



**Garfield School District Middle School Technology Curriculum**  
**Grades 6-8**

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**Middle School Technology Curriculum**  
**6<sup>th</sup> Grade Pacing Chart**

<u>Unit Title</u>	<u>Description/Objective</u>	<u>Duration</u>	
Cell Phone Project	<b>SWBAT research current gaps in existing cell phones and create a prototype of a cell phone that meets today's global needs.</b>	3 Weeks	8.1.8.A.3, 8.1.8.A.4, 8.1.8.A.5, 8.1.8.E.1, 8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3 8.1.8.B.1 8.1.8.C.1, 8.1.8.F.1, 8.2.8.A.1, 8.2.8.C.1
Anti-Cyber Bully Project	<b>SWBAT research current cyber bullying issues on a global level and create an inspirational and helpful presentation on ethical ways to utilize social media and suggestions to avoiding cyber bullying.</b>	2 Weeks	8.1.8.D.1, 8.1.8.D.2, 8.1.8.D.3, 9.1.8.A.1, 9.1.8.A.2
Web Design Project	<b>SWBAT research successful web design platforms and recreate a website utilizing effective graphic web design.</b>	2 Weeks	9.1.8.E.1, 9.1.8.E.2, 9.1.8.E.3, 9.1.8.E.4
Professional Business Letter Formatting	<b>SWBAT to learn proper professional business letter formatting skills.</b>	2 Weeks	9.2.8.A.3 9.2.8.A.4 9.2.8.A. L.A.7.2 L.A.2A L.A.7.2B l.a.7.2.C, l.A.7.2.D, l.A.7.2.D, L.A.7.2.E, L.a.7.2.F
Natural Disaster Project	<b>SWBAT research current global natural disasters and identify what caused them and technology innovations that could have helped avoid and or provide future solutions to cause.</b>	2 Weeks	9.1.8.B.1, 9.1.8.B.2



Middle School Technology Curriculum  
 7<sup>th</sup> Grade Pacing Chart

<u>Unit Title</u>	<u>Description/Objective</u>	<u>Duration</u>	
Learning the Use of Credit	<b>SWBAT to learn and appreciate the value of obtaining and maintain good financial credit.</b>	2 Weeks	9.2.8.B.10, 9.2.8.B.11, 9.2.8.B.12, 9.2.8.C.1, 9.2.8.C.2, 9.2.8.C.3, 9.2.8.C.4, 9.2.8.C.6, 9.2.8.C.8, 9.2.8.C.9, 9.2.8.E.2, 9.2.8.E.4, 9.2.8.E.6, 9.2.8.E.7
Microsoft PowerPoint– Creating Animations for a Theme Restaurant	<b>Students will use PowerPoint’s animation features to show various aspects of the theme restaurant they have designed.</b>	1 Week	8..1.8.A.3
Microsoft PowerPoint– Creating a Multiple Choice Science Quiz	<b>Students will use PowerPoint’s animation features to create a multiple choice quiz on a grade level science topic – such as ‘Great White Sharks’</b>	2 Weeks	8..1.8.A.3
Microsoft Excel – Creating a Calorie Chart	<b>Students will be able to use math skills to create a calorie chart in Excel.</b>	2 Weeks	<b>8.1.12a1 ,8.1.12a2, 8.1.12.a4</b>
Microsoft Excel – Designing a Theme Restaurant	<b>Students will be able to use Excel’s 2-D drawing features to create a theme restaurant.</b>	2 Weeks	8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3
Microsoft Word– Creating a Restaurant Menu and Description	<b>Students will be able to use their writing skills to properly format a menu and create a restaurant description.</b>	2 Weeks	W.7.2.a, W.7.2.b, W.7.2.c, W.7.2.d, W.7.2.e, W.7.2.f



