaguar.com
(NOTE: This site DOES NOT have the answer to our question)

Grade 5: Why did the Irish immigrate to America in the mid-1800’s?
www.digitalhistory.uh.edu/historyonline/irish_potato_famine.cfm

http://memory.loc.gov/learn/features/immig/alt/irish.html
(NOTE: This site DOES NOT have the answer to our question)

Big Idea: After you have skimmed and scanned to determine relevant sources, all sources that are going to be used should be cited on the bibliography page.

Teacher shows students a book and an already completed citation. Here is an example (MLA7):


Teacher asks: “What do you notice about this citation?”
Students turn and talk.
As students share, teacher charts responses around the citation. Expected responses may be name of author, title, italics, punctuation, date, publisher, type of source, city, etc.

Teacher asks, “Why is citing sources important when we are gathering information for our research?”

Students turn and talk. Share.
Teacher asks, “Why do you think we have to use a certain format?” Discuss.

Guide to Citing Sources

A bibliography is a list of works cited for a research report. This list includes all the information sources, book and non-book, used in your paper or project so that the information may be retrieved again. You must give credit for using another person’s words, ideas, facts or pictures. The list of works cited gives the source for this information.


- **Reverse image search** (to find an image’s url and/or find similar images using Google Chrome) - You can drag the picture into your google image search to find its source for citation purposes or related images from around the web. Link to directions: [https://support.google.com/websearch/answer/1325808?hl=en](https://support.google.com/websearch/answer/1325808?hl=en)

Site Visit

<table>
<thead>
<tr>
<th>Name of exhibit/place</th>
<th>Site Location</th>
<th>Date of visit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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</tbody>
</table>

Rubric for Location & Access
<table>
<thead>
<tr>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Generated numerous appropriate keywords and phrases to use as search terms.</td>
<td>• Generated adequate keywords and phrases to use as search terms.</td>
<td>• Generated few keywords and phrases to use as search terms. Not all are appropriate.</td>
<td>• Unable to generate adequate keywords and phrases to use as search terms.</td>
</tr>
<tr>
<td>• Located several print and electronic sources containing current, accurate and relevant information.</td>
<td>• Located a few print and electronic sources containing current, accurate and relevant information.</td>
<td>• Located a few print and electronic sources. Not all contained current, accurate and relevant information.</td>
<td>• Unable to locate print and electronic sources containing current, accurate and relevant information.</td>
</tr>
<tr>
<td>• Skimmed and scanned to determine content relevancy.</td>
<td>• Skimmed and scanned to determine content relevancy.</td>
<td>• Skimmed and scanned to determine content relevancy with little success.</td>
<td>• Unable to successfully skim and scan to determine content relevancy.</td>
</tr>
<tr>
<td>• Identified necessary information from sources for citation and cited the source using proper format.</td>
<td>• Identified necessary information from sources for citation and cited the source using proper format.</td>
<td>• Not able to successfully identify all necessary information from sources for citation and cited the source using proper format.</td>
<td>• Could not identify necessary information from sources for citation and did not cite the source using proper format.</td>
</tr>
</tbody>
</table>

**SOURCE REFLECTION (Completed after ISS and Location and Access)**

Name: ______________________________ Date: _____________

On a separate sheet of paper, please respond to each question or statement using **complete, descriptive and detailed sentences. USE ACE!!!** We want to understand exactly what you’re doing, why you’re doing it, how you’re doing it, and how you feel about it. Be honest and be sure to relate it to what you did this week for your research.

• Based on the sources you have found in the last few days, which sources do you feel will be most helpful to you in answering your research questions and why?

• What problem, if any, did I have finding sources? Explain.

• Explain something new I learned about finding information from sources (for example: a research skill, how to use a specific resource, a new resource never used before).

• What are some new questions that I have about my main inquiry question or sub-questions?
- People who have helped me and how (teacher, student, librarian, parent, sibling, etc.)
- Today I feel _______________ because...
- What I need to do next? Be specific.

Use of Information

What can I use from these resources?

- Extract information from resources
- Read, interview, visit, listen, and touch to acquire information
- Accurately and completely takes notes and paraphrase the main idea from all sources
- Accurately cites sources

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The Big Idea: Students need to review how to extract relevant information from resources and restate the information in their own
words. Students also need to review how to analyze information by thinking about what they’ve read.

