Randolph Township School District

Technology Education
K-5

Curriculum Contributors:
Jennifer Mariani
Susan Miessler
Lee Ann Pellegrini

Department of Technology Education
Dr. Craig Valenti, Supervisor

Board of Education Approved:
Pending

Appendices Edited Summer 2008:
Jennifer Fano
Elementary Media Specialists

Randolph Township Schools

Table of Contents

Randolph Township Schools

Mission Statement

It is the mission of the Randolph Township Schools to help prepare all our students for further education, productive work, responsible citizenship and personal fulfillment. Toward that end, we will provide students with educational experiences that enable them to acquire the knowledge and develop the thinking and problem-solving skills necessary for a lifelong process of learning. We will guide all students in discovering, valuing and developing their unique talents in order to realize their potential.

EDUCATIONAL GOALS
RANDOLPH TOWNSHIP BOARD OF EDUCATION
VALUES IN EDUCATION

The statements represent the beliefs and values regarding our educational system. Education is the key to self-actualization which is realized through achievement and self-respect. We believe our entire system must not only represent these values, but also demonstrate them in all that we do as a school system.

We believe:

- The needs of the child come first.
- Mutual respect and trust are the cornerstones of a learning community.
- The learning community consists of students, educators, parents, administrators, educational support personnel, the community and Board of Education members.
- A successful learning community communicates honestly and openly in a non-threatening environment.
- Members of our learning community have different needs at different times. There is openness to the challenge of meeting those needs in professional and supportive ways.

- Assessment of professionals (i.e., educators, administrators and educational support personnel) is a dynamic process that requires review and revision based on evolving research, practices and experiences. Development of desired capabilities comes in stages and is achieved through hard work, reflection and ongoing growth.

Randolph Township Schools

Technology Education Introduction

The purpose of the Technology Education program is to equip students with the ability to adapt to and benefit from changing technologies. The technology program promotes understanding, attitude and skill development, through an activity-based, hands-on curriculum. This is accomplished by focusing on the practical application of scientific principles, and the integration of topics from several subject areas. Skills developed from the program include data analysis, decision making, design and creativity, planning, management and implementation, dexterity, and technical literacy. These skills, as well as the content knowledge taken away from each course, will prepare students to be more informed and active citizens in a 21st century technological society.

Affirmative Action Statement

Equality and Equity in Curriculum

The Randolph township School district ensures that the district's curriculum and instruction are aligned to the State's Core Curriculum Content Standards. The curriculum addresses the elimination of discrimination and the achievement gap, as identified by underperforming school-level AYP reports for State assessment. The Curriculum provides equity in instruction, educational programs and provides all students the opportunity to interact positively with others regardless of

race, creed, color, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, religion, disability or socioeconomic status.

N.J.A.C. 6A:7-1.7(b): Section 504, Rehabilitation Act of 1973; N.J.S.A. 10:5; Title IX, Education Amendments of 1972

KINDERGARTEN
COMPUTER EDUCATION CURRICULUM

GOALS: Kindergarten students will learn to use the computer as a tool to reinforce basic classroom skills and begin to develop problem-solving skills.

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS
COMPUTER COMPONENTS		
Students will become familiar with the different pieces of computer hardware and software.		
a. Name the different components of a computer. b. Handle software and hardware appropriately. c. Use a mouse driven menu.	Group lesson and demonstration Ongoing application by students	**TL 8.1.4.A** .1, .2, .3, .9 **TL 8.1.4.B** .2, .3 LA 3.2.5
d. Become acquainted with the procedure for using the mouse and Introducing basic computer skills using opening a file.	Introducing basic computer skills using *JumpStart Kindergarten* Stereo/Hand	**TL 8.1.4.A** .2 LA 32.5, 3.2.7

KEYBOARDING AWARENESS		
Students will become familiar with the computer keyboard layout.		
a. Locate the Enter, Backspace, Space Bar, and, letter keys.	Group lesson and demonstration	**TL 8.1.4.A** .3, .9 LA 3.2.5, 3.2.7
b. Use proper fingering when using the Enter and Space Bar keys.	Ongoing application by students	

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS
COMMUNICATIONS		
Students will become aware of the computer as a communication device, used to create and exchange information.		
a. Use a word processing program to create, and print a short document. • Draw, color, and print a scribble design. • Stamp objects, write a short document, and print.	Combining graphics and text in a document using *Kid Pix Studio.* LA	**TL 8.1.4.A** .1, .2, .3, .4, .8, .9 LA 3.3.2, 3.3.12
b. Become aware of the purposes and uses of telecommunications. • Read aloud. Choose your own adventure with Theodore Tugboat.	www.cochran.com/theodore	LA 3.2.2
• Mouse-use reinforcement. Site: Kendra's Coloring Book	www.geocities.com/enchantedforest7155	

PROBLEM SOLVING

Students will develop and utilize critical thinking and decision-making skills through the use of appropriate software.

