**Lesson 3: Independent Research**

**Culminating Task**

Students will:

* Conduct independent research using a variety of sources.
* Apply note-taking strategies to organize their findings.
* Begin identifying key ideas and information relevant to their Heritage Fair projects.

**Materials:**

* Chart paper/markers
* White Board/Chalk Board
* **Heritage Fair Research Notes** Worksheet
* **Heritage Fair Research Rubric**
* Access to research materials: books, online resources, articles, etc.
* Devices for online research (if applicable)

**Setting the Stage**

Remind students that they have selected a focused topic for their Heritage Fair projects and learned the skills needed to take effective notes (paraphrasing, organizing, and avoiding plagiarism). Now they will put those skills into practice by diving deeper into their chosen topics.

Write the following question on the board:

**What makes a strong research process?**

Ask students to share ideas based on previous lessons. Record their responses on the board, and ensure the following points are discussed:

* Using a variety of reliable sources.
* Taking notes in their own words.
* Staying organized by grouping information by themes or subtopics.
* Keeping track of sources for later citation.
* Asking questions to guide their research.

**Direct Instruction**

Discuss the importance of reliable sources. Remind students that not all sources provide accurate or useful information, so they need to evaluate them critically.

To evaluate a source, they should ask questions like:

* Who created this source?
* Is it current?
* Is it supported by evidence?

Provide examples of reliable sources, such as books, online databases, museum exhibits, and interviews. Write these key evaluation questions on the board as a reference.

Next, introduce the concept of organizing research by themes. Explain that breaking a topic into smaller subtopics can make research more manageable. For example, if researching maple syrup, possible themes might include "How Maple Syrup is Made," "Maple Syrup in Canada," and "Tools and Methods." Model this process on the board by brainstorming subtopics for a sample project. Explain to students that while they may come up with subtopics to help their research, they may find that they create new subtopics from information they gather.

To help with their notetaking, provide students with the **Heritage Fair Research Notes Worksheet**. Hand out one copy, and let students know that they may need more than one, and extras will be available. As well, if they find the worksheet constraining for the amount of information being recorded, they can use a sheet of loose-leaf, clearly labeling where their information is coming from or where it is linked to on the worksheet.

The worksheet has four main parts, which are explained below:

**Source Information**: Record where the information came from.

* **Source Information: Where did the information come from (and can you get back to it?).**
* **Key Facts/Details**: Write down the main points in their own words.
* **Theme or Subtopic**: Assign the information to a relevant theme or category.
* **Questions/Next Steps**: Note follow-up questions or areas needing further research.

To model the process, choose a topic which students will be interested in, or which has been covered in class. Provided is an example using maple syrup production in Canada. You may wish to just show the chart, or provide specific websites for students to go to and extract information from to fill out the worksheet as a class.

Using maple syrup production in Canada, demonstrate how to fill out the worksheet. Highlight how to paraphrase effectively and how to group notes under the appropriate themes. The maple syrup example could look as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Source Information** | **Key Facts/Details (In Your Own Words)** | **Theme or Subtopic** | **Questions / Next Steps** |
| Encyclopedia Britannica - "Maple Syrup Production" | Maple syrup comes from the sap of sugar maple trees. The sap is collected in the spring. | How Maple Syrup isMade | What tools are used to collect the sap? |
| Canadian Geographic - Article on Maple Syrup | Quebec produces more than 70% of the world's maple syrup. | Maple Syrup in Canada | Why is Quebec so important for maple syrup? |
| Interview with Local Farmer | Farmers use taps and vacuum systems to collect sap. Some still use buckets. | Tools and Methods | How do tools and methods differ across farms? |

**Guided Activity**

After reviewing the sample worksheet, students are now ready to begin their own research. Provide time for them to independently explore their topics using the resources available in the classroom, such as books, articles, and online materials. Research may take a number of classes, and is at the discretion of the teacher. Time needed may be influenced by grade level, individualized expectations from teachers, or may simply be influenced by class need.

Encourage students to start by focusing on a single subtopic or theme, using one source at a time. As students work, remind them to carefully fill out their worksheets by recording source details, paraphrasing key facts, and organizing information under relevant themes. For instance, if a student is researching maple syrup, they might begin with "How Maple Syrup is Made" as a subtopic, gathering details about sap collection and boiling methods.

