



EXPEDITIONARY  
LEARNING

# **Grade 4: Module 2A: Unit 2: Lesson 5**

## **Research: Identifying Categories for Our Research about the Wheelwright**



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Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)	
<p>I can explain what a text says using specific details from the text. (RI.4.1)</p> <p>I can summarize informational text. (RI.4.2)</p> <p>I can conduct a research project to become knowledgeable about a topic. (W.4.7)</p> <p>I can document what I learn about a topic by sorting evidence into categories. (W.4.8)</p>	
Supporting Learning Targets	Ongoing Assessment
<ul style="list-style-type: none"><li>• I can identify important details in an informational text about the colonial wheelwright.</li><li>• I can determine important topics or categories to study in order to learn about colonists.</li></ul>	<ul style="list-style-type: none"><li>• Colonial Job application</li></ul>



Agenda	Teaching Notes
<ol style="list-style-type: none"><li>1. Opening<ol style="list-style-type: none"><li>A. Engaging the Reader (10 minutes)</li></ol></li><li>2. Work Time<ol style="list-style-type: none"><li>A. Initial Reading: The Wheelwright (25 minutes)</li><li>B. Creating Categories for Our Research (20 minutes)</li></ol></li><li>3. Closing and Assessment<ol style="list-style-type: none"><li>A. Debrief (5 minutes)</li></ol></li><li>4. Homework</li></ol>	<ul style="list-style-type: none"><li>• Students read a text about the wheelwright in this lesson. They then reread this same text again in Lesson 6 and practice taking notes. So in this lesson, allow students' understanding of the wheelwright text to be initial/preliminary/emerging. The main point of Lesson 5 is for students to get the gist of the text well enough to be able to generate categories for their future note-taking and research.</li><li>• This lesson's Work Time Part B is particularly important, because the categories students come up with are the ones they will use to guide their own research later in the unit. The body of the lesson includes suggestions for likely categories. Be sure that students come up with the categories. The fourth-grade standard for note-taking (W.4.8) states explicitly that students need to be able to "categorize information" (as compared to the third-grade standard, which says students need to be able to "sort" information into "provided categories").</li></ul>

Lesson Vocabulary	Materials
determine, categories, focus, research, researchers, depend, vital, construction, techniques; tapered, essential, wealthy, shopkeeper, operate, cart, iron tire, cargo, littered, wood shavings, hub, felloe, apprenticeship, planning, clamps, files, chisels, lathe	<ul style="list-style-type: none"><li>• "The Importance of the Wheelwright" (one per student)</li><li>• What It Means to be a Researcher anchor chart (new; teacher-created; see Opening Part A)</li><li>• What We Know about the Wheelwright anchor chart (new; teacher-created. This new anchor chart simply has the title at the top. Students will post their sticky notes on it and eventually group the notes into categories; See Work Time B.)</li><li>• Sticky notes</li></ul>



Opening	Meeting Students' Needs
<p><b>A. Engaging the Reader (10 minutes)</b></p> <ul style="list-style-type: none"><li>• Inform the students that they will continue to learn about life in Colonial America as they focus more deeply through researching on the trades, or jobs, people had.</li><li>• Begin a new <b>What It Means to Be a Researcher anchor chart</b>. Engage students in a conversation about research and chart their responses. Ask the following questions:<ul style="list-style-type: none"><li>* What does it mean to <i>research</i> a topic?</li><li>* What do researchers do?</li><li>* Why do they do this?</li><li>* What skills do good researchers need to have?</li></ul></li><li>• Invite students to read the learning target: "I can determine important topics or categories to study in order to learn about colonists." Have students quickly help define the key terms. Add as needed: <i>determine</i> means "to decide," and <i>categories</i> are "groups of things that are the same." Write these definitions above the two words in the learning target. Ask the students to choral read the learning target, substituting the definitions for the words. ("I can <i>decide</i> important <i>groups of things that are the same</i> to study in order to learn about colonists.") Check for student understanding of the target.</li></ul>	<ul style="list-style-type: none"><li>• Co-constructing anchor charts helps students to understand abstract concepts.</li><li>• Identifying, bolding, and writing in the margins to define what cannot be understood through the context of the text helps students who might struggle with language.</li></ul>



Work Time	Meeting Students' Needs
<p><b>A. Initial Reading: The Wheelwright (25 minutes)</b></p> <ul style="list-style-type: none"><li>• Distribute the shared text <b>“The Importance of the Wheelwright”</b> to all students. Tell students that they will be reading this text today and will reread it tomorrow in order to practice taking notes as researchers. Therefore, their work time today is purposefully not a full close reading of the text. Today their purpose for reading is to get the gist, think about details, and most importantly to think about the categories of information they are learning.</li><li>• Read aloud as students follow along. Ask them to think about the gist and talk with a partner:<ul style="list-style-type: none"><li>* “What is this text mostly about?”</li></ul></li><li>• Ask students to reread on their own, one sentence at a time. Encourage them to underline facts and details they think are important to know about the wheelwright. They can also circle words they don’t know.</li><li>• Ask students to share with a partner some of the things they underlined.</li><li>• Focus students whole group. Ask: “Was the wheelwright an important person in a colonial village?”</li><li>• Help the students to pair up and go back into the text to find evidence to support their thinking. Some things to listen for are:<ul style="list-style-type: none"><li>* “Many people in a colonial village needed carts and/or wagons, which had wheels.”</li><li>* “If wheels broke because of the rough roads and fields, the wheelwright was the main person who could fix them.”</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Reading the passage aloud before students read independently helps support students who are generally challenged by reading.</li><li>• ELLs and SPED students would benefit from pre-highlighting text so that when they reread independently, they can focus on the essential information.</li></ul>



