|  |  |
| --- | --- |
| *ELA/Literacy***CCSS.ELA-Literacy.W.5.7-5.9 Research to Build & Present Knowledge** Conduct short research projects that build knowledge through investigation of different aspects of a topic. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. Draw evidence from literary or informational texts to support analysis, reflection, and research. | Students conduct a short research project to determine the impact of climate and temperature on soil moisture. These projects require students to collect and analyze data, draw conclusions and articulate their findings.  |
| *Mathematics* **CCSS.Math.Content.5.MD.B.2 Represent and Interpret Data** Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots.  | Students graph the data they collect in their research projects in order to visually represent the information and analyze the results. |
| *Social Studies* **NCSS III People, Places, & Environments**Describe and speculate about physical system changes, such as seasons, climate and weather, and the water cycle.Use appropriate resources, data sources, and geographic tools such as atlases, databases, grid systems, charts, graphs, and maps to generate, manipulate, and interpret information. | Students create hypotheses about the impact of different climatic regions on soil moisture. This requires them to understand the geographic location of different places as well as the climate and weather. Students need to use maps and other data sources to learn about the different places they are investigating in order to make informed decisions when selecting geographic locations to include in their research. |
| *Technology*  **ISTE Standards for Students (2016)** (<https://www.iste.org/standards/for-students>)*Digital Citizen:* * 2b-Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
* 2c-Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

*Computational Thinker:** 5a-Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
* 5b- Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

*Global Collaborator:** 7b- Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

7d-Students explore local and global issues and use collaborative technologies to work with others to investigate solutions. | Students are required to use digital tools to access and analyze data. Students must exhibit characteristics of good digital citizenship while utilising these tools.Students engage in computational thinking as they collect and analyse data in order to test hypotheses and make decisions.Students engage in global collaboration by adding data to a shared database. |

**Connections to the *Common Core State Standards* (NGAC and CCSSO 2010) and *International Society for Technology in Education Technology Standards* (ISTE 2016):**