Circulate around the room during this activity to offer support and guidance. Some students may still need help identifying reliable sources or selecting important details to record. For example, you may point out key phrases in a passage or suggest breaking down a broad subtopic into smaller parts. This time provides an opportunity to check their progress and answer questions about the process.

Midway through each research period, ask students to pause and review their notes. Encourage them to check that their notes are clear, well-organized, and paraphrased. They should also think about any new questions or next steps that arise from their findings. This review helps to keep them on the right track and allows time to address any challenges they may encounter.

At the end of each research session, bring students together for a brief discussion. Ask them to share one interesting fact they learned and one question they still have about their topic. This helps students reflect on their progress and gives them ideas for what to focus on during their next research session.

**Reflection**

Encourage students to reflect on their research process and progress through guided questions to help consolidate their learning and identify areas for improvement:

1. **What was the most interesting fact you learned today?**

*This question encourages students to focus on engaging or surprising details, building excitement about their topics.*

1. **What challenges did you face while researching?**

*Reflecting on obstacles helps students develop problem-solving strategies and fosters resilience in tackling difficult tasks.*

1. **What is one thing you need to do next in your research?**

*This ensures students have a clear plan for their next steps and helps them stay organized.*

Reflections can be shared orally during a class discussion or written as an exit slip. This may be done at the end of each period, or at the end of the research process. For written responses, consider collecting them to provide individual feedback or to identify common challenges among the class.

**Evaluation**

Focus for this lesson should be on the research and the recording and organization of information. This lesson connects to most English Language Arts outcomes around reading and viewing strategies, evaluating reliability of sources, and on the students' ability to conduct research effectively and organize their findings. Use the following criteria to assess their progress:

1. **Research Notes Worksheet:**
   * Check that students have completed all sections, including accurate source information, well-paraphrased key details, and appropriate categorization under themes.
   * Look for evidence that students are asking thoughtful questions and planning their next steps.
2. **Participation and Engagement:**
   * Observe students' engagement during the research session, noting their ability to stay focused and ask for help when needed.
   * Consider how well they contributed to class discussions, including their willingness to share reflections and ideas.
3. **Feedback and Improvement:**
   * Provide constructive feedback on their worksheets, highlighting strengths (e.g., well-organized themes, insightful questions) and suggesting areas for improvement (e.g., paraphrasing more effectively or adding more source variety).
   * Encourage students to use your feedback to refine their research and continue improving their skills.

A sample rubric is provided. The *Related Outcomes* section is purposefully left blank so that specific outcomes for grade level and subject can be added at the educator’s discretion. The achievement levels are based on middle school assessment, and may have to be changed to suit other grade levels.

***Heritage Fair Research***

Name: Homeroom:

***Achievement Levels (AL)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **LK** | **LK+** | **DK** | **DK+** | **CK** | **CK+** | **IK** |
| **Limited Knowledge** **(LK)** and understanding of content and concepts. Limited application of the related skills *(You have not demonstrated the skills connected to the outcome).* | | **Developing Knowledge** **(DK)** and understanding of content and concepts. Developing in the application of the related skills *(You are beginning to demonstrate the skills connected to the outcome).* | | **Competent Knowledge** **(CK)** and understanding of content and concepts. Appropriate application of the related skills *(You are able to demonstrate the skills connected to the outcome)* | | **In-depth Knowledge** **(IK)** and understanding of content and concepts. Able to extend the application of the related skills *(You have gone beyond demonstrating the skills connected to the outcome).* |

***Rubric***

|  |  |  |  |
| --- | --- | --- | --- |
| **Assignment Breakdown** | **Expectations** | **Related Outcomes** | **AL** |
| *Category* | *Kid/Parent friendly language of expectation* | *Outcome/indicator being assessed* | *Achievement Level* |
| **Organization** | Notes are clear and organized, with minor grouping issues. |  |  |
| **Accuracy** | Facts are accurate and supported by reliable sources. |  |  |
| **Engagement** | Student was focused and participated in most discussions and activities. |  |  |
| **Critical Thinking** | Student asked relevant questions and made some meaningful connections. |  |  |

**Heritage Fair Research Notes Worksheet**

Name: Date: Homeroom:

### Topic:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source Information**  *(Web address, book title, etc.)* | |  |  | | --- | --- | |  | **Key Facts/Details (In Your Own Words)** | | **Theme or Subtopic** | **Questions/ Next Steps** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |