### Basic Design

<table>
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<tr>
<th>Strand</th>
<th>Measurement and Data</th>
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<tr>
<td><strong>Concept</strong></td>
<td><strong>Learning Targets</strong></td>
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<tr>
<td>A. Positional terms</td>
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1. Demonstrate understanding of the following positional terms to complete a project:
   - above
   - below
   - diagonal
   - horizontal
   - parallel
   - intersecting
   - right angles
   - symmetrical

### Alignments:
- **CCSS:** K.MD.1; K.MD.2; K.MD.3; 1.MD.1; 1.MD.2; 3.MD.3; 3.MD.4; 6-8.RST.3; 6-8.RST.4; 6-8.RST.7
- **Performance:** 1.8-1.10, 2.1, 2.5
- **Knowledge:** (CA) 3 (MA) 5
- **NETS:** N/A
- **DOK:** 2

### Instructional Strategies
- Teacher modeling and guided practice of decorating a mask similar to Native African masks
- Guided practice using positional terms while examining a board game
- Small group instruction with a variety of symmetrical designs with positional terms

### Assessments/Evaluations
- Teacher created scoring guides for:
  - the mask project
  - a PowerPoint project
  - the board game design
## Basic Design

### Sample Assessment Questions

- Place object horizontal onto the mask

### Instructional Resources/Tools

- Positional matching cards
- Paper Mache masks
- Lap tops to create PowerPoints
- Board games
- Internet

### Literacy Connections

- Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object
- Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference
- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count
- Order three objects by length; compare the lengths of two objects indirectly by using a third object
- Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps
- Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs
- Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters
- Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks
- Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades K-5 texts and topics
- Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)

### Cross Curricular Connections

- Vocational Work Skills
- Functional Math:
  - Relative position
  - Geometry
<table>
<thead>
<tr>
<th>Strand</th>
<th>Reading Standards for Literacy in Science and Technical Subjects</th>
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<tbody>
<tr>
<td></td>
<td><strong>Concept</strong></td>
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<tr>
<td></td>
<td>B. Follow verbal, pictorial, and written directions</td>
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<tr>
<td></td>
<td><strong>Learning Targets</strong></td>
</tr>
<tr>
<td></td>
<td>1.</td>
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<td></td>
<td>• Demonstrate the ability to follow directions in order to complete a project or activity</td>
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<tr>
<td><strong>Alignments:</strong></td>
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<td>CCSS: 6-8.RST.7; 6-8.RST.8</td>
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<tr>
<td></td>
<td>Performance: 1.5, 1.8, 2.5</td>
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<tr>
<td></td>
<td>Knowledge: (CA) 3,5</td>
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<td></td>
<td>NETS: 5b</td>
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<td>DOK: 2</td>
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</table>

### Instructional Strategies

- Whole group instruction on sewing a pillow and making African masks
- Modeling and guided practice of creating PowerPoint projects
- Guided practice playing board games
- Modeling and guided practice of proportional layout drawing projects
- Small group instruction of mapping activities

### Assessments/Evaluations

Teacher created scoring guides for:
- sewing
- masks
- PowerPoint
- ability to follow directions on game board

### Sample Assessment Questions

- Explain the steps in order to play this board game

### Instructional Resources/Tools

- Board games
- Sewing materials
- Maps
- Internet
### Literacy Connections

- Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)
- Distinguish among facts, reasoned judgment based on research findings, and speculation in a text

### Cross Curricular Connections

- Vocational Work Skills
- ELA: Following directions
<table>
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<tr>
<td>C. Comprehend and identify details in information presented auditorily</td>
<td>1. Demonstrate, in writing or orally, the comprehension of details after listening to information presented from the Internet, short stories, movies, recipes or books</td>
</tr>
</tbody>
</table>

**Alignments:**
CCSS: 6.SL.1; 6.SL.2; 6-8.WHST.4  
Performance: 1.5  
Knowledge: (CA) 5,6  
NETS: 5b  
DOK: 2

### Instructional Strategies
- Through teacher led whole group instruction, students will:
  - design a board game or game cards based on class novel
  - discuss a class novel that has been read by the teacher
  - discuss current events
- Teacher led:
  - small group instruction comparing class novels to movies
  - guided practice of following multi-step directions according to recipes

### Assessments/Evaluations
- Teacher created:
  - quizzes
  - scoring guides for game board or card game based on a class novel
  - Completion of a Venn diagram comparing a class novel to a movie

### Sample Assessment Questions
- Complete the Venn diagram comparing and contrasting the class novel to the movie
### Instructional Resources/Tools

- Class novels
- Current events found on internet
- Recipes from the Internet or cookbooks
- Movies
- Short stories from a variety of sources

### Literacy Connections

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly
- Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study
- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience

### Cross Curricular Connections

- Vocational Work Skills
- Functional Reading:
  - Writing
  - Speaking and Listening
<table>
<thead>
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<th>Concept</th>
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<tr>
<td>D. Use measuring tools accurately</td>
<td>1. Demonstrate the ability to use a variety measuring tools with enough accuracy (based on teacher discretion according to student ability) to complete a project</td>
</tr>
</tbody>
</table>

**Alignments:**
CCSS: K.MD.1; K.MD.2; K.MD.3; 1.MD.1; 1.MD.2; 2.MD.1; 2.MD.2; 2.MD.3; 2.MD.4; 2.MD.5; 2.MD.6; 3.MD.2; 3.MD.3; 3.MD.4; 3.MD.5a; 6-8.RST.3
Performance: 2.1, 2.5
Knowledge: (FA) 1 (MA) 2
NETS: N/A
DOK:

**Instructional Strategies**
- Through teacher guided practice, students will:
  - measure:
    - lines and game cards for a board game
    - length for sewing a pillow and pencil pocket
  - make:
    - a variety of recipes for food or sensory items such as play dough
    - snacks and drinks for student consumption

**Assessments/Evaluations**
- Teacher created worksheets assessing measurements of:
  - sewing projects
  - board game
  - drinks and snacks preparation
  - play dough preparation

**Sample Assessment Questions**
- Use a sewing machine to sew a length of 10 inches
## Instructional Resources/Tools

- Sewing machine
- Rulers
- Measuring cups/spoons
- Food and drink ingredients

## Literacy Connections

- Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference.
- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
- Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.
- Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- Estimate lengths using units of inches, feet, centimeters, and meters.
- Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
- Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.
- Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
- Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.
- Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.
Recognize area as an attribute of plane figures and understand concepts of area measurement.
   a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.

Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

**Cross Curricular Connections**

- Vocational Work Skills
- Functional Math: Measurement
- ELA: Following directions
### Concept

E. Work cooperatively in a group to complete tasks

### Learning Targets

1. Demonstrate the ability to work cooperatively in a group to complete a task

### Alignments:

- **CCSS:** 3.SL.1a-d; 3.SL.3; 6-8.RST.3; 6-8.RST.4
- **Performance:** 2.3, 3.6, 4.6
- **Knowledge:** (CA) 6 (H/PE) 4 (SS) 6
- **PEGLE:** EHMP.1.B,F (Gr. K-2)
- **SCGLE:** SC8.3.A (Gr. K-4)
- **SSGLE:** RIGIT.6.C (Gr. 3)
- **NETS:** N/A
- **DOK:** 2

### Instructional Strategies

- Through teacher guided practice, students will:
  - work with simulated and real world work experiences requiring group cooperation
  - design and create a group map project
  - prepare and cook food

### Assessments/Evaluations

- Teacher observation of individual student ability to work with cooperation within a group to completion of assigned task
- Teacher created scoring guides of cooperative work skills

### Sample Assessment Questions

- Teacher scoring guides: Students can express his/her opinion regarding task completion in an appropriate manner in the group
Instructional Resources/Tools

- Real work experiences
- Simulated work experiences
- Cooking recipes
- Materials to make a map

Literacy Connections

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.
  a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion
  b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
  c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
  d. Explain their own ideas and understanding in light of the discussion
- Ask and answer questions about information from a speaker, offering appropriate elaboration and detail
- Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks
- Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades K-5 texts and topics

Cross Curricular Connections

- Vocational Work Skills
### Strand: Efficiency of Human Movement and Performance

#### Concept
F. Read, identify and use controls on a computer, electronic devices and household appliances to complete a project without harm to self

#### Learning Targets
1. Demonstrate the appropriate use of computers, electronic devices and household appliances to complete a project
2. Identify the most effective household appliance to complete a project

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### Alignments:
- CCSS: 6-8.RST.3; 6-8.RST.4; 6-8.RST.7
- Performance: 1.4, 2.5, 3.5
- Knowledge: (CA) 3 (FA) 1 (H/PE) 4 (SS) 7
- PEGLE: EHMP.1.C (Gr. K-3); EHMP.2.A (Gr. K-4)
- NETS: 5b
- DOK: 2

### Instructional Strategies
- Through teacher guided practice, students will:
  - create a PowerPoint project using a variety of electronic devices
  - using a:
    - stove
    - oven
    - microwave
    - blender
    - hand mixer
    - sink
    - sewing machine
  - without harm to self
  - use a digital camera
### Assessments/Evaluations

- Teacher created scoring guides based on operation of:
  - computers
  - electronic devices
  - household appliances
- Teacher observation of correct operation of:
  - computers
  - electronic devices
  - household appliances

### Sample Assessment Questions

- Teacher created scoring guide: Student can use a microwave to cook a hotdog

### Instructional Resources/Tools

- Computers
- Electronic devices
- Household appliances

### Literacy Connections

- Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks
- Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades K-5 texts and topics
- Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)

### Cross Curricular Connections

- Vocational Work Skills
- Independent Living II