

**Information and Research:** Through engagement in the research process, students will apply critical thinking skills (e.g., analysis, evaluation, organization, synthesis) to draw conclusions and construct new understandings. Additionally, students will engage in research processes (e.g., inquiry-based, information problem solving). Such experiences will develop student self-confidence in solving problems in an environment where information resources and technologies are increasingly complex.

## STRAND 4: Defining an information problem and identifying information needed

### Standard 1: Define an information problem.

<b>a. Analyze the task to identify the information problem.</b>	<b>K</b> Recognize and identify the information task.	<b>1-2</b> Identify and interpret the information need.	<b>3-4</b> Determine and analyze the information problem.	<b>5</b> Analyze the information problem.
<b>b. Seek clarification from teachers and others.</b>	<b>K</b> With guidance, ask questions to understand what is required to complete the task.	<b>1-2</b> Ask questions to understand what is required to complete the task.	<b>3-4</b> Review information task with teacher input.	<b>5</b> Understand task requirements and clarify when necessary.
<b>c. Select and narrow (or broaden) topics into a manageable focus.</b>	<b>K</b> With guidance, narrow the information topic.	<b>1-2</b> With guidance, explain how topics can be broadened or narrowed.	<b>3-4</b> Demonstrate how topics can be broadened or narrowed.	<b>5</b> Evaluate and revise the topic.
<b>d. Conceptualize the form of the final product based on target audience and criteria for evaluation.</b>	<b>K</b> With guidance, brainstorm and select possible forms of the final product, target audience, and evaluation of product.	<b>1-2</b> With guidance, brainstorm, explain, and select possible forms of the final product, target audience, and evaluation of product.	<b>3-4</b> Analyze and select a final product that meets criteria for task, target audience, and evaluation.	<b>5</b> Analyze, evaluate, and select a final product that meets criteria for task, target audience and evaluation.

### Standard 2: Identify the information needed.

<b>a. Analyze the task and information needed.</b>	<b>K</b> With guidance, identify background knowledge and information needed.	<b>1-2</b> With guidance, identify background knowledge and predict information needed.	<b>3-4</b> Identify and record information already known and predict information needed.	<b>5</b> Identify, summarize, and evaluate for relevance the information already known and determine information needed.
<b>b. Generate essential questions for new understanding and to guide inquiry.</b>	<b>K</b> List possible questions together with teacher guidance.	<b>1-2</b> List possible questions to direct and focus attention and review with the teacher.	<b>3-4</b> Analyze possible questions for relevance to the topic.	<b>5</b> Create and evaluate possible essential questions.
<b>c. Select and narrow (or broaden) keyword search terms.</b>	<b>K</b> With guidance, list possible keyword search terms.	<b>1-2</b> With guidance, identify possible keyword search terms and distinguish between narrow and broad terms.	<b>3-4</b> Generate and broaden or narrow possible keyword search terms, and critique them for relevance.	<b>5</b> Generate and broaden or narrow possible keyword search terms, and critique them for relevance.

## STRAND 5: Identifying, evaluating, and selecting sources

### Standard 1: Identify information sources (e.g., texts, places, people).

	<b>K</b> With guidance, brainstorm a wide range of possible information sources.	<b>1-2</b> Brainstorm and describe a range of possible information sources.	<b>3-4</b> Brainstorm, identify, and explain a range of possible information sources.	<b>5</b> Brainstorm and explain a range of possible information resources. Identify primary and secondary sources.
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