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS
a. Classify objects by color, shape, and use.	Reinforcing classification skills using *Word Munchers Deluxe* Grade 1/Classification	**TL 8.1.4.A** .1, .9 MATH 4.14.1, 4.14.4
c. Match upper and lower case letters.	Reinforcing visual discrimination using *JumpStart Kindergarten* Letter Board Puzzle	**TL 8.1.4.A** .1,.2, .3 MATH 4.14.1
d. Match numerals with objects	Reinforcing basic counting skills using *Thinkin' Things 2* Frippletration/Green	**TL 8.1.4.A** .1,.2, .3 MATH*4.6.3, 4.14.1*
e. Match patterns.	Reinforcing visual discrimination using *JumpStart Kindergarten* Watering Can	**TL 8.1.4.A** .1,.2, .3 MATH 4.14.1, 4.14.4
f. Match beginning sounds.	Reinforcing phonics skills using Word *Munchers Deluxe* Grade 1/Phonics	**TL 8.1.4.A** .1,.2, .3 MATH 4.14.1, 4.14.4

g. Classify objects by one or two attributes.	Reinforcing small motor development using *Mighty Math Carnival Countdown* Carnival Cars	**TL 8.1.4.A** .1,.2, .3
h. Add sums of 10 or less.	Reinforcing counting and addition skills using *Mighty Math Carnival Countdown* Snap Clowns/G	**TL 8.1.4.A** .1,.2, .3 MATH 4.1.4, 4.5.2, 4.6.3, 4.6.4, 4.14.1

GRADE LEVEL APPROPRIATE SOFTWARE-KINDERGARTEN

- JumpStart Kindergarten
- JumpStart First Grade
- Kid Pix Studio
- Mighty Math Carnival Countdown
- Thinkin' Things 2
- Word Munchers Deluxe

GRADE 1

COMPUTER EDUCATION CURRICULUM

GOALS: First-grade students willcontinue to reinforce basic curriculum concepts and begin to develop the skills needed to produce creative documents and graphics.

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM

		CONTENT STANDARDS
	COMPUTER COMPONENTS	
Students will become familiar with	the different pieces of computer hardware and software.	**TL 8.1.4.A** .1, .2, .3, .9
	Group lesson and demonstration	
a. Name the different components of a computer.	Ongoing application by students	LA 3.2.5
b. Handle software and hardware Appropriately.		
c. Use a mouse driven menu.	**KEYBOARDING AWARENESS**	
Students will become familiar with	the computer keyboard layout.	
		LA 3.2.5, 32.7
a. Locate and use appropriately the	Group lesson and demonstration	
Enter, Spacebar, Escape,	Ongoing application by students	
Backspace, number, letter, and		**TL 8.1.4.A** .1, .2, .3, .4, .5, .6,
arrow keys.		.7, .8, .9
b. Locate the Shift and letter keys.		
c. Space words properly.		

Students will become aware of the computer as a communication device, used to create and exchange information.		
a. Use a word processing program to create, edit, save, and print a short document. • Lesson 1 Draw a self-portrait and save on a data disk. • Lesson 2 Write and print a brief description of myself. • Lesson 3 Design and save an appropriate background. ▪ Lesson 4 Write and print a short story. ▪ Lesson 5 Print the story.	Combining graphics and text in a document using *Kid Pix Studio* Develop creative writing skills using *Storybook Weaver Deluxe*	LA 3.3.2, 3.3.11, 3.3.12 **TL 8.1.4.A** .1, .2, .3, .4, .5, .6, .7. .8. .9 LA 3.3.2, 3.3.11, 3.3.12
b. Become aware of the purposes and uses of telecommunications. • Initial consonants. Site: Little Explorers. (Write five words that start with _____ sound.)	www.enchantedlearning.com/dictionary . html	LA 3.3.3, 3.4.8 **TL 8.1.4.B** .1, .2, .3, .5, .9
PROBLEM SOLVING		
Students will develop and utilize critical thinking and decision-making skills through use of appropriate software.		LA 3.2.5
a. Match initial consonant sounds with pictures.	Reinforcing phonics skills using Word *Munchers Deluxe*	**TL 8.1.4.A** .1, .2, .3, .4, .5, .6, .7. .9
b. Match short vowel sounds with pictures.	Reinforcing phonics skills using Word *MunchersDeluxe*	LA 3.2.5 **TL 8.1.4.A** .1, .2, .3, .4, .5, .6, .7, .9
c. Follow oral directions.	Reinforcing listening skills using *JumpStart First Grade* Pizza Pie	LA 3.2.5, 3.2.7 **TL 8.1.4.A** .1, .2, .9

