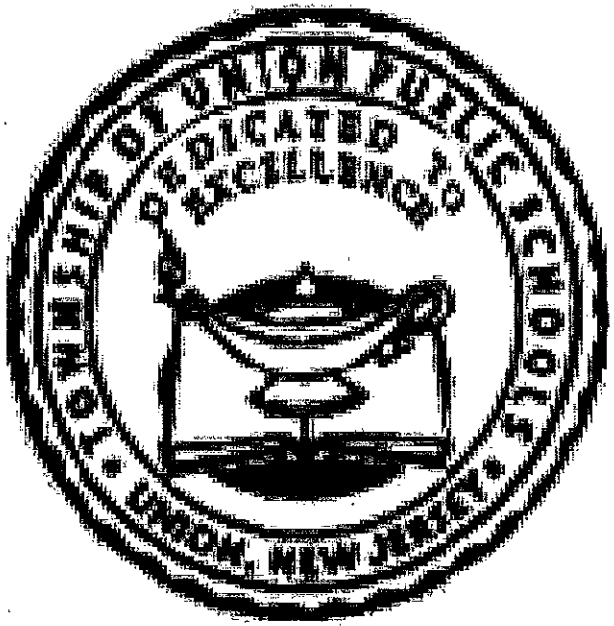
TOWNSHIP OF UNION PUBLIC SCHOOLS



GRADE 5 COMPUTERS

Curriculum Guide

2012-2013

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TOWNSHIP OF UNION PUBLIC SCHOOLS

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Curriculum Committee
Grade 5 Computer

Ms. Joanna Riley
Mr. Craig Wojcik

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Mission Statement

The Township of Union Board of Education believes that every child is entitled to an education designed to meet his or her individual needs in an environment that is conducive to learning. State standards, federal and state mandates, and local goals and objectives, along with community input, must be reviewed and evaluated on a regular basis to ensure that an atmosphere of learning is both encouraged and implemented. Furthermore, any disruption to or interference with a healthy and safe educational environment must be addressed, corrected, or when necessary, removed in order for the district to maintain the appropriate educational setting.

Philosophy Statement

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

Statement of District Goals

- Develop reading, writing, speaking, listening, and mathematical skills.
- Develop a pride in work and a feeling of self-worth, self-reliance, and self discipline.
- Acquire and use the skills and habits involved in critical and constructive thinking.
- Develop a code of behavior based on moral and ethical principals.
- Work with others cooperatively.
- Acquire a knowledge and appreciation of the historical record of human achievement and failures and current societal issues.
- Acquire a knowledge and understanding of the physical and biological sciences.
- Participate effectively and efficiently in economic life and the development of skills to enter a specific field of work.
- Appreciate and understand literature, art, music, and other cultural activities.
- Develop an understanding of the historical and cultural heritage.
- Develop a concern for the proper use and/or preservation of natural resources.
- Develop basic skills in sports and other forms of recreation.

Course Description

The purpose of the district computer education program is to educate students on how to use computers properly and for the use of research and entertainment. It will also be used to teach students about appropriate computer etiquette and internet safety. Additionally, the program will be used to educate students on different software programs and how to make effective presentations at their appropriate grade levels.

Different software programs such as Inspiration, Windows Movie Maker, and Microsoft Office, among others, will be used for students to reach their fullest potential in computer education class. They will learn internet research and typing skills to prepare them for course work in grade levels in and beyond the elementary level. Students will be able to take what they have learned in computer education class and apply it to their grade level class work. There will be an emphasis on using the programs Microsoft Excel, Microsoft PowerPoint, and Microsoft Word.

Course Proficiencies

By the end of grade 5, students will be able to...

1. Navigate appropriate websites.
2. Use search engines effectively.
3. Display proficient knowledge in Microsoft Office programs.
4. Demonstrate keyboarding skills.
5. Demonstrate ability to utilize a variety of multimedia software.
6. Demonstrate ability to present an oral presentation.
7. Identify how to utilize the internet to communicate around the world.
8. Demonstrate the proper way to create an email.

Curriculum Units – Grade 5

Unit 1: **Basic Computer Operations and Concepts**

Unit 2: **Multimedia and Software Exploration**

Unit 3: **Digital Communication**

Unit 4: **Basic Internet and Research Skills**

Unit 5: **Collaborative Technology Seminar**

Pacing Guide- Grade 5

Content	Number of Days
Unit 1: Basic Computer Operations and Concepts	Sept-Oct
Unit 2: Multimedia and Software Exploration	Sept-June
Unit 3: Digital Communication	Sept-June
Unit 4: Internet and Research Skills	Sept-June
Unit 5: Collaborative Technology Seminar	Sept-June

Unit 1: Basic Computer Operations and Concepts

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
1. What are the parts and functions of a computer? 2. How is technology useful?	• Demonstrate responsible behavior when safely operating technology equipment. • Demonstrate correct keyboarding skills by selecting alpha and numeric keys, as well as commonly used keys (i.e. ENTER, SPACEBAR, SHIFT). • Use the components of Windows (icons, scroll bars, title bar, menu bar, etc.). • Understand terms and concepts related with applications • Demonstrate the ability to copy and paste text and graphics.	• Follow commands given by the teacher to use simple programs. • Practice opening, starting up, and closing software programs. • Use videos and classroom management tools to demonstrate proper behavior on the computer. • Print finished products after creation in a program.	• Teacher Evaluation • Self Evaluation

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
	• Identify and use application, documents and downloads folder, hard drive, networked folder icons, and trash icons. • Open and use multiple programs, windows, and/or browser tabs simultaneously. • Demonstrate time management skills in accomplishing lesson objectives. • Open, create, delete, copy, paste, import, and/or export a document, file and folder. • Identify and define terms and concepts related to word processing (alignment/spacing,		

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
	font style/size/color, return/enter, shift, tab, etc.). • Recognize the purpose of basic menu options (new, open, save, quit, print, undo, redo, page setup, insert, format, etc.). • Demonstrate knowledge of copyright laws and the ethical use of copyrighted materials.		