Middle School Technology Curriculum  
 8<sup>th</sup> Grade Pacing Chart

<u>Unit Title</u>	<u>Description/Objective</u>	<u>Duration</u>	
Microsoft PowerPoint– Creating Animations for Small Business	<b>Students will use PowerPoint’s animation features to show various aspects of the small business they have designed.</b>	1 Week	8..1.8.A.3
Microsoft Excel – Designing a Small Business	<b>Students will be able to use Excel’s 2-D drawing features to create a small business.</b>	2 Weeks	8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3
Microsoft PowerPoint– Researching Careers	<b>Students will use PowerPoint to create a slideshow about five possible careers they might be interested in during their working life.</b>	1 Week	9.1.8.C1, 9.3.8.B.7, 9.3.8.B.8, 9.3.8.B.9, 9.3.8.B.10, 9.3.8.B.11, 9.3.8.B.12
Microsoft PowerPoint– Current Technology’s Impact both Positive and Negative.	<b>Students will use PowerPoint to argue a side on a technological controversy.</b>	1 Week	8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3, 8.2.8.C.1, 8.2.8.C.2, 8.2.8.D.1, 8.2.8.E.1, 8.2.8.F.1, 8.2.8.F.2, 8.2.8.G.1, 8.2.8.G.2



### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Anti-Cyber Bully Project

**Target Course/Grade Level:** 6<sup>th</sup> Grade

**Duration:** 2 weeks

**Description:** SWBAT research current cyber bullying issues on a global level and create an inspirational and helpful presentation on ethical ways to utilize social media and suggestions to avoiding cyber bullying.

### Concepts & Understandings

**Concepts**

- Researching current cyber bully issues on local and global levels
- Creating a solution to meet the demands of teens being bullied in social media

**Understandings**

- The importance utilizing social media safely and effectively
- The impact of cyber bullying on a local and global level
- The significance of avoiding social media bullying

### Learning Targets

8.1.8.D.1, 8.1.8.D.2, 8.1.8.D.3, 9.1.8.A.1, 9.1.8.A.2 RI.8.2, W8.6 W.8.7, SL.1.DL.8.1L.8.2C, W.8.7, W.8.6W.8.6

### 21<sup>st</sup> Century Themes and Skills

- Ethical Behavior, Internet Safety, Creative thinking, Collaboration, Social Media research, Problem Solving, Interpersonal Skills

### Essential Questions

- In a world revolving around Social media how do teenagers avoid the dangers related to being in the new age cyber world?
- How do we analyze and identify current cyber bully issues and avoid being a part of the dangers of social media?
- What can we do as teenagers to participate in the cyber world safely without adding to and promoting antbullying?

### Unit Results/Assessments

**Students will ...**

- Be able to research and identify industry unsafe practices in the cyber world of social media and outline dangers. SWBAT identify new solutions to meet current global safety issues in Social Media and address cyber bully platforms. SWBAT create a cohesive solution in an anti cyber bully slideshow on internet safety. SWBAT Create a anti-cyber bully resource page that provides students with outlets, hotlines and web based organizations for support and solutions for victims of cyber bullying acts.

**Assessments:**

- Projects

### Suggested Activities/Materials

**Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk**

ELL, Special Ed. At Risk

- Research and create 5 social media solutions for teens being cyber bullies from given websites
- Pick 3 social media solutions for teens from given list

On Level

- Create a cohesive slideshow promoting anti cyber bullying amongst teens locally and globally.
- Research and create at least 10 social media solutions for teens being cyber bullies including web based organizations, online resources and hotlines for teens to turn to.
- Research **and identify current** industry gaps in cellular communication technology.

Gifted & Talented or Enrichment

- Identify new solutions to meet current global demands on internet safety in regards to social media.