GRADE LEVEL APPROPRIATE SOFTWARE-GRADE 1

- JumpStart First Grade
- Kid Pix Studio
- Mighty Math Carnival Countdown
- Storybook Weaver Deluxe
- Thinkin' Things 2
- Word Munchers Deluxe

RANDOLPH TOWNSHIP SCHOOLS

GRADE 2

COMPUTER EDUCATION CURRICULUM

GOALS: Second-grade students will begin to use the computer as a communication tool and to develop basic research skills.

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	
	COMPUTER COMPONENTS	
Students will become familiar with the different	pieces of computer hardware and software.	**TL 8.1.4.A** .1, .2, .3, .4, .7, .9
a. Name the different components of a computer.	Group lesson and demonstration	LA 3.2.5
b. Handle software and hardware appropriately.	Ongoing application by students	
c. Use a mouse driven menu.		
	KEYBOARDING AWARENESS	

Students will become familiar with the computer keyboard layout.		**TL 8.1.4.A** .1, .2, .3, .4, .5, .6, .7, .8, .9
a. Locate and use appropriately the Enter, Spacebar, Escape, Shift, Backspace Caps lock Backspace, Caps lock, number, letter, and arrow keys.	Group lesson and demonstration Ongoing application by students	LA 3.2.5, 3.2.7
b. Space words and sentences properly and Shift for capital letters.		

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS

COMMUNICATIONS AND PROBLEM SOLVING

Students will become aware of the computer as a communication device used to locate, create, and exchange information.

Students will develop and utilize critical thinking and decision-making skills through the use of appropriate software.

a. Use a word processing program to create, edit, save, and print a short document. • Lesson 1 Design and save a creative fairytale scene. •Lesson 2 Write a fairytale. • Lesson 3 Complete original fairytale and print.	Reinforce creative writing skills using *Storybook Weaver Deluxe*	LA 3.3.2, 3.3.11, 3.3.12, 3.5.7 **TL 8.1.4.A** .1, .2, .3, .4, .6, .7, .9
b. Introduce database research skills using a treasure hunt theme.	Developing proper searching techniques using *Compton's Interactive Encyclopedia*	LA 3.4.8 SCI 5.2.2

		SS 6.7.1 **TL 8.1.4.A** .1, .2, .3, .4, .6, .7, .9 **TL 8.1.4.B** .1, .2, .3, .4, .5, .6
c. Extend research skills focusing on science or social studies topics.	Extending proper searching techniques using Compton's Interactive Encyclopedia	LA 3.4.8 SCI 5.2.2 SS 6.7.1 LA 3.3.12
d. Design and print an original poster . *OR* Draw a picture of your house and write your address.	Developing the ability to creatively combine graphics and text in a well designed poster *Print Master Gold OR* *Kid Pix Studio*	**TL 8.1.4.A** .1, .2, .3, .4, .6, .7. .9
e. Identify nouns, verbs, and adjectives.	Reinforcing phonics skills using *Word Munchers Deluxe* Grammar	LA 3.3.3, 3.4.8, 3.5.2
f. Become aware of the purposes and uses of telecommunications. • Research a dinosaur OR • Visit a zoo and research an animal.	htty://www.enchantedlearning.com/subjects/dinosaurs/Dinotopics.html httu://www.mindspring.com/-zoonet httu://www.mindspring.com/-zoonet	**TL 8.1.4.A** .1, .2, .4, .6, .7, .9 **TL 8.1.4.B** .2, .3, .4, .5, .6
• Read an Arthur story and e-mail him a question.	http://www.pbs.org/wgbh/pages.arthur	LA 3.3.3, 3.4.8

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS

EVALUATION OF STUDENT SKILLS	
Students will demonstrate correct use of hardware and application	of software in order to achieve `Driver's License"
a. Assessment based on: Observable Behavior Rubric Skill Application Rubric	Teacher observation of students working at their computer stations.