1-3 days for mini-lessons and practice

2-3 weeks for actual note taking

NOTE TAKING LESSONS:
- **Graphic Organizer Wheel** of options for note-taking (click on the title and you’re able to print): [http://www.kyvl.org/kids/p3_notes/notes.html](http://www.kyvl.org/kids/p3_notes/notes.html)

- **Boiling Down Our Notes Lesson**
  [https://docs.google.com/a/elem.scarsdaleschools.net/document/d/1l40DKOR9quzGHmQVi9GP2uceeBPrcz0gr4PawH-mEck/edit](https://docs.google.com/a/elem.scarsdaleschools.net/document/d/1l40DKOR9quzGHmQVi9GP2uceeBPrcz0gr4PawH-mEck/edit)
  - (This lesson teaches kids to write only the MOST important information using successively smaller post-its. Very effective! Page 1 is the Big Idea page for the students and the lesson is on pages two and three.)

- **Strategic Note Taking Template - Boiling Down our Notes Student Organizer**
  [https://docs.google.com/a/elem.scarsdaleschools.net/document/d/1YCcsA3E_OU87Qa9Ht1JUIPEC-RwcdeDA9aMGO2TJA/edit](https://docs.google.com/a/elem.scarsdaleschools.net/document/d/1YCcsA3E_OU87Qa9Ht1JUIPEC-RwcdeDA9aMGO2TJA/edit)

- **Read, Write, Think Lesson- Research building blocks**
  - This lesson teaches students the concepts of why note taking is important and how to take notes using “fact fragments.”

  [http://www.readwritethink.org/classroom-resources/printouts/power-notes-b-30774.html](http://www.readwritethink.org/classroom-resources/printouts/power-notes-b-30774.html)

- This lesson teaches students a method for organizing their thoughts that involves assigning "powers" to different ideas. This outlining technique helps students differentiate between main ideas and supporting details

- The teacher can model how to take notes using any of the above lessons including the “Taking Notes on Research” sheet.
Each note-taking sheet has a box and a question #. Each question # corresponds to the main inquiry question and 5 sub-questions. At the end of research, students might end up with 4 sheets on question 1, one sheet on question 3 etc. depending on the information found. Results will vary depending on the sources.

Next, the teacher will model note-taking using the method outlined in the “Taking Notes” handout. Using pages 10 and 11, the teacher now models note taking and a personal response. The students will practice note taking, and responding.

Read, Write, Think graphic organizers for notetaking:
- Compare and Contrast chart

- Concept Map

- Double Entry Journal (2 columns; one for Idea from Text and Reaction/Connection)

- Inquiry Chart (to organize questions and sources)

- T Chart

- Venn Diagrams

PARAPHRASING vs. PLAGIARISM:
- This lesson introduces paraphrasing and provides teacher prompts to teach students how to use their own words when taking notes.
  - http://www.readwritethink.org/classroom-resources/lesson-plans/used-words-paraphrasing-informational-1177.html
• Partner Paraphrasing Practice- Online
  • http://www.studyzone.org/testprep/ela4/g/devideabrtextl.cfm
  • http://www.readwritethink.org/files/resources/lesson_images/lesson1062/ParaphrasingPractice.pps

• This lesson teaches students about copyright and plagiarism
  • http://www.readwritethink.org/classroom-resources/lesson-plans/exploring-plagiarism-copyright-paraphrasing-1062.html

• Paraphrasing a non-fiction passage
  • http://betterlesson.com/lesson/41398/paraphrasing

POLLS:
• 15 Great Sites for Creating Polls:

• Poll Everywhere
  • http://www.polleverywhere.com/app

INTERVIEWS:
• Nine Great Sites for Finding Interviews:
  http://www.findingdulcinea.com/features/best-sites/Interviews.html

The students should continue note-taking for approximately 2-3 weeks. During this time, students are also gathering their information from site visits etc. Note-taking from all sources should be done on these sheets (or whatever method you are using).

TAKING NOTES

1. Put pencil or pen down!
2. Review your questions and “Keywords”.
3. Find a good section to read related to your questions and keywords.
4. Read. Close the book or turn over the paper when you are done.
5. Think about what you read.
6. Now, pick up your pen or pencil and write or draw in your note taking sheets/cards only the important
   - Facts
   - Dates
   - Key Words-underline if possible
Do NOT use sentences!
Paraphrase the information using your own words. Do NOT plagiarize (copy exactly the words from the document).

