# **Grade K**

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING "We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

### **Connect**

- Identifies one or two key words about a topic, problem or question with guidance from the librarian.
- Connects ideas to own interests. Connect#1 and Connect#2

### Wonder

Formulates questions related to listening activities.

# Investigate

- Uses ABC arrangement of picture books to locate materials.
- Understands the basic organizational structure of books. <a href="mailto:lnvestigate#1">lnvestigate#1</a>
- Distinguishes between fiction and nonfiction resources. <u>Investigate#2</u>
- Uses materials provided to find answers to questions posed.

### **Construct**

Demonstrates simple organizational skills such as sorting and categorizing. Construct#1

# **Express**

• Presents facts and simple answers to questions. Express#1

# Reflect

• Identifies own strengths and sets goals for improvement. Reflect#1

# Grade 1

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers"

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

### **Connect**

- Shares what is known about the general topic to elicit and make connections to prior knowledge.
   Connect#4
- Restates/retells and asks questions about the topic, problem or question with guidance.

#### Wonder

Adds to K-W-L chart constructed by class by helping develop questions for W - Wonder.

# **Investigate**

- Demonstrates the ability to use the library and check out books.
- Recognizes that nonfiction resources in the library are organized by categories and begins to associate
  the Dewey numbers with areas of interest.
- Recognizes that fiction and picture books are organized by the author's last name in A-B-C order. <u>Investigate#5</u>
- Recognizes the purpose of the online catalog to locate materials.
- Selects and uses appropriate sources with guidance, including picture dictionaries and beginning encyclopedias, to answer questions.
- Interprets information represented in pictures, illustrations and simple charts and verbalizes the main idea.
- Distinguishes between fact and opinion. <a href="mailto:lnvestigate#6">lnvestigate#6</a>
- Finds facts and briefly summarizes them via writing, drawing, or verbalization to answer research questions. <u>Investigate#7</u>

# **Construct**

- Draws a conclusion about the main idea with guidance. Construct#2
- Completes the L portion of the K-W-L chart with what new ideas were learned.

# **Express**

- Uses writing process to develop expression of new understandings.
- Uses format chosen by the teacher or librarian.

- Asks, "What do I wonder about now?" Reflect#2
- Identifies own strengths and sets goals for improvement. Reflect#3

# Grade 2

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

### **INQUIRY PROCESS**

### **Connect**

- Recognizes that questions can be answered by finding information. Connect#6
- Identifies the overall "big picture" idea by stating it orally or drawing a picture.

#### Wonder

Asks "I wonder" questions about the research topic. Wonder#3

# Investigate

- Uses ABC arrangement of fiction books to locate materials.
- Follows a modeled inquiry process during each visit to the library to do research. <a href="Investigate#17">Investigate#17</a>
- Uses online encyclopedias, magazines databases, and other technology resources with guidance.
- Selects and uses appropriate sources with guidance, including dictionaries, periodicals, maps, and globes, to answer questions.
- Writes, draws, or verbalizes the main idea and supporting details. <u>Investigate#18</u>
- Uses simple note-taking strategies as demonstrated by librarian/teacher (e.g., copying words or phrases).

# **Construct**

Compares new ideas with what was known at the beginning of the inquiry. Construct#4

## **Express**

- Begins to understand concept of "audience."
- Presents information in a variety of ways (e.g., art, music, poetry, movement, verbally, and/or written language). <a href="mailto:Express#7"><u>Express#7</u></a>
- Identifies the names of sources used.
- Uses technology tools chosen by teacher or librarian to create written products.

- Uses authentic assessment rubrics modeled by librarian.
- Identifies own strengths and sets goals for improvement. Reflect#4

# **Grade 3**

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

### **Connect**

- Connects ideas in texts to own interests.
- States what is known about the problem or question and makes connections to prior knowledge.

### Wonder

- Formulates questions about the topic with guidance.
- Uses prior knowledge and understanding of overall topic to make predictions about what the new information will reveal.

## **Investigate**

- Identifies the ten major Dewey areas and what main topics are included in each. <a href="Investigate#25">Investigate#25</a>
- Locates nonfiction material at appropriate reading level.
- Searches the online catalog (author, title, and subject) with assistance to locate materials. <a href="https://linearchestrates.com/linearchest
- Uses bookmarked Websites to find appropriate information. <u>Investigate#27</u>
- Selects and uses multiple appropriate print, nonprint, electronic and human sources {e.g., thesauri, general encyclopedias, and periodical databases) to answer questions.
- Uses at least two sources for research projects.
- Questions text during reading or listening.
- Uses simple notetaking strategies {e.g., graphic organizers}.
- Identifies and uses the organizational structures of a nonfiction book {table of contents, index and glossary) to locate information.