Materials:

- Computer; laptop; printer; PowerPoint; Internet, Smart Board



## Garfield Elementary School

Aligned to the 2014 New Jersey Student Learning Standards

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

### Unit Overview

**Content Area:** 21<sup>st</sup> Century Life & Careers

**Unit Title:** Professional Business Letter Formatting

**Target Course/Grade Level:** 7<sup>th</sup> Grade

**Duration:** 2 weeks

**Description:** SWBAT to learn proper professional business letter formatting skills.

### Concepts & Understandings

#### Concepts

- Researching the college of choice and which one is best for profession
- Business letter formatting
- SAT scores, GPA & Extra Curricular Activities and how they relate to 1<sup>st</sup> impressions of colleges
- Professional essay writing skills

#### Understandings

- The importance of a first impression
- Students don't choose a college the college choose you
- Margins, formatting and writing guidelines
- The significance of utilizing proper formatting

### Learning Targets

9.2.8.A.3 ,9.2.8.A.4 , 9.2.8.A., L.A.7.2, L.A 7.2A, L.A.7.2B, 1.a.7.2.C, 1.A.7.2.D, 1.A.7.2.D, L.A.7.2.E, L.a.7.2.F, RI.8.2, W8.6 W.8.7, SL.1.DL.8.1L.8.2C, L.8.6,W.8.5, W.8.1,W.8.1A

### 21<sup>st</sup> Century Themes and Skills

- Internet Research, Writing Skills, Formatting, Professional Growth, Creative thinking, Collaboration, Problem Solving, Imagination

### Essential Questions

- What is the name of the college you wish you could go to and is it the best fit for your profession?
- Do you plan on getting involved in HS in Extra Curricular activities and why?
- What is an Admissions Department?
- Do you know proper formatting for a professional Business letter?
- What is a cover letter?

### Unit Results/Assessments

#### Students will ...

- Be able to research and identify their college of choice related to their "dream" profession.
- SWBAT make sound decisions on what college to go to and what activities they should plan to participate in when they reach HS.
- SWBAT know how to utilize proper formatting for a business cover letter and appreciate the impact of writing skills in relation to first impression.

SWBAT write a formal business letter correctly.

#### Assessments:

- Projects, Oral Presentations

### Suggested Activities/Materials

#### Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk

##### ELL, Special Ed. At Risk

- Imagine you are a junior/senior in HS and are trying to apply to college.
- Research and select a college or university to apply to, the Admissions department's mailing address will be provided.

##### On Level

- Create a professional cover letter, including a properly formatted essay about yourself and why the college of choice should select you.
- Apply proper formatting to all aspects of the business letter, including spacing, indentation, salutation, greeting, address formatting and proper paragraph sentence structure.

##### Gifted & Talented or Enrichment

- Create a cohesive interactive slideshow promoting their selected college campus, extracurricular activities.

##### Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



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### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Cell Phone Project

**Target Course/Grade Level:** 6<sup>th</sup> Grade

**Duration:** 3 weeks

**Description:** SWBAT research current gaps in existing cell phones and create a prototype of a cell phone that meets today's global needs.

### Concepts & Understandings

#### Concepts

- Researching current cell phone technologies to create new innovations for cell phone designs and features
- Creating a 3D design and prototype for Marketing Plan

#### Understandings

- The importance of meeting current demands and technology gaps in cell phone technology
- The impact of a cohesive logo, tagline and graphic design image of marketing concept

### Learning Targets

- 8.1.8.A.3, 8.1.8.A.4, 8.1.8.A.5, 8.1.8.E.1, 8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3 8.1.8.B.1 8.1.8.C.1, 8.1.8.F.1, 8.2.8.A.1, 8.2.8.C.1, SL8.2, 8.G, 8.G.2, CC8G9, RI8.1, RI8.3

### 21<sup>st</sup> Century Themes and Skills

- Creative thinking, Collaboration, Industry research, Problem Solving

### Essential Questions

- In a world of constant change what solution can we provide?
- How do we analyze the industry gaps and fill them with new innovations?

### Unit Results/Assessments

#### Students will ...

- Be able to research and identify industry gaps in cellular communication technology. SWBAT identify new solutions to meet current global demands on the communication market. SWBAT create a cohesive marketing concept with original logo, tagline and prototype utilizing 3D graphic Design. SWBAT utilize digital tools to create a cellular phone and prototype that provides solutions to a global marketplace in regards to cyber bullying. SWBAT Create a anti-cyber bully application to communicate to international communities in regards to social media bullying issues.