If you need to quote or copy something EXACTLY, put it inside quotation marks.
Write the page number next to it.
7. Next, write a personal response on your note-taking sheets/cards. Write your own thoughts, ideas and opinions about what you’ve read.

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Taking Notes

It is time to take notes from your sources. You should write only those words that answer your question. Save your energy for using the notes in the final product.

Here’s how to write only the words that answer your questions. It is called Trash-n-Treasure and is very easy to learn.

Find the section or page that you think will answer your question.

Read the first sentence. Does it answer or help answer the question? If not, go to the next sentence because it is trash (to you).

If it answers the question, look at words and phrases. Ask yourself: “Which of these words and phrases answer my question?” Those words and phrases are the treasure you are seeking. You don't need to use any of the words that are just filler. Don’t write complete sentences.

Record the keywords on the appropriate place on your note-taking organizer.

Go to the next sentence and repeat numbers 2 and 3. Do this until the section is finished.
Now you must cite your sources! This means that you must give credit to the books, web sites, and other materials that you used.

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Created by Leslie B. Preddy

Taking Notes on Research

Student Name:_______

Question: #1
How do animals defend themselves?

<table>
<thead>
<tr>
<th>Source #<em>1</em></th>
<th>Bibliography: Animal Adaptation, p.13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>temperature on Earth different, some areas more rain and hotter, hard for animals. animals adapt to environments, example, frogs-DORMANT-inactive-dry areas.</td>
</tr>
</tbody>
</table>

| Opinion/Response | I can’t believe frogs are not active for years. I can’t stand sitting still for long times. I wonder how they survive? How do they eat? This reminds me of how bears hibernate. |

Taking Notes on Research

Student Name:_______

Question: #1

<table>
<thead>
<tr>
<th>Information (using my own words) about this question.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source #<em>1</em></td>
<td>Bibliography: Animal Adaptation, p.13</td>
</tr>
<tr>
<td></td>
<td>temperature on Earth different, some areas more rain and hotter, hard for animals. animals adapt to environments, example, frogs-DORMANT-inactive-dry areas.</td>
</tr>
</tbody>
</table>

| Opinion/Response | I can’t believe frogs are not active for years. I can’t stand sitting still for long times. I wonder how they survive? How do they eat? This reminds me of how bears hibernate. |
**Taking Notes on Research**

**Student Name:**_____

**Question:** #2

<table>
<thead>
<tr>
<th>Source #__</th>
<th>Bibliography:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

**Opinion/Response**

<table>
<thead>
<tr>
<th><strong>Information (using my own words) about this question.</strong></th>
</tr>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>Source #__</th>
<th>Bibliography:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Opinion/Response</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>---</td>
</tr>
</tbody>
</table>

Taking Notes on Research

Student Name: ______

Question: #3

<table>
<thead>
<tr>
<th>Source #__</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bibliography:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information (using my own words) about this question.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Opinion/Response</th>
<th></th>
</tr>
</thead>
</table>

Taking Notes on Research

Student Name: ______

Question: #4

<table>
<thead>
<tr>
<th>Information (using my own words) about this question.</th>
</tr>
</thead>
</table>
Taking Notes on Research

Student Name: ______

Question: #5

<table>
<thead>
<tr>
<th>Information (using my own words) about this question.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source #__</td>
</tr>
<tr>
<td>Bibliography:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Opinion/Response</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Taking Notes on Research

Student Name: 

Question: #6

<table>
<thead>
<tr>
<th>Information (using my own words) about this question.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source #__</td>
</tr>
<tr>
<td>Bibliography:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opinion/Response</th>
</tr>
</thead>
</table>

Question:

_______________________________________________________________________

_______________________________________________________________________

Information Found:
The Big Idea: Open-ended questions provide more information than closed-ended questions

Students/Researchers prepare interview questions prior to the interview.

1 day
• Using the “Asking Good Questions” sheet, students write at least one interview question from each category. Remind students that during the interview they may ask follow-up questions that occur to them during the course of the interview.

• Student must also decide how to record their information prior to the interview. They may either hand write, type or tape record their interviews. In the recording of the interview, the students must also state whether the interview was face to face or via telephone.

