

**Computer Technology Curriculum
Grade 8 – Marking Period 1
Curriculum Map**

Big Idea: Technology for Communication, Collaboration, Research, and Problem Solving

| Enduring Understandings | Essential Questions | Skills/21 st Century Skills | Standards | Assessments |
|---|--|--|--|---|
| <p>Students select and use digital tools effectively and productively to: conduct research, construct knowledge, communicate, collaborate, solve problems, and make informed decisions.</p> <p>Students practice safe, legal and responsible use of information and technology.</p> <p>Vocabulary:</p> <ul style="list-style-type: none"> - Research - Analyze - Evaluate - Synthesize - Credibility - Collaborate - Online Database - Digital Citizenship - Spreadsheet: Column, Row, Cell, Alignment, Format, Formulas, Data, Chart Type, Axis, Legend, Data Labels | <p>How can digital tools be used to:</p> <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions <p>What responsibilities do I have as a digital citizen?</p> <p>How do we participate respectfully and responsibly in an online community?</p> <p>Suggested Modifications:</p> <ul style="list-style-type: none"> - Small group instruction - Chunking of skills - Shorten length assignment - Tiered assignment - Independent work | <ul style="list-style-type: none"> • Use digital tools to: <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions • Use search tools and filters within an online database to locate relevant information. • Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. • Create documents using various applications. • Create a spreadsheet to calculate and graph data. • Participate and communicate effectively and respectfully with others in an online community. <p><i>Critical thinking, Reasoning, Communicate clearly, Collaborate with others, Information literacy.</i></p> | <p>NJCCCS – Technology</p> <p>8.1.8.A.1 Demonstrate knowledge of a real world problem using digital tools. (CC – ELA, Math, Science, SS)</p> <p>8.1.8.A.2 Create a document using one or more digital applications to be critiqued by professionals for usability. (CC – ELA, SS)</p> <p>8.1.8.A.4 Graph and calculate data within a spreadsheet and present a summary of the results. (CC – Math, Science)</p> <p>8.1.8.B.1 Synthesize and publish information about a local or global issue or event. (CC – ELA, SS)</p> <p>8.1.8.D.1 Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media. (CC – ELA, SS)</p> <p>8.1.8.E.1 Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem. (CC – ELA, SS)</p> | <p>Observation Formative Assessment Summative Assessment Projects</p> <p>Suggested Resources:</p> <ul style="list-style-type: none"> - Online databases: Ebsco Host, Go Grolier - Online websites - Google Classroom - Google Doc - Google Sheets - Google Slides - Microsoft Word - Microsoft Excel - Microsoft PowerPoint |

**Computer Technology Curriculum
Grade 8 – Marking Period 2
Curriculum Map**

Big Idea: Technology for Communication, Collaboration, Research, and Problem Solving

| Enduring Understandings | Essential Questions | Skills/21 st Century Skills | Standards | Assessments |
|--|--|---|--|---|
| <p>Students select and use digital tools effectively and productively to: conduct research, construct knowledge, communicate, collaborate, solve problems, and make informed decisions.</p> <p>Students practice safe, legal and responsible use of information and technology.</p> <p>Vocabulary:</p> <ul style="list-style-type: none"> - Research - Analyze - Evaluate - Synthesize - Credibility - Collaborate - Online Database - Digital Citizenship - Intellectual Property - Copyright - Public Domain - Creative commons - Fair use - Spreadsheet: Column, Row, Cell, Alignment, Format, Formulas, Data, Chart Type, Axis, Legend, Data Labels | <p>How can digital tools be used to:</p> <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions <p>What responsibilities do I have as a digital citizen?</p> <p>How and why do we evaluate credibility of information?</p> <p>Suggested Modifications:</p> <ul style="list-style-type: none"> - Small group instruction - Chunking of skills - Shorten length assignment - Tiered assignment - Independent work | <ul style="list-style-type: none"> • Use digital tools to: <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions • Use search tools and filters within an online database to locate relevant information. • Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. • Evaluate the credibility and accuracy of online information. • Evaluate what is fair and legal usage of information or media, and what is not. • Participate and communicate effectively and respectfully with others in an online community. • Use digital tools to simulate a problem or theory. • Create a spreadsheet to calculate and graph data. <p><i>Critical thinking, Reasoning, Communicate clearly, Collaborate with others, Information literacy.</i></p> | <p>NJCCCS – Technology</p> <p>8.1.8.A.3 Use and/or develop a simulation that provides an environment to solve a real world problem or theory. (CC – Math)</p> <p>8.1.8.A.4 Graph and calculate data within a spreadsheet and present a summary of the results. (CC – Math, Science)</p> <p>8.1.8.B.1 Synthesize and publish information about a local or global issue or event. (CC – ELA, SS)</p> <p>8.1.8.D.3 Demonstrate an understanding of fair use and Creative Commons to intellectual property. (CC – SS)</p> <p>8.1.8.D.4 Assess the credibility and accuracy of digital content. (CC – ELA, SS)</p> <p>8.1.8.E.1 Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem. (CC – ELA, SS)</p> | <p>Observation Formative Assessment Summative Assessment Projects</p> <p>Suggested Resources:</p> <ul style="list-style-type: none"> - Online databases: Ebsco Host, Go Grolier - Online websites - Google Classroom - Google Doc - Google Sheets - Google Slides - Desmos - Microsoft Word - Microsoft Excel - Microsoft PowerPoint |