#### Assessments:

- Projects, Oral Presentations

### Suggested Activities/Materials

#### Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk

##### ELL, Special Ed. At Risk

- Research and identify current industry gaps in cellular communication technology.
- Identify current/existing solutions to meet current global demands on the communication market.

##### On Level

- Create a cohesive marketing concept with original logo, tagline and prototype utilizing 3D graphic Design.
- Address the ongoing demand for cyber bullying prevention

##### Gifted & Talented or Enrichment

- Create a 5 page marketing brochure to pitch, display and sell the new cellular communication device on a global level.
- Create an Anti-bully app for the cell phone that communicates to international platforms to address global cyber bully issues

#### Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



### Unit Overview

**Content Area: 21<sup>st</sup> Century Life & Careers**

**Unit Title:** Learning the Use of Credit

**Target Course/Grade Level:** 7<sup>th</sup> Grade

**Duration:** 2 weeks

**Description:** SWBAT to learn and appreciate the value of obtaining and maintain good financial credit.

### Concepts & Understandings

**Concepts**

- Researching the term credit score
- Business career choices and financial responsibility
- Excel spreadsheet formulas
- Financial terminology
- Taxes and how they effect financial worth

**Understandings**

- The importance of a Credit Score
- Financial Responsibility and money making decisions
- The impact of bad credit
- The significance of being fiscally sound

### Learning Targets

- 9.2.8.B.10, 9.2.8.B.11, 9.2.8.B.12, 9.2.8.C.1, 9.2.8.C.2, 9.2.8.C.3, 9.2.8.C.4, 9.2.8.C.6, 9.2.8.C.8, 9.2.8.C.9, 9.2.8.E.2, 9.2.8.E.4, 9.2.8.E.6, 9.2.8.E.7, W.8.6, W.8.7, F.IF.8, 8.EE.5.6, RI.8.1, RI.8.3

### 21<sup>st</sup> Century Themes and Skills

- Internet Research, Excel Formulas, Financial Responsibility, Budgeting, Creative thinking, Collaboration, Problem Solving,

### Essential Questions

- What is a credit score, and why is it important?
- Are financial choices a direct reflection of one's maturity and educational levels?
- What saving tools can help aid in effective financial planning?
- What type of technology platform can be utilized to plan for personal finances?
- Can saving practices effect professional growth related to entrepreneurship?

### Unit Results/Assessments

***Students will ...***

- Be able to research and identify the best financial planning practices and start planning for future goals.
- SWBAT make sound financial decisions.
- SWBAT know how to utilize Excel spreadsheet and create formulas to help start saving and or get out of debt.
- SWBAT appreciate the impact of a credit score.

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials





## Garfield Elementary School

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***Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk***

ELL, Special Ed. At Risk

- Create a list of current debt and or financial responsibilities.

On Level

- Use Excel to create formulas to help conduct sound financial planning.

Gifted & Talented or Enrichment

- Forecast & project future savings by Applying proper formulas to make financial predictions.

Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



### Unit Overview

**Content Area: Technology Education, Engineering, and Design**

**Unit Title:** Natural Disaster Project

**Target Course/Grade Level:** 6<sup>th</sup> Grade

**Duration:** 2 weeks

**Description:** SWBAT research current global natural disasters and identify what caused them and technology innovations that could have helped avoid and or provide future solutions to cause.