GRADE LEVEL APPROPRIATE SOFTWARE-GRADE 2

- World Book Encyclopedia
- Kid Pix Studio
- Mighty Math Carnival Countdown
- Mighty Math Zoo Zillions
- Print Master Gold*
- Print Shop Deluxe III
- Storybook Weaver Deluxe
- Super Solvers Spellbound!
- Thinkin' Things 2
- Word Munchers Deluxe

GOALS: Third-grade students will learn basic keyboarding skills including the home row and selected other letters and special keys.

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CONTENT **STANDARDS**
COMPUTER COMPONENTS		
Students will become familiar with the computer components--keyboard, monitor, CD ROM drive, disk drive, and printer-and be able to access a variety of software programs.		
a. Name and demonstrate an understanding of the use of the different computer components.	Group lesson and demonstration Ongoing application by students	LA 3.2.5 **TL 8.1.4.A** .1, .2, .3, .4, .5, . 6, 7, 9 .
b. Handle software and hardware appropriately. c. Use a mouse driven menu.		
KEYBOARDING AWARENESS		
Students will become familiar with the computer keyboard layout.		
a. Begin to keyboard using the home row as a base. b. Become familiar with the position of the following keys on the keyboard: ASDFJKL;I T.ORNHEPU c. Finger adjacent keys from the home row position. d. Demonstrate the ability to use the functions keys: Enter, Delete, Spacebar, Escape, Shift Keys, Backspace, and arrow keys.	Training for using correct keyboarding techniques using *Ultra Key*, for six sequential lessons.	LA 3.2.5, 3.2.7 **TL 8.1.4.A** .1, .2, .3, .4
e. Demonstrate correct posture while using the computer.		

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS
COMMUNICATIONS AND PROBLEM SOLVING		
Students will become familiar with the concepts and processes for using the computer as a tool to locate, organize, and exchange information with other people.		
Students will develop and utilize critical thinking and decision-making skills through the use of appropriate software.		
a. Apply keyboarding skills and the editing techniques of copy, cut, and paste while creating a written document with graphics. skills *7* • Lesson 1 Create and save to disk an original scene using available graphics. • Lesson 2 Create an original descriptive paragraph based upon the scene.	Reinforce keyboarding and paragraph writing using *Storybook Weaver Deluxe*	LA 3.3.2, 3.3.11, 3.3.12, **TL 8.1.4.A** .1, .2, .3, .4, .6, .7, .9
b. Research information on a specific topic and use that information to write and print an original paragraph. • Lesson 1 Research and begin planning to write. Save. • Lesson 2 Complete writing original paragraph. Print.	Reinforcing keyboarding skills and developing research skills With an emphasis on rewriting information in your own words Using *World Book Encyclopedia*	LA 3.3.8, 3.4.8 SCI 5.2.2 SS 6.7.1 **TL 8.1.4.B** .1, .2, .3, .4, .5, .6, .7, .8, .9
c. Become aware of the purposes and uses of telecommunications. • Solar System. Site: The Nine Planets Just for Kids • Amish Culture. Site: The Amish, The Mennonites, and " Plain People"	http://www.tcsn.nedafiner The http://www.800padutch.com/amish.html	LA 3.3.3, 3.4.8, 3.5.2 SS 6.5.3-6 **TL 8.1.4.B** .1, .2, .3, .5, .6, .7

GRADE LEVEL APPROPRIATE SOFTWARE-GRADE 3

- World Book Encyclopedia
- Kid Pix Studio
- Mighty Math Number Heroes
- Mighty Math Zoo Zillions
- Print Master Gold
- Print Shop Deluxe III
- Storybook Weaver Deluxe

*Strategy Challenges of the World

- Super Solvers Spellbound!
- Thinkin' Things 2
- Ultra Key
- Word Munchers Deluxe

GRADE 4

COMPUTER EDUCATION CURRICULUM

GOALS: Fourth-grade students begin to select appropriate previously learned skills and apply them to the creation of original work.