Unit 2: Multimedia and Software Exploration

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
1. How can word processing software be used for a range of purposes? (i.e. Research Projects, Visual Aids, and Web Pages) 2. How can software be used to show data? 3. How can software be used for presentations?	• Use a variety of digital media to publish ideas. • Illustrate and communicate original ideas using digital tools or web resources. • Organize, calculate, and graph data using a spreadsheet. • Use concepts and skills from basic software and apply them to more advanced software. • Use formatting tools in Microsoft Word. (i.e. Setting margins and tabs, inserting tables and charts) • Insert images in various software programs to enhance student work. • Demonstrate how to change fonts, color, and sizes in	• Use current events to create and use forms of digital applications. (e.g., graphic design, word processing, spreadsheets) • Create a PowerPoint/Word Document with use of graphics. • Change margins in Word to help with document formatting. • Create tables in Word to show information and create graphs and charts of that data. • Insert sounds, videos, and clipart into PowerPoint presentations. • Use slide transitions and custom animation in PowerPoint presentations.	• Teacher Evaluation • Self Evaluation

	order to emphasize various parts of a document.		

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
	• Show understanding of various types of graphs. • Use simulation, problem solving, and application programs to reinforce skills, other curricular areas and to further develop critical thinking skills. • Demonstrate the ability to use technology tools (e.g., multimedia authoring and presentation software, digital camera, digital video camera, scanner, etc.) for individual and collaborative writing, communication and publishing activities to create projects.	• Use Excel and Word to collect data and create various charts and graphs of the data. • Use Excel to show data. • Use formulas in Excel to show sum and average. • Format cells to various sizes in Excel. • Use the sort feature in Excel for alphabetizing or numerical order. • Use Microsoft Publisher to create a classroom newsletter. • Use Word to create a website.	

Unit 3: Digital Communication

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
1. How can presentation software help to express our thoughts and ideas? 2. How should you properly present an oral presentation? 3. How can you use the internet to connect with others around the world?	• Use software properly for video and text presentations. • Include links, images, video clips, and animation in PowerPoint presentations.	• Present PowerPoint presentations that include links, images, video clips, and animation. • Create and present short digital stories using Microsoft Photo Story or Windows Movie Maker. • Utilize epals.com to communicate digitally around the world. • Demonstrate the procedures for developing a proper email.	• Teacher Evaluation • Self Evaluation • Peer Evaluation

Unit 4: Internet and Research Skills

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
1. What are the basic rules of using the internet? 2. How can the internet be used to find useful information? 3. How can the internet be used for different purposes? 4. What is plagiarism? 5. How should sources be properly cited? 6. What is the appropriate behavior to use online?	• Work cooperatively and collaboratively to gather information and communicate results. • Develop ability to utilize search engines, key words, and advanced search. • Demonstrate understanding of internet navigation. • Follow instructions on websites. • Demonstrate the ability to use the internet to access, retrieve, interpret, and evaluate information.	• Using search engines, etc., search for images, cut/paste them in a word document, and then find information on the topic and cut/paste the information below the picture. • Participate in virtual field trips through Google Earth and other field trip websites. • Participate in grade appropriate web quests and internet scavenger hunts. • Use a search engine to find information and research. • Use specific keys such as semi-colon and quotation marks to refine search results.	• Teacher Evaluation • Self Evaluation

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
		• Visit given websites to explore themes. • Visit readwritethink.org to assist with writing. • Using an online website such as physical games.net, use or create robots to use problem solving skills. • Demonstrate digital citizenship.	

Unit 5: Collaborative Technology Seminar

Essential Questions	Instructional Objectives/ Skills and Benchmarks *(CPIs)*	Activities	Assessments
1. How can technology be utilized to develop understanding of different subject areas?	• Develop improved problem solving ability. • Incorporate Science, Social Studies, etc. into a technology lesson.	• Have the classroom teacher develop a lesson containing content and the computer teacher implements that content using a digital tool.	• Teacher Evaluation

New Jersey Core Curriculum Content Standards
Academic Area

8.1 Educational Technology All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

- **A. Technology Operations and Concepts**
- **B. Creativity and Innovation**
- **D. Digital Citizenship**
- **F. Critical Thinking, Problem Solving, and Decision-Making**

8.2 Technology Education, Engineering, and Design All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.

- **B. Design: Critical Thinking, Problem Solving, and Decision-Making**
- **G. The Designed World**

New Jersey Scoring Rubric

4 - Outstanding	3 – Above Average	2 - Average	1 – Below Average	0 – Unsatisfactory
Exhibits outstanding skills in software applications.	Exhibits above average skills in software applications.	Exhibits average skills in software applications.	Exhibits below average skills in software applications.	Exhibits unsatisfactory skills in software applications.
Outstandingly observes/follows classroom rules and directions.	Above averagely observes/follows classroom rules and directions.	Averagely observes/follows classroom rules and directions.	Below averagely observes/follows classroom rules and directions.	Unsatisfactorily observes/follows classroom rules and directions.