**Computer Technology Curriculum
Grade 8 – Marking Period 3
Curriculum Map**

Big Idea: Technology for Communication, Collaboration, Research, and Problem Solving

| Enduring Understandings | Essential Questions | Skills/21 st Century Skills | Standards | Assessments |
|--|---|--|---|---|
| <p>Students select and use digital tools effectively and productively to: conduct research, construct knowledge, communicate, collaborate, solve problems, and make informed decisions.</p> <p>Students practice safe, legal and responsible use of information and technology.</p> <p>Vocabulary:</p> <ul style="list-style-type: none"> - Research - Analyze - Evaluate - Synthesize - Credibility - Collaborate - Online Database - Digital Citizenship - Database: Table, Record, Field, Data Integrity, Template, Data Type, Primary Key, Forms, Query, Relationship, Sort, Filter, Report - Culture | <p>How can digital tools be used to:</p> <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions <p>What responsibilities do I have as a digital citizen?</p> <p>How do we participate respectfully and responsibly in an online community?</p> <p>How does one's culture influence their point of view on a global problem?</p> <p>How can databases be used?</p> <p>Suggested Modifications:</p> <ul style="list-style-type: none"> - Small group instruction - Chunking of skills - Shorten length assignment - Tiered assignment - Independent work | <ul style="list-style-type: none"> • Use digital tools to: <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions • Use search tools and filters within an online database to locate relevant information. • Use digital tools to work collaboratively on a global problem and discuss with learners of other cultures. • Participate and communicate effectively and respectfully with others in an online community. • Use digital tools to simulate a problem or theory. • Create a spreadsheet to calculate and graph data. • Use the following database features: create database, define field/field type, enter data, sort data, filter data, query data, generate report, save. <p><i>Critical thinking, Reasoning, Communicate clearly, Collaborate with others, Information literacy.</i></p> | <p>NJCCCS – Technology</p> <p>8.1.8.A.3 Use and/or develop a simulation that provides an environment to solve a real world problem or theory. (CC – Math)</p> <p>8.1.8.A.4 Graph and calculate data within a spreadsheet and present a summary of the results. (CC – Math)</p> <p>8.1.8.A.5 Create a database query, sort and create a report and describe the process, and explain the report results. (CC – Science)</p> <p>8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries. (CC – ELA, SS)</p> <p>8.1.8.E.1 Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem. (CC – ELA, SS)</p> | <p>Observation Formative Assessment Summative Assessment Projects</p> <p>Suggested Resources:</p> <ul style="list-style-type: none"> - Online databases: Ebsco Host, Go Grolier - Online websites - Google Classroom - Google Doc - Google Sheets - Google Slides - Desmos - Microsoft Word - Microsoft Excel - Microsoft PowerPoint - Microsoft Access |

**Computer Technology Curriculum
Grade 8 – Marking Period 4
Curriculum Map**

Big Idea: Technology for Communication, Collaboration, Research, and Problem Solving

| Enduring Understandings | Essential Questions | Skills/21 st Century Skills | Standards | Assessments |
|---|--|--|--|---|
| <p>Students select and use digital tools effectively and productively to: conduct research, construct knowledge, communicate, collaborate, solve problems, and make informed decisions.</p> <p>Students practice safe, legal and responsible use of information and technology.</p> <p>Vocabulary:</p> <ul style="list-style-type: none"> - Research - Analyze - Evaluate - Synthesize - Credibility - Collaborate - Online Database - Digital Citizenship | <p>How can digital tools be used to:</p> <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions <p>What responsibilities do I have as a digital citizen?</p> <p>How and why do we evaluate credibility of information?</p> <p>How do we participate respectfully and responsibly in an online community?</p> <p>Suggested Modifications:</p> <ul style="list-style-type: none"> - Small group instruction - Chunking of skills - Shorten length assignment - Tiered assignment - Independent work | <ul style="list-style-type: none"> • Use digital tools to: <ul style="list-style-type: none"> - conduct research - construct knowledge - communicate effectively - work collaboratively - solve problems - make informed decisions • Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. • Use digital tools to simulate a problem or theory. • Create citations for online sources. • Evaluate what is fair and legal usage of information or media, and what is not. • Participate and communicate effectively and respectfully with others in an online community. <p><i>Critical thinking, Reasoning, Communicate clearly, Collaborate with others, Information literacy.</i></p> | <p>NJCCCS – Technology</p> <p>8.1.8.A.3 Use and/or develop a simulation that provides an environment to solve a real world problem or theory. (CC – Math, Science)</p> <p>8.1.8.B.1 Synthesize and publish information about a local or global issue or event. (CC – SS)</p> <p>8.1.8.D.2 Demonstrate the application of appropriate citations to digital content. (CC – SS)</p> <p>8.1.8.D.3 Demonstrate an understanding of fair use and Creative Commons to intellectual property. (CC – SS)</p> <p>8.1.8.E.1 Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem. (CC – ELA, SS)</p> <p>8.1.8.F.1 Explore a local issue, by using digital tools to collect and analyze data to identify a solution and make an informed decision. (CC – Science)</p> | <p>Observation Formative Assessment Summative Assessment Projects</p> <p>Suggested Resources:</p> <ul style="list-style-type: none"> - Online databases: Ebsco Host, Go Grolier - Online websites - Google Classroom - Google Doc - Google Sheets - Google Slides - Desmos - Microsoft Word - Microsoft Excel - Microsoft PowerPoint |