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS (W/R = Cross Content Standards)

COMPUTER COMPONENTS		
Students will become familiar with the computer components--keyboard, monitor, CD ROM drive, disk drive, and printer-and be able to access a variety of software programs.		
		LA 3.2.5
a. Name and describe the different parts of a computer.	Group lesson and demonstration	W/R 2.1, 2.2, 2.3
	Ongoing application by students	
b. Handle software and hardware appropriately.		
c. Use a mouse driven menu.		
d. Understand some of the capabilities of the computer.		

TOPICS AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS
COMMUNICATIONS AND PROBLEM SOLVING		
Students will become familiar with the concepts and processes for using the computer as a communication tool to locate, create, and exchange information with other people. Students will develop and utilize critical thinking and decision-making skills through the use of appropriate software.		
a. Practice application of keyboarding while creating a written document with graphics.	Reinforce keyboarding and paragraph writing skills using *Storybook Weaver Deluxe*	LA 3.3.2, 3.3.11, 3.3.12, 3.5.7 **TL 8.1.4.A** .1, .2, .3, .4, .7, .9
*Lesson 1 Use keyboarding and word processing skills to		

illustrate, write, and save a creative story. • Lesson .2 Continue to use keyboarding and word processing skills to illustrate, write, and print a creative story.	Developing the ability to arrange graphics	
b. Design and print stationery for a friendly letter.	Developing the ability to arrange graphics writing skills using *Microsoft Word*	LA 3.3.12, 3.5.7 **TL 8.1.4.A** .1, .2, .3, .4, .6, .7, .9
c. Use Keyboarding skills to write and print a friendly letter.	Reinforcing keyboarding, formatting, and letter Writing skills using *Microsoft Word.*	LA 3.3.2, 3.3.4, 3.3.11,3.3.12 **TL 8.1.4.A** .1, .2, .3, .4, .6, .7, .9
d. Research a science or social studies topic and begin to analyze and draw conclusions from the information gathered.	Reinforcing database research skills using *Compton's Interactive Encyclopedia*	LA 3.3.8, 23.3.11, 3.3.12, 3.4.8 SCI 52.-3 **OR** SS 6.7.1 **TL 8.1.4.B** .1, .2, .3, .4, .5, .6, .7, .8,
f. Become aware of the purposes and uses of • Grammar-Mad Libs. Site: Wacky Web Tales. • Research skills. Site: The State of New Jersey. Click on "Facts and Symbols."	http://www.eduplace.com/tales/f/fairy.html com/tales/f/fairy.html http://state.nj.us	**TL 8.1.4.B** .1, .2, .3

GRADE LEVEL APPROPRIATE AVAILABLE SOFTWARE-GRADE 4

- World Book Encyclopedia
- Encarta

- Grammar Games
- HyperStudio
- Kid Pix Studio
- Microsoft Word
- Mighty Math Calculating Crew
- Mighty Math Number Heroes
- Print Master Gold
- Print Shop Deluxe III
- Storybook Weaver Deluxe
- *Strategy Challenges of the World
- Super Solvers Spellbound!
- Thinkin' Things 2
- Word Munchers Deluxe

RANDOLPH TOWNSHIP SCHOOLS

GRADE 5

COMPUTER EDUCATION CURRICULUM

GOALS: Fifth grade students will create a multimedia project/presentation that includes and extends various reading and research applications.

TOPIC AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS

COMPUTER COMPONENTS		
Students will become familiar with the computer components--keyboard, monitor, CD ROM drive, disk drive, and printer-- and be able to access a variety of software programs.		
		LA 3.2.5
a. Name and describe the different parts of a computer.	Group lesson and demonstration	**TL 8.1.8.A** .1, .2, .3, .4, .5, .10
b. Handle software and hardware appropriately.	Ongoing application by students	
c. Use a mouse driven menu.		
d. Understand some of the capabilities of the computer.		
KEYBOARDING AWARENESS		
Students will demonstrate the ability to use good keyboarding techniques when writing at the computer and will continue to refine their keyboarding skills when involved in word processing activities.		
a. Demonstrate correct keyboarding techniques through all applications.	Ongoing application by students through various word-processing activities are listed under the heading of COMMUNICATIONS using *Microsoft Word.*	LA 3.2.5, 3.2.7 **TL 8.1.8.A** .2, .3, .4, .5, .7, .8, .9, .11

RANDOLPH TOWNSHIP SCHOOLS		
TOPIC AND OBJECTIVES	LEARNING ACTIVITIES	CORE CURRICULUM CONTENT STANDARDS
COMMUNICATIONS AND PROBLEM SOLVING		
Students will become familiar with the concepts and processes for using the computer as a communication tool to locate, create, present, and exchange information with others.		