### **Construct**

- Uses a variety of strategies to determine importantideas.
- States the main idea. Construct#7
- Organizes information using a teacher provided tool.

## **Express**

- Communicates new understandings through combining, predicting, illustrating and constructing.
- Chooses the format for the product based on personal preference or uses format chosen by the teacher or librarian. Express#7
- Uses visuals and multimedia to communicate meaning.
- Presents information clearly so that main points are evident. Express#10

- Identifies and evaluates the important features for a good product.
- Assesses and revises own work with guidance. <u>Reflect#6</u>
- Identifies own strengths and sets goals for improvement. Reflect#7
- Asks "What about this topic do I want to learn more about?"

# Grade 4

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING "We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

## **INQUIRY PROCESS**

### **Connect**

Generates a list of key words for a research-based project with guidance. Connect#10

### Wonder

- Asks questions to clarify topics or details. Wonder#6
- Predicts answers to inquiry questions based on background knowledge and beginning observation or experience. Wonder#7

## **Investigate**

- Uses selected search engines to find appropriate information. <u>Investigate#36</u>
- Uses pre-selected primary sources to gather information.
- Uses pre-selected Web resources to locate information.
- Selects and uses multiple appropriate print, nonprint, electronic and human sources (e.g., almanacs, indexes, specialized dictionaries and encyclopedias, and databases) to answer questions.
- Uses skim/scan to locate information that is appropriate to age and ability level.
- Distinguishes between fact and opinion.
- Uses various notetaking strategies {e.g., highlighting, graphic organizers}.
- Paraphrases, summarizes information that answers research questions. <a href="Investigate#37">Investigate#37</a>
- Identifies and uses the organizational structures of a nonfiction book {bibliography and appendix} to locate information.
- Follows a model or template provided to complete inquiry project and follows a timeline.

# **Construct**

- Identifies facts and details that support main ideas. Construct#10 and Construct#11
- Notes similarities and differences in information from two different sources.
- Uses common organizational patterns (chronological order, main idea with supporting details) to organize information. <u>Construct#12</u>
- Draws a conclusion about the main idea.

### **Express**

- Uses pre-writing to brainstormideas for most effective way to present conclusions.
- Drafts the presentation/product.
- Understands the concept of "audience"; determines audience before creating product.

- Identifies and evaluates the important features for a good product. Reflect#10
- Assesses and revises own work with guidance. Reflect#11
- Identifies own strengths and sets goals for improvement. Reflect#12

# Grade 5

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

#### Connect

Uses sources to acquire background information and brainstorms ideas for further inquiry. Connect#11

#### Wonder

- Assesses questions to determine which can be answered by simple facts, which cannot be answered, and which would lead to an interesting inquiry.
- Forms tentative thesis about main idea with guidance.

# **Investigate**

- Selects and uses multiple appropriate print, nonprint, electronic, and human sources to answer questions.
   Investigate#43
- Uses navigation tools of a Website to find information. <u>Investigate#44</u>
- Uses prior knowledge and experiences to understand new facts and ideas.
- Interprets information taken from maps, graphs, charts and other visuals.
- Evaluates print and electronic information for usefulness, relevance, and accuracy. <a href="https://linearing.ncbi.nlm.ncbi.
- Determines important details.
- Uses various notetaking strategies (e.g., outlining, underlining, bulleted lists, highlighting, graphic organizers). <a href="mailto:lnvestigate#46">lnvestigate#46</a> and <a href="lnvestigate#47">lnvestigate#46</a>
- Uses software {e.g., word processing, graphic organizing) to record and organize information.
- Identifies and uses the organizational structures of a nonfiction book {preface, foreword and introduction} to locate information.

## **Construct**

- Makes inferences with guidance.
- Forms opinion and uses evidence from text to back it up. Construct#16
- Organizes notes and ideas and develops an outline or graphic organizer.
- Actively listens to and restates others' ideas and contributes own ideas.

# **Express**

- Uses writing process to develop expression of new understandings.
- Cites all sources used according to model provided by teacher. <a href="Express#14"><u>Express#14</u></a>
- Uses a variety of technology tools chosen by librarian or teacher to create products.
- Modifies and revises own work based on feedback from teacher and others. <a href="Express#15"><u>Express#15</u></a>
- Checks for correctness and completeness.