• Nine Great Sites for Finding Interviews:
  http://www.findingdulcinea.com/features/best-sites/Interviews.html

Rubric for Summarizing & Note-Taking

<table>
<thead>
<tr>
<th></th>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
</table>
| **Keywords vs. Copying** | • Notes are recorded as keywords/phrases  
• Notes are written in own words  
• Selected effective keywords | • Notes are primarily recorded as keywords/phrases  
• Notes are written using own words  
• Selected mostly effective keywords | • Notes are primarily copied from source; some evidence of keywords/ phrases  
• Some notes copied word-for-word from source  
• Selected many keywords that were not effective | • Notes copied directly from source  
• Selected no effective keywords |
| **Relevance** | • Notes related to the inquiry questions | • Notes primarily related to the inquiry questions | • Some notes related to the inquiry questions, but many not related | • Notes not related to inquiry questions |
| **Organization** | • Notes are neat, easy-to-read  
• Notes organized into main and sub questions | • Notes are mostly neat, easy-to-read  
• Notes are mostly organized into main and sub questions | • Some notes are messy and hard-to-read  
• Some notes organized into main and sub questions | • All notes are messy and hard-to-read  
• Notes not organized into main and sub questions |
| **Citation** | • All sources cited properly | • Most sources cited properly | • Some sources cited properly | • Sources not cited properly |
| **Quantity** | • More than enough notes taken to thoroughly answer all | • Sufficient notes taken to answer all inquiry questions | • Sufficient notes taken to answer some inquiry | • Not enough notes taken to answer inquiry |
NOTE-TAKING REFLECTION (To be completed after written notes, interview and site visit)

Name: ______________________________ Date: _____________

On a separate sheet of paper, please respond to each question or statement using complete, descriptive and detailed sentences. We want to understand exactly what you’re doing, why you’re doing it, how you’re doing it, and how you feel about it. Be honest and be sure to relate it to what you did this week for your research.

- What strategies did you use to take your notes? For example, reading and then covering the text, paraphrasing in your own words.
- What problem, if any, did I have taking notes? Explain.
- Explain something new I learned about taking notes from sources.
- Explain how you organized your notes (for example, graphic organizer, note cards, bullets, electronic).
- Describe how taking notes helped you or was challenging to you during the interview.
- Describe how information gathered during the site visit added to your knowledge.
- What are some new questions that I have about my main inquiry question or sub-questions?
- People who have helped me and how (teacher, student, librarian, parent, sibling, etc.)
- Today I feel _______________ because...
- What I need to do next? Be specific.

Synthesis

What can I produce to show what I know?
Organize the information from multiple sources in a clear, coherent product

Present information in a personally designed product that communicates content

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The Big Idea: Researchers synthesize their information in a product and share their work in various forms for a specific audience.

2 weeks

After research is completed, the students will take the “Multiple Intelligences and Learning Style Survey” in order to identify their intelligences and brainstorm possible project ideas for the different intelligences. In learning about their “intelligence/learning style” the children will be better able to create a project suited to their learning style.

Based on this philosophy, projects may or may not have a written component, may or may not have an oral component etc. Projects will vary in format.

Students will write a project proposal, and the teacher will discuss and revise the proposal with the student.

Some examples of projects, based upon different intelligences are on the attached project sheet. The projects should be proposed by the students and completed IN CLASS. The student should bring in all materials required for the product.

Name: __________________________ Date: __________________________

Multiple Intelligences and Learning Styles

Q: What are learning styles?
A: Learning styles are simply different approaches or ways of learning.

Q: What are Multiple Intelligences?

The Big Idea: Researchers synthesize their information in a product and share their work in various forms for a specific audience.

2 weeks

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Some examples of projects, based upon different intelligences are on the attached project sheet. The projects should be proposed by the students and completed IN CLASS. The student should bring in all materials required for the product.

Name: __________________________ Date: __________________________

Multiple Intelligences and Learning Styles

Q: What are learning styles?
A: Learning styles are simply different approaches or ways of learning.

Q: What are Multiple Intelligences?
A. *Multiple Intelligences are different ways people have of understanding the world.*

**Directions:**
- Circle the bulleted characteristics under each category of learning style that you feel describe you.
- Think of an example from your life that proves you have one or some characteristics of that learning style.
- Later, you will collaborate with a group to come up with possible project ideas for each learning style category.