Students will develop and utilize critical thinking and decision-making skills through the use of appropriate software.

a. Practice application of keyboarding while creating a well-written paragraph. • Lesson 1 Write and print a summary paragraph incorporating correct punctuation, spelling, and sentence and paragraph structure. • Lesson 2 Write, save, and print an expository paragraph including a graphic. • Lesson 3 Write, save, and print an *opinion* letter to the editor of a newspaper using the business letter format.	Reinforce keyboarding and paragraph writing skills using *Microsoft Word*	LA 3.3.2, 3.3.4, 3.3. 11, 3.3.12, 3.4.12 **TL 8.1.8.A** .1, .2, .3, .4, .5, .10
b. Provide practice accessing information from several electronic databases. • Lesson 1 Research, save, and print information about a famous person using several sources. • Lesson 2 Continue researching and printing information about a famous person using an additional source.	Reinforcing database research skills *Compton's Interactive Encyclopedia* http://www.s9.com/biography *Biographical Dictionary* http://www.achievement.org.mainmenu.html *Academy of Achievement*	LA 3.3.8, 3.3.11, 3.3.12, 3.4.8, 3.4.12 **TL 8.1.8.B** .2, .4, .6, .7,
c. Create a multimedia presentation using information collected during research (three lessons).	Introducing multimedia presentation concepts and skills using *HyperStudio* (three lessons)	LA 3.5.7 **TL 8.1.8.A** .1, .2, .3, .4, .5, .8, **TL 8.1.8.B** .3, .4, .5, .6, .7,
d. Become aware of the purposes and uses of telecommunications. • Social Sciences. Site: White House Tour • Social Sciences. Site: Seven Wonders of the Ancient World	http::/www.whitehouse.oov Http://pharos.bu.edu/Egy pt/Wonders	SS 6.1.6, 6.5.5 **TL 8.1.8.B** .2, .3, .4, .5, .6

I

TOPIC AND OBJECTIVES	LEARNING ACTIVITIES
EVALUATION OF STUD	**OF STUDENT SKILLS**
Students will demonstrate correct use of hardware and	application of software in order to demonstrate skill development
a. Assessment based on: • Observable Behavior Rubric • Skill Application Rubric	Teacher observation of students working at their computer stations.
GRADE LEVEL APPROPRIATE AVAILABLE	SOFTWARE-GRADE 5

- World Book Encyclopedia
- Encarta

*Grammar Games

- HyperStudio
- Kid Pix Studio
- Microsoft Word
- Mighty Math Calculating Crew

*Mighty Math Number Heroes

- Print Master Gold
- Print Shop Deluxe III
- Storybook Weaver Deluxe
- Super Solvers Spellbound!

- Thinkin' Things 2
- Ultra Key
- Word Munchers Deluxe

APPENDIX A

Resources

October 2008

1. www.unitedstreaming.com
2. http://www.brainpop.com/
3. www.trevor.org/index.htm,
4. http://www.bbc.co.uk/wales/snapdragon/yesflash/time-1.htm
5. www.yahooligans.com
6. www.primarygames.com
7. www.lil-fingers.com/holidays/backtoschool/index.html
8. www.enchantedlearning.com
9. www.teach-nology.com
10. http://people.csp.edu/saylor/effective_powerpoint.htm
11. www.teachervision.com
12. http://arcytech.org/java/money/money.html
13. http://nlvm.usu.edu/en/nav/vlibrary.html
14. www.usmint.gov/kids/
15. www.mathplayground.com
16. www.teachervision.com
17. http://www.dinosaurdiscovery.com/dinosaur-fossil.htm
18. http://www.marshall-es.marshall.k12.tn.us/jobe/Read-Write/dinosaur/dinosaurs.html
19. http://museum.cl.msu.edu/ProgramsandPartnerships/Educational/VirtualOutreach/ScienceFieldTrips.html
20. www.amnh.org/
21. www.expertvillage.com/videos/make-clay-t-rex.htm

