

Grade 4: Spreadsheets

ESTABLISHED GOALS:

Competencies:

- *Students will demonstrate the ability to use appropriate spreadsheet software to construct, organize, calculate, analyze and interpret ideas and data, and to present conclusions.*
- *Students will demonstrate the ability to create databases, spreadsheets and a variety of graphic presentations to communicate numeric and visual information.*

Content Standards:

- ISTE.1.CI. Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- ISTE.2.CC. Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- ISTE.3.RIF. Apply digital tools to gather, evaluate, and use information.
- ISTE.4.CT. Use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
- ISTE.5.DC. Understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- ISTE.6.TOC. Demonstrate a sound understanding of technology concepts, systems, and operations.

Transfer

*Students will be able to independently use their learning to collect data to **create spreadsheets and graphs.***

Meaning

ENDURING UNDERSTANDINGS

Students will understand that...

- data may be represented in a variety of ways and there are advantages and disadvantages associated with each statistical method.
- how data is represented influences how it may be interpreted.
- spreadsheets organize and display information and allow you to manipulate a large amount of data.

ESSENTIAL QUESTIONS

- What is the best way to organize data?

Acquisition

Students will know...

- in a spreadsheet program charts and graphs can be interpreted for data analysis.
- that a cell location name is based on the cell's row and column.
- that cells are the building blocks of a spreadsheet.
- that rows include number labels and that columns include letter labels.
- that data is entered in specific cells.
- that the components of a spreadsheet include worksheets, cells, rows, and columns.

vocabulary: spreadsheet, worksheet, column, row, cell, active cell, chart, graph, pie/bar/line graph, table, range, formula, grid lines, autosum, data, chart, select, heading, label, formatting, conditional formatting

Students will be skilled at...

- entering data in individual cells.
- creating, and labeling line graphs, bar graphs, and pie charts.
- reading and interpreting line graphs, bar graphs, and pie charts.
- conducting surveys and displaying the information as a pie chart, bar graph, or line graph.
- identifying and naming the components of a spreadsheet, including worksheet, cell, row, and column.

<i>Content Area Literacy Standards</i>	<i>21st Century Skills</i>
• NOT APPLICABLE	• use and manage information • use systems thinking • access and evaluate information

<i>Evaluative Criteria</i>	<i>Assessment Evidence</i>
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

<i>Summary of Key Learning Events and Instruction</i>		
<i>Science Integration</i>	<i>College, Career, and Civic Life Integration</i>	<i>Technology Integration</i>
<i>District Materials</i>	<i>Distance Learning/Field Trips</i>	<i>Technology Resources</i>