If you are a **linguistic/verbal learner**, these are some characteristics you may have:

- You like to read
- You like to write
- You like to tell stories
- You are good at memorizing names, places, dates and trivia
- You learn by taking detailed notes
- You learn best by saying, hearing, and seeing words (through videos, transparencies, diagrams, books)

Example from your life:
______________________________________________________________________________
______________________________________________________________________________
Possible Project Ideas: __________________________________________________________

If you are a **logical/mathematical learner**, these are some characteristics you may have:

- You like to do experiments
- You like to figure things out
- You like to work with numbers
- You like to ask questions
- You like to explore patterns
- You are good at math
- You are good at problem solving
- You learn best by categorizing and classifying (putting things in order)

(Logical/mathematical learner continued)
Example from your life:
______________________________________________________________________________
______________________________________________________________________________
Possible Project Ideas: __________________________________________________________

If you are a **spatial/visual learner**, these are some characteristics you may have:

- You like to draw
- You like to build
- You like to design and create things
• You like to look at pictures/slides
• You like to watch movies
• You like to play with machines
• You are good at imagining things
(Spatial learner continued)
• You are good at mazes/puzzles
• You are good at reading maps and charts
• You learn best by visualizing
• You learn best by working with colors and pictures

Example from your life:
______________________________________________________________________________

Possible Project Ideas: ________________________________________________________

If you are a **musical learner**, these are some characteristics you may have:

• You like to sing and hum tunes
• You like to listen to music
• You like to play an instrument
• You are good at picking up sounds
• You are good at remembering melodies
• You are good at keeping musical time
• You learn best by rhythm, melody, and music

Example from your life:
______________________________________________________________________________

Possible Project Ideas: ________________________________________________________

If you are a **bodily/kinesthetic** learner, these are some characteristics you may have:

• You like to move around
• You like to touch
• You like to talk
• You like to use body language
• You are good at physical activities (sports/dance/acting)
• You are good at crafts
• You learn best by touching and moving

Example from your life:
______________________________________________________________________________

Possible Project Ideas: ________________________________________________________

If you are a **naturalistic learner**, these are some characteristics you may have:
• You like to be outside
• You like to be with animals
• You like geography and weather
• You like to interact with your surroundings
• You are good at organizing an area
• You are good at planning trips
• You are good at preservation and conservation

Example from your life:
______________________________________________________________________________
__________________________________________________________________

Possible Project Ideas: _____________________________________________________

If you are an **interpersonal learner**, these are some characteristics you may have:

• You like to have a lot of friends
• You like to talk to people
• You like to join groups
• You are good at understanding people
• You are good at leading others
• You are good at organizing
• You are good at communicating
• You are good at resolving conflicts
• You learn best be sharing
• You learn best by cooperating
• You learn best by interviewing

Example from your life:
______________________________________________________________________________
__________________________________________________________________

Possible Project Ideas: _____________________________________________________

If you are an **intrapersonal learner**, these are some characteristics you may have:

• You like to work alone
• You like to pursue your own interests
• You are good at understanding yourself and your instincts
• You are good at pursuing your goals
• You are good at being original
(Intrapersonal learner continued)

• You learn best by working alone
• You learn best by individualized projects
• You learn best by going at your own pace
Example from your life:

------------------------------------------------------------------------------

Possible Project Ideas: _____________________________________________________

If you are an **auditory learner**, these are some characteristics you may have:

- You like listening to read alouds
- You like using a tape recorder
- You learn best through verbal lectures
- You learn best through discussions and talking things through
- You learn best by listening
- You are good at interpreting people’s feelings through their tone

Example from your life:

------------------------------------------------------------------------------

Possible Project Ideas: _____________________________________________________

Learning Style Descriptions adapted from The Learning Disabilities Resource Community Website 2006

**Product list for Inquiry Research Project**

Advertisement
Award
Billboard
Book Review
Cartoon
Chart
Comic strip
Demonstration
Diary
Diorama
Editorial
Experiment
Flip Book
Graphs
Greeting Card
Illustrated Story
Inspiration
Interview
Journal
Letter
Lyrics
Map
Museum exhibit
Narrative poem
Newscast
Newspaper article
Painting
Poster
Power point
Puppet show
Reader’s Theater
Role-play
Skit
Song
Speech
Storyboard
Timeline
Travelogue/brochure
TV program
Videotaped production
Wanted poster

**The Big Idea: Other ways to Synthesize:**

- **Student Weebly Site** - Students create their own password-protected [website](https://education.weebly.com/?session-expired=1&redirect=userHome.php#login) including blogs *(need premium version for passwords)*:
• Student Weebly Website Examples (password is 5ecapstone): contains student-made video:
  • http://espncapstone.weebly.com/
  • http://capstonecheese.weebly.com/
  • http://329901435844501900.weebly.com/

• Quotes about synthesizing
  • https://teachingthoughtfullearners.pbworks.com/w/page/19949453/Synthesizing

Big Idea: The students will describe how they will present their project in a detailed proposal. The students will also describe how the project reflects their multiple intelligence and learning style.