- Identifies and evaluates the important features for a good product.
- Assesses and revises own work with guidance. <u>Reflect#13</u>
- Identifies own strengths and sets goals for improvement. Reflect#14
- Relies on feedback to figure out how to improve product and process.

# Grade 6

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

### **Connect**

- Finds areas of passion or interest within topics of study.
- Identifies key words and ideas that appear in background information and class conversation.

### Wonder

- Recognizes characteristics of good questions.
- Determines what information is needed to support the investigation and answer the questions.

# Investigate

- Recognizes the organization and use of special sections in the library {e.g., reference, graphic novels, paperbacks).
- Follows a complete research plan and stays on a timeline.
- Uses online catalog independently to locate specific books, get classification numbers, and browse the shelves. <u>Investigate#53</u>
- Participates in supervised use of search engines and pre-selected Web resources to access appropriate information for research.
- Evaluates electronic and printinformation to determine whether it is inaccurate or misleading.
- Uses both primary and secondary sources. <u>Investigate#54</u>
- Summarizes information that answers research questions.
- Differentiates between important and unimportant details.
- Takes notes using one or more of a variety of notetaking strategies.
- Relates new information to prior knowledge.

# Construct

- Makes inferences based on explicit information in text.
- Organizes notes and ideas and develops an outline or graphic organizer using both print and electronic tools.
- Combines information and weighs evidence to draw conclusions and create meaning. Construct#19

### **Express**

- Uses pre-writing to discover alternate ways to present conclusions.
- Drafts the presentation/product tailored to the audience.
- Presents conclusions and supporting facts in a variety of ways. Express#21 and Express#22

# Reflect

• Assesses own work and begins to develop own revision process.

# Grade 7

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

### Connect

- States and verifies what is known about the problem or question and makes connections to prior knowledge. <u>Connect#14</u>
- Uses multiple sources to acquire background information and brainstorms ideas for further inquiry.

## Wonder

- Writes questions independently based on key ideas or areas of focus.
- Analyzes and evaluates what is known, observed or experienced to form tentative thesis or hypothesis.
   Wonder#12
- Determines what resources will most likely offer quality information.

# Investigate

- Uses the categorization of materials within Dewey Areas to locate resources and browse for additional materials.
- Uses technology resources such as online encyclopedias, online databases, and Web subject directories to locate information on assigned topics in the curriculum.
- Uses organizational systems and electronic search strategies (key words, subject headings) to locate appropriate resources.
- Evaluates and paraphrases information that answers research questions.
- Evaluates quality of electronic and print information for usefulness, currency, authority and accuracy.
   Investigate#69 and Investigate#70
- Uses both facts and opinions responsibly by identifying and verifying them. <a href="Investigate#71">Investigate#71</a>
- Uses table of contents, index, chapter and section headings, topic sentences, and summary sentences to locate information and select main ideas.
- Uses the structure and navigation tools of a Website to find the most relevant information.

#### **Construct**

- Uses common organizational patterns (chronological order, cause and effect, compare/contrast) to organize information in order to draw conclusions. <u>Construct#22</u>, <u>Construct#23</u>, <u>Construct#24</u>, <u>Construct#25</u>, <u>Construct#26</u>, <u>Construct#27</u> and <u>Construct#28</u>
- Interprets information and ideas by defining, classifying, and inferring. Construct#29
- Forms opinions and judgments backed up by supporting evidence.
- Questions the differences between sources and seeks additional sources to resolve.

# **Express**

- Publishes final product for a particular audience and purpose.
- Cites all sources used according to local style formats. Express#24

# Reflect

Uses established criteria or collaborates with classmates and teacher to develop criteria for assessment.
 Reflect#18

# **Grade 8**

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

#### **Connect**

- Revises the question or problem as needed to arrive at a manageable topic for inquiry. <u>Connect#16</u> and <u>Connect#17</u>
- Expresses the bigidea and the relation of own topics of interest to that idea through a mind map using pictures and words.

## Wonder

- Refines questions to guide the search for different types of information (e.g., overview, big-idea, specific detail, cause and effect, comparison). <u>Wonder#15</u>
- Plans inquiry to test hypothesis or validate thesis.