### Concepts & Understandings

**Concepts**

- Researching current natural disaster issues on local and global levels
- Technology innovations that could help prevent future disasters
- Graphing global weather patterns

**Understandings**

- The importance utilizing technology innovations to provide communities that are at risk of natural disasters effectively
- The impact of technology solutions in regards to natural disasters
- The significance of technology platforms in relation to proactive solutions and or innovations to aid in aftermath rebuilding

### Learning Targets

- 9.1.8.B.1, 9.1.8.B.2 , W.8.6, 8. 8.EE.7, 8.EE.8, CC8G9,W.8.7,RI.8.1, RI.8.3,RI8.8, W.8.1,W.8.1A

### 21<sup>st</sup> Century Themes and Skills

- Internet research, Understanding Global Weather Patterns and climate issues, Creative thinking, Collaboration, Problem Solving,

### Essential Questions

- What are current social practices doing to our climate?
- Can humans be aiding the current global natural disasters through negative social practices and daily behaviors?
- Can technology help proactively avoid natural disasters?
- Can technology innovations help the aftermath of a natural disaster?

### Unit Results/Assessments

**Students will ...**

- Be able to research and identify current weather natural disasters. SWBAT to create a slideshow outlining a specific natural disaster and the repercussions of its aftermath. SWBAT to understand the impact of a natural disaster on a community.

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials

**Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk**

ELL, Special Ed. At Risk

- List monumental global natural disasters.
- Research and identify current natural disasters on a global level and create a slideshow that outlines the disaster.

On Level

- Identify technology solutions that could have helped aid in proactively avoid and or help aid in the aftermath.
- Create a cohesive slideshow that identifies the effects of a natural disaster on a community.

Gifted & Talented or Enrichment

- Graphically design a slideshow with actual footage of natural disaster including streaming embedded video and or news articles.
- Provide high resolution graphics.
- Outline hotlines, services and programs that helped aid recovery.

Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



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### Unit Overview

**Content Area:** 21<sup>st</sup> Century Life & Careers

**Unit Title:** Web Design Project

**Target Course/Grade Level:** 6<sup>th</sup> Grade

**Duration:** 2 weeks

**Description:** SWBAT research successful web design platforms and recreate a website utilizing effective graphic web design.

### Concepts & Understandings

#### Concepts

- Researching effective website design
- identifying poor web design
- Web based marketing solutions to reach a global economy

#### Understandings

- The importance utilizing technology innovations to provide web based marketing solutions as a business model to promote and or generate sales
- The impact of technology solutions in regards to web based marketing platforms
- The significance of technology platforms in relation to a successful web based business model

### Learning Targets

- 9.1.8.E.1, 9.1.8.E.2, 9.1.8.E.3, 9.1.8.E.4, W.8.5, 8.EE.5, 8.EE.6, 8.EE.8, W.8.1A, CC8G9, W.8.8, W.8.6

### 21<sup>st</sup> Century Themes and Skills

- Internet Research, Analyzing Global Economy, Marketing Strategies, Creative thinking, Collaboration, Problem Solving,

### Essential Questions

- What are current social practices for an online business?
- What is the industry standard for a website design?
- Can technology help drive sales and why? Cost of advertising?
- Can technology innovations help market and promote a business's growth?

### Unit Results/Assessments

#### Students will ...

- Be able to research and identify web based marketing solutions for ecommerce. SWBAT to understand the impact of a effective and poor web design choices for a company's bottom line. SWBAT graphically design a website from scratch after researching effective websites.

#### Assessments:

- Projects, Oral Presentations

### Suggested Activities/Materials

#### Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk

##### ELL, Special Ed. At Risk

- List successful web designs that attract high traffic population to the website.
- Research and identify current websites that you personally find appealing and easy to navigate.

##### On Level

- Identify technology solutions that could enhance an innovative web design for new website
  - Research, outline and highlight company marketing materials in a cohesive layout for a dynamic website
- Build a starter company website from ground up utilizing high resolution graphics.

##### Gifted & Talented or Enrichment

- Build a interactive advanced website with interpersonal capabilities for consumers to communicate with
- Websites must incorporate an advanced photo gallery of products/services

##### Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft Excel – Creating a Calorie Chart

**Target Course/Grade Level: 7**

**Duration:** two weeks

**Description - Students will be able to use math skills to create a calorie chart in Excel.**

### Concepts & Understandings

**Concepts**

- Students will become skilled in creating formulas and charts.