Homework

After students complete the “Multiple Intelligences Survey”, they will write a project proposal on the “Inquiry Project Proposal.” There are examples of student proposals attached. The student will bring in all materials. Students will brainstorm materials and write them on the “Materials List.”

Inquiry Project Proposal Guidelines

*Each of the bullet points below signifies the beginning of a new paragraph of your proposal.*

- Explain your topic in as much detail as you can. Include the main inquiry questions and some of your sub-questions.

- Think about the sources you have gathered so far. Tell about the two most useful sources you have found. Briefly describe the information you have found in these sources.

- Review what you have learned about Multiple Intelligences and The Styles of Learning. Keeping your own style of learning and your topic choice in mind,
explain how you will present your information in a final product. Keep in mind your audience.

- REMEMBER, YOU MUST HAVE A TR-FOLD POSTER THAT IS NOT YOUR PRESENTATION.

- YOUR PRESENTATION NEEDS TO HAVE AN INTERACTIVE FEATURE

Remember, your final product must include the information from:
books
computer sites
3 images
1 written document
1 interview
1 site visit
1 quote
1 artifact

Your explanation of a final product should include how the information from these sources will be a part of your final product.

Inquiry Project Proposal – Materials List

Please list the materials you will need to complete your project. Include everything you will need to bring to school to assemble and complete your project.

Name: ___________________________ Date: ________________

Process Summary for Final Project
Whatever final project you complete, must include a summary of the research process you used in this Capstone unit. Your summary must include a brief description of each phase of the research process. Remember to include your “voice” (personality on paper) when writing this summary. Use the following guideline below to help you remember the steps in each phase.

- Each phase must be a separate paragraph with a topic sentence, examples, and a conclusion.
- Type your name, date, and class at the top of your page.
- Indent each paragraph.
- Check your spelling and grammar.

PHASE 1: TASK DEFINITION – define the information problem
- Asking Good Questions
- Inquiry Survey complete
- Curriculum Wheel complete
- My Main Inquiry Questions Sheet complete
- Journal Reflection #1

PHASE 2: INFORMATION SEEKING STRATEGIES – determine possible sources
- How People Learn About Anything
- Brainstorming Possible Sources (Chart)

PHASE 3: LOCATION AND ACCESS – locating your sources
- Skim and Scan Sheets for all Resources
- Gathering Sources (going to library, etc.)
- Phase 2 & 3 Reflection

PHASE 4: USE OF INFORMATION – extracting relevant information from your sources
- Taking Notes on Research Organizer Sheets
- Interview arranged appropriately
- Interview questions appropriate & valuable
- Interview recorded comprehensively & insightfully
- Site Visit arranged and conducted
- Written Documents, Images, and Other Sources of Information
- Phase 4 Reflection

PHASE 5: SYNTHESIS – organizing information from multiple sources
- Multiple Intelligences and Learning Styles Survey
- Inquiry Project Proposal
- Materials List
- Bibliography
- Creation of Project (You will have to wait to write this part until your project is complete.)

Name: ____________________________

Phase 6

**Project Checklist**

The Product

THE MAIN RESEARCH QUESTION MUST BE SHOWN!!!!!!!

**Process Summary**

- written in paragraph form with topic sentences and supporting details
- contains original thoughts
- uses complete sentences and variety of sentence formats
- proper grammar, punctuation, spelling
- neat and well organized
___grabs attention, engaging, enthusiastic, interesting
___on time, met deadlines

**Visual (ex. Artifacts, poster, video etc.)**
___accurate, correct and significant facts
___no plagiarism
___descriptive captions appear for graphics/documents
___emphasizes important points in student's thoughts and opinions
___colorful and creative
___shows originality
___neat and well organized
___grabs, attention, engaging, enthusiastic, interesting
___on time, met deadlines

**Oral Presentation (ex. Skit, oral report, song, interview)**
___accurate, correct and significant facts
___no plagiarism
___varies pace and does not use a monotone voice
___faces audience
___engages audience and answers their questions accurately
___well organized
___grabs attention, engaging, enthusiastic, interesting
___on time, met deadlines