# Investigate

- Uses different formats (e.g., books, Websites, subscription databases, multimedia, graphs, charts, maps and diagrams) as sources of information. <a href="Investigate#75">Investigate#75</a>
- Seeks balanced view by using diverse sources to access appropriate material.
- Selects information based on authority and point of view.
- Recognizes the effect of different perspectives and points of view on information. Investigate#76
- Recognizes that own point of view influences the interpretation of information. <a href="Investigate#77">Investigate#77</a>
- Identifies misconceptions and revises ideas as new information is gained.

# **Construct**

- Analyzes disparate points of view discovered in different sources.
- Draws conclusions based on explicit and implied information. <u>Construct#30</u> and <u>Construct#31</u>
- Compares information found to tentative thesis or hypothesis; revisits and revises thesis/hypothesis as appropriate.

#### **Express**

- Creates products for authentic reasons and audiences. <a href="Express#27"><u>Express#27</u></a>
- Uses two or three strategies to revise product based on self-assessment, teacher feedback, and peer feedback.
- Identifies and uses a variety of technology tools, including Web-based interactive tools, to organize information, create a product, and enhance communication.

### Reflect

• Identifies own strengths and sets goals for improvement. Reflect#19

# **Grade 9**

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING "We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

#### Connect

- Reads background information to discover the complexities of the problem or question and brainstorms ideas for further inquiry.
- Identifies key words, concepts, and synonyms, both stated and implied, for topic and uses them to further research. <u>Connect#19</u>
- Develops a schema or mind map to express the big idea and the relationships among supporting ideas and topics of interest. Connect#20

#### Wonder

- Focuses the purpose of the research by formulating specific questions to be answered.
- Determines the kind of information needed to investigate the complexities of the topic and whether different points of view will be important.

# Investigate

- Brainstorms ideas for further information.
- Uses search strategies (Boolean operators, synonyms and relational searching) to broaden and narrow searches and locate appropriate resources.
- Uses technology resources such as the online catalog, online encyclopedias, online databases, Web subject directories, and links from valid Web sites to locate primary and secondary information on topics of inquiry.
- Uses a variety of search engines to do advanced searching.
- Seeks and uses many different sources in a variety of formats to obtain balanced and complex information and to fill information needs effectively.
- Adjusts search strategies by comparing information gathered with the problem or question.
- Analyzes maps, pictures, charts, graphs, and other information presented visually to determine main ideas and supporting details.
- Takes notes using one or more of a variety of notetaking strategies, including reflecting on the information (e.g., graphic organizers, two-column notes). <a href="mailto:lnvestigate#85">lnvestigate#85</a>, <a href="lnvestigate#86">lnvestigate#86</a>, <a href="lnvestigate#85">lnvestigate#86</a>, <a href="lnvestigate#85">lnvestigate#88</a> and <a href="lnvestigate#89">lnvestigate#89</a>

# **Construct**

- Combines ideas and information to develop and demonstrate new understanding.
- Organizes information independently, deciding the structure based on the relationships among ideas and general patterns discovered. <u>Construct#36</u> and <u>Construct#37</u>
- Understands and builds on the ideas of others.

# **Express**

- Presents conclusions to answer the question or problem.
- Uses visuals, electronic tools and multimedia to communicate meaning.

### Reflect

Identifies own strengths and sets goals for improvement. Reflect#20 and Reflect#21

# Grade 10

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

# **INQUIRY PROCESS**

### **Connect**

- Develops and refines the topic, problem, or question independently to arrive at a worthy and manageable topic for inquiry. <u>Connect#22</u>, <u>Connect#23</u> and <u>Connect#24</u>
- Maintains a list of effective search terms throughout the process of inquiry.

### Wonder

Refines questions to provide a framework for the inquiry and to fulfill the purpose of the research
{e.g., questions to lead to historical context and interpretation; questions to elicit accurate facts about
scientific problem or issue). Wonder#19 and Wonder#20

# Investigate

- Uses specialized reference materials to find specific and in-depth information.
- Conducts advanced Web searches using Boolean logic and other sophisticated search functions.
   Investigate#96 and Investigate#97
- Uses text structures to derive relationships among ideas and deeper or more subtle meaning {signal words; patterns such as cause/effect, comparison, sequence; foundational vs. detailed information).
- Evaluates information from a variety of sources for accuracy, appropriateness, validity and comprehensiveness.
- Recognizes statements that can be verified.
- Uses collaborative and independent digital tools to record and organize information.
- Pursues a balanced perspective of fact, opinion, and different points of view.