**Understandings**

- Identify how to use spreadsheet formulas.
- Identify how to create charts

### Learning Targets

- 8.1.12a1 ,8.1.12a2, 8.1.12.a4, 8.G, 8.G.2, 8.EE, CC8F1, W.8.2.B, W.8.2.A

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- How are formulas used in a spreadsheet?
- How are charts created with data?
- How does one distribute one’s daily calories in a healthy diet?

### Unit Results/Assessments

***Students will ...***

- Be able to create a spreadsheet using proper formatting, formulas, graphs, and charts.
- Research, evaluate and identify healthy eating habits and lifestyle changes.

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials

***Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk***  
ELL, Special Ed. At Risk

- Research websites to find healthy foods to feed the athlete.

On Level

- Create a calorie spreadsheet for a professional athlete, who is in training camp.
- Create a healthy menu per calories for an active athlete.

Gifted & Talented or Enrichment

- Create a calorie chart for an athlete to plan what they will eat all meals at the camp: breakfast, lunch, snacks, and dinner.
- Calories must add up to a goal total by the end of the day.
- Create a pie chart showing how the calories are used during the day.

Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft Excel – Designing a Theme Restaurant

**Target Course/Grade Level: 7**

**Duration:** two weeks

**Description - Students will be able to use Excel’s 2-D drawing features to create a themerestaurant.**

### Concepts & Understandings

**Concepts**

- Students will become skilled in creating drawings of various parts of a theme restaurant

**Understandings**

- Identify how to visualize a space and how to structure designs.
- Identify how to create key elements of a restaurant

### Learning Targets

- 8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3, 8.EE.8, CC8G9, CC8F1, CC8FS, RI.8.1, RI.8.7, W.8.1, W.8.1A

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- How does one create 2D effects in Microsoft Excel?
- What are the common features of a theme restaurant?
- How does a restaurant make best use of its theme?

### Unit Results/Assessments

***Students will ...***

- Be able to create a series of drawings depicting a restaurant

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials

***Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk***

ELL, Special Ed. At Risk

- Research websites to find trending local restaurants.
- List top five popular locations for dining.

On Level

- Create a restaurant menu that incorporates a theme.
- Create a healthy menu and a snack portion for all customers.

Gifted & Talented or Enrichment

- Research vendors for specific themed dishes that offer authentic cuisine
- Add captions with research and graphics on the menu to enhance the theme
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Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



## Garfield Elementary School

Aligned to the 2014 New Jersey Student Learning Standards

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### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft PowerPoint– Creating a Multiple Choice Science Quiz

**Target Course/Grade Level: 7**

**Duration: 1 to 2 weeks**

**Description - Students will use PowerPoint’s animation features to create a multiple choice quiz on a grade level science topic – such as ‘Great White Sharks’**

### Concepts & Understandings

#### Concepts

- Students will become skilled in creating slides and animations on a science topic

#### Understandings

- Identify key questions on a science topic
- Identify how to create interactive questions in PowerPoint

### Learning Targets

- 8..1.8.A.3, 8.EE.5, RI.8.1, RI.8.8, R.I8.4,W.8.1C, RI8.1,W.8.2.B

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- How does one create animations in Microsoft PowerPoint?
- What are appropriate questions about the topic?
- What do various PowerPoint motions add to animations?

### Unit Results/Assessments

#### *Students will ...*

- Be able to create a series of slides that will test the knowledge of the reader.

#### Assessments:

- Projects, Oral Presentations

### Suggested Activities/Materials

#### *Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk*

##### ELL, Special Ed. At Risk

- Research websites to outline Science curriculum being taught.
- List Science questions and provide multiple choice answers

##### On Level

- Create a survey monkey questionnaire that addresses the gaps in comprehension among student
- List and identify the curriculum that needs to be incorporated into the Science assessment/test
- Create True/False questions for the Science test

##### Gifted & Talented or Enrichment

- Create a pie chart to highlight the overall student academic achievements on the Science test
- Create advanced open ended questions for the Science test
- Create a Rubric for the open ended questions

##### Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft Word– Creating a Restaurant Menu and Description

**Target Course/Grade Level: 7**

**Duration: Two weeks**

**Description - Students will be able to use their writing skills to properly format a menu and create a restaurant description.**

### Concepts & Understandings

**Concepts**

- Students will become skilled in formatting a menu, and writing a clear description of a theme restaurant.