Work Time (continued)	Meeting Students' Needs
<p><b>B. Creating Categories for Our Research (20 minutes)</b></p> <ul style="list-style-type: none"> <li>• Ask students to work with a partner. Have them look again at the facts and details the other students underlined in the shared text. Ask them, as pairs, to write on a <b>sticky note</b> one to two facts they learned.</li> <li>• Begin a new <b>What Do We Know about the Wheelwright anchor chart</b>. Ask pairs to read their fact out loud and post it anywhere on the class anchor chart.</li> <li>• Read through the sticky notes, asking: “What do you notice?” Listen for students to notice that some of the facts mention the same type of things, some of the facts “go together,” etc.</li> <li>• Tell students that you will now work together to <i>categorize</i> their sticky notes: to sort the facts into like groups. Explain that whatever categories they choose will be the categories for the students’ trade research. So it is important that the categories would work for any trade, not just the wheelwright. Ask: “Which of these facts and details go together? Why?” As you read the facts aloud, students will help you decide which facts are similar. Move the similar facts together in stacks or groups as the students observe.</li> <li>• Decide on labels for each group. Likely categories will include “Tools for the Trade,” “Skills for the Trade,” and “How the Trade Helps.” Consider having a fourth category for “Other Interesting Things.”</li> <li>• Remind students that the categories need to be relevant for any colonial trade. Help students think about strong categories. For example, ask them: <ul style="list-style-type: none"> <li>* “Why didn’t we label a category ‘Parts of a Wheel?’” (Students should realize that the facts about the parts of a wheel are very trade-specific and could fall under the category of “Other Interesting Things,” but it wouldn’t be a research category because not all trades made wheels.)</li> </ul> </li> </ul> <p><i>Note: Students will need this text about the wheelwright again during Lesson 6. Either collect students’ texts or have them put them in a folder so they can access them again during Lesson 6.</i></p>	<ul style="list-style-type: none"> <li>• Consider partnering an ELL student with a student who speaks the same L1 for discussion of complex content, or partner an ELL with a native speaker of English. ELLs’ language acquisition can be facilitated by interacting with the content in English.</li> <li>• Co-construction of the categories and sorting the facts will deepen the broad understanding of the content for students who struggle with language.</li> </ul>



Closing and Assessment	Meeting Students' Needs
<b>A. Debrief (5 minutes)</b> <ul style="list-style-type: none"><li>• Gather students whole group.</li><li>• Ask, "Based on what we know about colonial trades so far, how was work in colonial times different from the type of work that the adults you know do today? What is your evidence?"</li></ul>	
Homework	Meeting Students' Needs
Continue reading in your independent reading book for this unit at home.	



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## Supporting Materials



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## The Importance of the Wheelwright

The cart was an important item for many people in Colonial America. Wealthy colonists and shopkeepers used carts. Farmers especially depended on them. If you were a farmer in Colonial America, you couldn't operate without a cart of some kind. Farmers used carts to collect and transport their produce.

Wheelwrights were important members of colonial communities. They cut, shaped, and joined wood to make the wheels. Most wheels had a strip of iron called an iron tire, around the outside of the wheel. It was carefully fitted around the wheel to help hold all the parts in place and to make the finished wheel strong enough so that they were able to stand up to rough roads and fields. The iron tire came from the blacksmith, who would help the wheelwright put it on the wheel.

Wheelwrights also built and repaired carts, not just the wheels on them. Cart design and construction were simple. In order to make the cart, the wheelwright used basically the same tools and techniques that they did when making a wheel. Carts had flat beds where the cargo was put. Some carts' beds moved like a dump truck and some stayed solidly attached to the frame.

The wheelwrights worked in a large shop. Wood shavings would have littered the floor. Hanging on the walls were tools such as saws, clamps, files, chisels, and the curved portions of a wheel rim. A giant wheel with a hand crank would probably have been put along a wall. It would have been used to power a lathe, a machine used to spin an object.

Craftsman also needed woodworking skills. Perhaps the most important was the ability to make spokes for the wheels that were smaller or "tapered" at the ends. These spokes would fit perfectly into the hub, the center of the wheel, and the felloe, the curved outer circle of the wheel. If the ends didn't fit into the holes, the wheel wouldn't be able to hold its shape.

Like all trades, the wheelwright's was learned through an apprenticeship. During this training, a young man would pick up basic math and develop an eye for shaping wood flat or round. Often the hardest thing for the apprentices was planing, or scraping the wood to make it level. Creating a flat surface sounds easy, but actually it was tough to do.

Wheels were essential to helping a colonial village survive and grow. Wagons, carts, carriages, and spinning wheels were common items that helped colonists do basic daily tasks.

Written by Expeditionary Learning for Instructional Purposes



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### **Bibliography**

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