## Construct

- Critically examines and analyzes relevant information from a variety of sources to discover relationships among ideas.
- Organizes notes and ideas using both print and electronic tools to create the most appropriate organizational pattern to express the connections and patterns.
- Draws clear and appropriate conclusions supported by evidence and examples. <u>Construct#40</u> and <u>Construct#41</u>

### **Express**

- Drafts the presentation/product to present an argument, point of view, interpretation, or new model most effectively with supporting evidence.
- Cites all sources used according to standard style formats. <a href="Express#30"><u>Express#30</u></a> and <a href="Express#31"><u>Express#30</u></a>
- Identifies and uses a variety of technology tools, including Web-based interactive tools, to organize information, create a product, and enhance communication with a real world application.

- Identifies and evaluates the important and subtle features for an effective product.
- Records individual experience of the inquiry process the hardest part, best part, skills learned, insights experienced, etc.-with suggestions for future improvements. Reflect#23

# Grade 11

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

### **INQUIRY PROCESS**

# Connect

• Verifies the accuracy of what is known about the problem or question.

#### Wonder

Plans inquiry to systematically test hypothesis or to gather evidence to validate thesis. <u>Wonder#21</u> and <u>Wonder#22</u>

## **Investigate**

- Pursues a balanced perspective by evaluating information based on authority, accuracy, point of view, and reliability. <a href="https://investigate#104">https://investigate#104</a>
- Uses the organizational features of a book as well as abstracts, tables, charts and first and last chapters to locate main ideas, specific supporting evidence, and a balanced perspective. <a href="mailto:lnvestigate#105">lnvestigate#105</a>
- Recognizes degrees of bias (from slightly slanted point of view to heavily slanted propaganda).
- Recognizes competing interpretations of historical events and issues and the reasons for those differences.
- Evaluates the authority of a source by assessing the credentials and reputation of the author, creator and publisher.
- Evaluates, paraphrases, summarizes, and interprets information that answers research questions and gives an accurate picture of the research topic.
- Recognizes that even accurate facts can be misleading if relevant facts are omitted or if context is not provided.
- Categorizes information; adds new categories as necessary; explores connections among categories.

# **Construct**

- Analyzes different points of view and determines best supported point of view by sorting and sifting evidence.
- Presents different perspectives with evidence for each. Construct#44, Construct#45, and Construct#46
- Identifies and addresses previously held misconceptions.

### **Express**

- Chooses the most appropriate format, tone and language to communicate ideas clearly in real world formats to different audiences. <a href="Express#34"><u>Express#34</u></a>
- Publishes final product for an authentic audience and real world application.

# Reflect

Assesses and revises own work using own revision process.

# Grade 12

# STANDARD 1: USING INFORMATION TO BUILD UNDERSTANDING

"We are thinkers."

Independent learners ask authentic questions and access, evaluate and use information effectively to develop new understandings.

### **INQUIRY PROCESS**

### **Connect**

• Explores problems or questions for which there are multiple answers or no "best" answer. Connect#27

### Wonder

 Uses prior knowledge, understanding of essential ideas and questions, and comprehensive background information to make predictions about specific information needed to answer questions and about the effectiveness of potential sources.

# Investigate

- Seeks resources with diverse opinions and points of view and evaluates them carefully, particularly
  on controversial, historical or culturally based topics.
- Counters the effect of bias on the accuracy and reliability of information by actively pursuing a balanced perspective.
- Challenges ideas in text and makes notes of questions to pursue in additional sources. <a href="Investigate#111">Investigate#111</a> and <a href="Investigate#112">Investigate#112</a>
- Independently recognizes gaps in information (based on the complexity of the problem or question).
- Extends search beyond readily available sources to ensure accuracy and comprehensiveness.
- Maintains an open attitude about new areas of the subject that were previously unknown or overlooked.

### **Construct**

- Builds a conceptual framework by synthesizing ideas gathered from multiple sources. <u>Construct#47</u> and <u>Construct#48</u>
- Changes own ideas based on the ideas of others.
- Develops own point of view and supports with evidence. Construct#49

# Express

- Communicates new understandings through designing, inventing, composing, transplanting and constructing.
- Evaluates own product and process throughout the work and uses self-assessment, teacher feedback, and peer feedback to make revisions when necessary. <a href="Express#37"><u>Express#37</u></a> and <a href="Express#38"><u>Express#38</u></a>

# Reflect

Asks, "What about this topic is personally interesting to me and important? What about this
topic do I want to pursue when I have an opportunity? Does this topic have implications for
future career or college choices?