**Written (report, book, brochure etc.)**
___accurate, correct and significant facts
___no plagiarism
___covers topic thoroughly: uses relevant details and examples
___contains original thoughts
___uses complete sentences and variety of sentence formats
___proper grammar, punctuation, spelling
___neat and well organized
___grabs attention, engaging, enthusiastic, interesting
___on time, met deadlines

**Rubric for Synthesis**

<table>
<thead>
<tr>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Quality of the product shows an understanding of most facets of the inquiry questions</td>
<td>Quality of the product shows an understanding of many facets of the inquiry questions</td>
<td>• Quality of the product shows an understanding of some facets of the inquiry questions</td>
<td>• Quality of the product shows limited understanding of the inquiry questions</td>
</tr>
<tr>
<td>• Facts are accurate, correct and significant</td>
<td>Facts are mostly accurate, correct and significant</td>
<td>• Some facts are accurate, correct and significant</td>
<td>• Few facts are accurate, correct and significant</td>
</tr>
<tr>
<td></td>
<td>Able to demonstrate</td>
<td>• Demonstrates some knowledge of inquiry</td>
<td>• Demonstrates limited</td>
</tr>
</tbody>
</table>
Evaluation

How will I know I did my job well?

- Judge the result
- Access the product for completeness, strengths
- Judge the process
- Provide recommendations to improve results

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The Big Idea: Students will evaluate the process and the product, reflect on how effective they were as researchers as well as what they learned that they can use again.

EVALUATE YOURSELF: (questions to ask yourself):

Process summary
The students complete a 5 paragraph summary of the research process.

Project Checklist
Students will use the Product Evaluation Checklist as they complete their products. This form has the criteria and requirements for completing the product. It has four components, **process summary, visual, oral and written**. No matter what product the student completes, the product will involve one or more of these presentations. Use whichever criteria are appropriate to the product.

Overall Rubric
There is a rubric for the research process. This rubric is for the teacher as well as the student. The rubric describes the evidence that demonstrates the students’ research process level. It is correlated to the report card.

Research Organizer Checklist
The Research Organizer introduced at the beginning of this process sets forth the criteria for research organization. The rubric on that checklist provides a way for the teacher and student to grade their organization.

Reflection #1, Mid-Reflections and Final Reflections
There are reflections for the students to complete. This will not only help the student think about the entire information gathering and research process, but will help inform instruction.

**OVERALL ASSESSMENT RUBRIC - The Research Process**

<table>
<thead>
<tr>
<th>Phase</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>EVIDENCE</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>Task Definition</th>
<th>Independently creates a: - focused/narrow inquiry question and relevant sub questions from interest survey and curriculum wheel</th>
<th>Able to create a: - focused/narrow inquiry question and relevant sub questions from interest survey and curriculum wheel</th>
<th>Attempts to create a: - focused/narrow inquiry question and relevant sub questions from interest survey and curriculum wheel</th>
<th>Unable to create a: - focused/narrow inquiry question and relevant sub questions from interest survey and curriculum wheel</th>
<th>- Curriculunm Wheel - Interest survey - Brainstorming question sheet - My Main Inquiry Question Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Info Seeking Strategy</td>
<td>Independently able to: - identify multiple/varied sources, - evaluate sources for relevancy/appropriateness</td>
<td>Able to: - identify several varied sources, - evaluate sources for relevancy/appropriateness most of the time</td>
<td>Able to: - identify a minimum amount of sources - evaluate sources for relevancy/appropriateness with help</td>
<td>Unable to: identify multiple or varied sources - evaluate sources for relevancy/appropriateness</td>
<td>- How People Learn About Anything Chart</td>
</tr>
<tr>
<td>Location Access</td>
<td>Independently able to: - locate and gain access to appropriate: interview document / web resource /</td>
<td>Able to: - locate and gain access to appropriate: interview document / web resource / image / artifact</td>
<td>Developing the ability to: - locate and gain access to appropriate:</td>
<td>Unable to: - locate and gain access to appropriate:</td>
<td>- Resource Checklist - Skim and Scan Sheets for all resources</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Use of Info</th>
<th>Independently:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Takes accurate and appropriate notes from all sources</td>
</tr>
<tr>
<td></td>
<td>- Paraphrases relevant information</td>
</tr>
<tr>
<td></td>
<td>- Includes a thoughtful personal response</td>
</tr>
<tr>
<td></td>
<td>- cites sources accurately</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Image / artifact / site visit / texts</th>
<th>Site visit / texts most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>- skim / scan to determine relevancy of information</td>
<td>- skim / scan to determine relevancy of information most of the time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interview document / web resource / image / artifact / site visit / texts</th>
<th>Interview document / web resource / image / artifact / site visit / texts</th>
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<tbody>
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<tr>
<td>- cites sources accurately most</td>
</tr>
</tbody>
</table>

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<tr>
<th>Unable to:</th>
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<tbody>
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</tr>
<tr>
<td>- Include a thoughtful personal response</td>
</tr>
<tr>
<td>- cites sources accurately</td>
</tr>
</tbody>
</table>

- Note taking Organize Sheets
- Interview Question
- Record of Interview
- Bibliography
<table>
<thead>
<tr>
<th>Synthesis</th>
<th>Independently:</th>
<th>Is able to:</th>
<th>Attempts to:</th>
<th>Unable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- thoroughly answers/addresses all or most of the inquiry question; -incorporates information from all sources, -Presents information according to criteria on the product checklist</td>
<td>- answer/address all or most of the inquiry question; -incorporate information from all sources, -Present information according to criteria on the product checklist</td>
<td>- answer/address most of the inquiry question; -incorporate information from some sources, -Present information according to some of the criteria on the product checklist</td>
<td>- answer/address all or most of the inquiry question; -incorporate information from all sources, -Present information according to criteria on the product checklist</td>
</tr>
</tbody>
</table>

Include a thoughtful personal response - cite sources
| Evaluation     | Completed all reflections and final evaluation thoughtfully | Completed most reflections and final evaluations thoughtfully | Completed some reflections and final evaluations | Unable to evaluate or reflect | - Reflections -Final Evaluations |

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Student’s Name: ______ Date:

**RESEARCH BINDER Organizer**

**Directions:** Place a check next to each item as it is completed and added to the binder.

**PHASE 1: Task Definition** - define the information problem
___ Asking Good Questions
___ Inquiry Survey complete
___ Curriculum Wheel complete
___ My Main Inquiry Questions sheet complete
___ Journal Reflection #1

**PHASE 2: Information Seeking Strategies** - determine possible sources
___ How People Learn About Anything List
___ How People Learn About Anything Chart
___ Parent letter signed / returned
___ Contract complete (deadlines and dates)

**PHASE 3: Location and Access** - locating your sources
___ Resource Checklist
___ Skim and Scan Sheets for all resources
___ Reflection

**PHASE 4: Use of Information** - extracting relevant information from your sources
___ Taking Notes Instruction sheet
___ Taking Notes on Research organizer sheets
___Interview arranged appropriately
___Interview questions appropriate & valuable
___Interview recorded comprehensively & insightfully
___Site visit arranged and conducted
___Appropriate artifact selected or created
___Written documents
___Images
___Other
___Web pages copied
___Reflection

PHASE 5: SYNTHESIS - organizing information from multiple sources

___Multiple Intelligences and Learning Styles Survey
___Inquiry Project Proposal
___Possible Product List
___Materials List
___Bibliography

PHASE 6: Evaluation and Reflection - judging the product’s effectiveness
___Final Reflection
___Project Checklist

Overall Organization Grade

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binder Checklist</td>
<td>Binder is complete and follows evaluation checklist organization. Neat presentation.</td>
<td>Binder is mostly organized and mostly follows evaluation checklist. Satisfactory presentation.</td>
<td>Binder is somewhat organized. Attempts to follow research binder organization. Little care put into presentation.</td>
<td>Binder is disorganized, incomplete, documents are missing.</td>
</tr>
</tbody>
</table>

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Created by Leslie B. Preddy

Name: ___________________________  Date: ____________

Final Reflection
Directions: Please complete the following questions as honestly and completely as possibly. Attach you answers to this sheet before handing it in.

1. Explain the research process you went through and what you learned about research. Be specific.

2. Explain which sources were most helpful. Why?

3. Explain which source was least helpful. Why?

4. What are some things you learned about yourself (as a learner, a reader, a researcher, a student) while doing this project?

5. Think about your final product. What were some of its strengths? Explain.

6. If you could do your final product all over again, what would you have done differently? Why?

7. If you could conduct the research for this project all over again, what would you have done differently? Why?

8. What was the hardest part of this project? Explain.

9. What was the easiest part of this project? Explain.