**Understandings**

- Identify how to format menus.
- Identify how to properly format a Word document.

### Learning Targets

- W.7.2a, W.7.2b, W.7.2c, W.7.2d, W.7.2e, W.7.2f, CC8G9, CC8F1, CC8FS, R.I8.4, W.8.1C

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- How does one create a document layout, create and add graphics?
- How does one edit documents using the thesaurus, grammar functions, and spell check?
- How does one format headers, footers, page numbers, and text?

### Unit Results/Assessments

***Students will ...***

- Be able to create a documents using proper formatting, and learn how to review for accuracy.

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials

***Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk***

ELL, Special Ed. At Risk

- Research websites to find popular local restaurants.
- List top 10 local eateries.

On Level

- Create a written description of a theme restaurant. Include descriptions of the exterior, waiting area, main dining room, large party room, and kitchen.

Gifted & Talented or Enrichment

- First, create a written description of a theme restaurant. Include descriptions of the exterior, waiting area, main dining room, large party room, and kitchen.
- Next, create a two-column menu for the restaurant, listing at least four items for each section of the menu: appetizers, entrees, desserts, and salads.

Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft PowerPoint– Creating Animations for Small Business

**Target Course/Grade Level: 8**

**Duration: 1 week**

**Description - Students will use PowerPoint’s animation features to show various aspects of the small business they have designed.**

### Concepts & Understandings

**Concepts**

- Students will become skilled in creating animations of various parts of the small business

**Understandings**

- Identify how to animate people, machines and other objects.
- Identify how to create key scenes in the business

### Learning Targets

- 8..1.8.A.3, CC8G9, CC8F1, CC8FS, W.8.1,W.8.1A

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- How does one create animations in Microsoft PowerPoint?
- What are realistic animations in a restaurant?
- What do various PowerPoint motions add to animations?

### Unit Results/Assessments

***Students will ...***

- Be able to create a series of animations to enhance their small business concept.

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials

***Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk***

ELL, Special Ed. At Risk

- Research and identify local small businesses.
- List top 10 local stores that focus on technology needs/services or supplies.

On Level

- Create animations utilizing PowerPoint to showcase small business design.
- Projects will animate people, machines and objects within their small business model.

Gifted & Talented or Enrichment

- Create a written description of a small business model. (Basic) Use an electronic organizational chart.
- Create 3D animated people, objects and machines that will highlight the technology and or equipment that the small business will utilize.
- Use animations of people and things to create a further understanding of how their small business operates.

• Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board





### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft PowerPoint– Current Technology’s Impact both Positive and Negative.

**Target Course/Grade Level: 8**

**Duration: 1 week**

**Description - Students will use PowerPoint to argue a side on a technological controversy.**

### Concepts & Understandings

**Concepts**

- Students will find a current use of technology that is having a major impact on society.

**Understandings**

- What positive role a new technology presents
- What negative role a new technology presents
- Oral presentations will be conducted

### Learning Targets

- 8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3, 8.2.8.C.1, 8.2.8.C.2, 8.2.8.D.1, 8.2.8.E.1, 8.2.8.F.1, 8.2.8.F.2, 8.2.8.G.1, 8.2.8.G.2, RI.8.1, RI.8.4, W.8.8, SL.8.8

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- What are some current problems that technology has caused, and what are possible solutions?
- What are the positives and negatives presented by the new technology?

### Unit Results/Assessments

***Students will ...***

- Be able to create a series of slides arguing one side of an argument in today’s technology

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials

***Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk***

ELL, Special Ed. At Risk

- Research and identify social media concerns.
- Use appropriate websites to research current technology, and then put the information into PowerPoint animated slides.

On Level

- Create an animated slide show utilizing PowerPoint to highlight both negative and positive effects of social media.
- Address the impact of current technology innovations.

Gifted & Talented or Enrichment

- Create a written description of both pros and cons of the impact of technology innovations.
- Create a pro/con chart of technology effects
- Hold a debate on the pros and cons of new technology platforms

Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



## Garfield Elementary School

Aligned to the 2014 New Jersey Student Learning Standards

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft PowerPoint– Researching Careers

**Target Course/Grade Level: 8**

**Duration: 1 week**

**Description - Students will use PowerPoint to create a slideshow about five possible careers they might be interested in during their working life.**

### Concepts & Understandings

#### Concepts

- Students will find 5 careers suitable for their interests

#### Understandings

- Identify how to locate a career that matches one's skillset
- Identify where to find relevant information to help them in their job search

### Learning Targets

- 9.1.8.C1, 9.3.8.B.7, 9.3.8.B.8, 9.3.8.B.9, 9.3.8.B.10, 9.3.8.B.11, 9.3.8.B.12, R.18.5, W.8.6, W.8.6, W.8.8.1,

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- What are various educational opportunities?
- What are ways to narrow down one's interests in the job fields?

### Unit Results/Assessments

#### **Students will ...**

- Be able to create a series of slides showing important information about various jobs

#### **Assessments:**

- Projects

### Suggested Activities/Materials

#### **Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk**

##### ELL, Special Ed. At Risk

- Research and identify potential careers pertaining to personal interest and/or hobbies.
- Use appropriate websites to research job possibilities and create slideshow of findings.

##### On Level

- Create an animated slide show utilizing PowerPoint to highlight researched information
- Address the impact of current technology innovations.

##### Gifted & Talented or Enrichment

- Create a pie chart of most sought after careers in the class.
- Create a written description of top five careers selected among students and explain rationale.
- Create an interactive slideshow on the top five career paths that your peers have selected and illustrate why careers were popular.

#### Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board



### Unit Overview

**Content Area: Educational Technology**

**Unit Title:** Microsoft Excel – Designing a Small Business

**Target Course/Grade Level: 8**

**Duration: 2 weeks**

**Description - Students will be able to use Excel’s 2-D drawing features to create a small business.**

### Concepts & Understandings

**Concepts**

- Students will become skilled in creating drawings of various parts of a small business

**Understandings**

- Identify how to visualize a space and how to structure designs. Students will explain designs to class.
- Identify how to create key elements of a business

### Learning Targets

- 8.2.8.B.1, 8.2.8.B.2, 8.2.8.B.3, W.8.8, RI.8.1, W.8.1, CC8G9, CC8F1, CC8FS, W.8.1B, SL.8.4

### 21<sup>st</sup> Century Themes and Skills

- Creativity, critical thinking, collaboration, problem-solving skills.

### Essential Questions

- How does one create 2D effects in Microsoft Excel?
- What are the common features of a small business?
- What does a particular business need to function?

### Unit Results/Assessments

**Students will ...**

- Be able to create a series of drawings depicting a small business

**Assessments:**

- Projects, Oral Presentations

### Suggested Activities/Materials

**Strategies for Differentiated Instruction to support Special Education, ELL, Gifted & Talented, and At Risk**

ELL, Special Ed. At Risk

- Research and identify a need for a small business potentially based on your interests and/or hobbies.
- Utilizing Excel create blue print of small business floor plans.

On Level

- Use websites to focus on what would be an appropriate small business.
- Then create images of the business using Excel’s drawing features.
- Create 3D blue prints for a small business floor plan incorporating realistic special relations.

Gifted & Talented or Enrichment

- Identify a need for a new small business.
- Write a written description of a small business plan including rationale for investors to support your business model.
- Create an interactive 3D birds eye schematic of your virtual blue prints.

Materials:

Computer; laptop; printer; PowerPoint; Internet, Smart Board