22. http://www.1001-periodic-table-quiz-questions.com/grade_1_science_quizzes.html
23. http://www.gardenofpraise.com/matter.htm
24. http://yorkcountyschools.org/mes/what's%20the%20matter%20webquest/index.htm
25. http://www.harcourtschool.com/activity/states_of_matter/
26. http://www.grc.nasa.gov/WWW/K-12/airplane/state.html
27. http://www.gardenofpraise.com/matter.htm
28. www.Fodors.com
29. www.planning.org/kidsandcommunity
30. www.googleearth.com
31. www.eduref.org/Virtual/Lessons
32. www.puzzlemaker.com
33. http://mrsdell.org/nativeamericans/resources.html
34. http://www.kent.k12.wa.us/staff/danastandlee/nativeamericans/doublebubble.doc
35. http://webquest.org/questgarden/lessons/28856-060627071555
36. www.state.nj.us/hangout_nj/government.html
37. http://bensguide.gpo.gov/3-5/index.html
38. www.pbs.org/democracy/kids
39. http://npdp.stanford.edu/index.html
40. http://www.watersheds.org/earth/field.htm
41. http://bensguide.gpo.gov
42. http://www.usconstitution.net/constop_cnb.html

43.http://nanunet.lhric.org/highviewelem/Grade4/G4government/governmentstart.htm

44.http://www.trumanlibrary.org/whistlestop/teacher_lessons/3branches/front.htm

45.http://www.educationworld.com/a_lesson/04/lp341-02.shtml

46.www.bellmuseum.org/distancelearning/watershed/watershed2.html

47.www.hackensackriverkeeper.org.html

48.www.thinkfinity.org

49.www.mped.org

50.www.dot.state.oh.us/ltap/Flyers/Archive/salt_and_the_environment.htm

51.www.cce.cornell.edu/monroe/horticulture/factsheets/fs18.htm

52.http://gardening.wsu.edu/column/02-18-01.htm

53.http://eartheasy.com/grow_lawn_alternatives.htm

54.http://www.epa.gov/oilspill/index.htm

55.http://www.ec.gc.ca/acidrain/acidfact.html

56.http://www.shannon-fishery-board.ie/aboutus/phosphates.htm

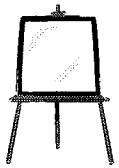
57.http://www.environment.nsw.gov.au/small_business/car_yards/detergents.htm

58.www.cochran.com/theodore

59.www.geocities.com/enchantedforest7155

APPENDIX B

Assessment Tools



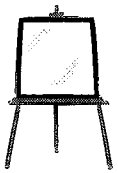
Oral / Visual Presentation Scoring Rubric Grades 1 and 2

	1	2	3	Self Evaluation	Teacher Evaluation
Topic	Includes **few** details	Includes **some** details. Gives audience a good understanding of topic	Includes **many** details Audience wants to know more		
Organization	Information is presented out of order	Information is presented with some details out of order	Information is presented with all details in order and easy to follow		
Written Work (if applicable)	Includes **many** spelling and punctuation mistakes	Includes **some** spelling and punctuation mistakes	Includes **few** spellings and punctuation mistakes		
Visuals (if applicable)	Project includes **few** details and little effort	Project includes **some** details and good effort	Project includes **many** details and great effort		

Eye Contact	Makes **very little** or no eye contact	Makes **some** eye contact	Makes **good** eye contact		
Elocution (speaking skills)	Mumbles and speaks quietly	Speaks clearly, but quietly	Speaks clearly and loudly		
Promptness	Handed in late and incomplete	Handed in late and complete	Handed in on time and complete		
				Total Score	

Final Grade _____

Comments: _____



Oral / Visual Presentation Scoring Rubric Grades 3, 4 & 5

	1	2	3	4	Self Evaluation	Teacher Evaluation
Topic/ Content	Includes little important information and few facts	Includes some important information	Includes important information Gives audience a good understanding of topic	Covers topic completely and in depth Encourages audience to want to know more		
Organization	Audience cannot understand presentation	Audience has difficulty following presentation	Information is presented in logical sequence which audience can follow	Information is presented in logical, interesting sequence which audience follows easily		
Subject Knowledge	No grasp of information Can't answer questions	Little grasp of information Can only answer a few questions	At ease with subject Answers questions, but fails to elaborate	Full knowledge of subject Answers all questions with explanations and elaboration		
Visuals (if applicable)	Visuals do not enhance presentation	Uses graphics that rarely support presentation	Visuals relate to presentation	Graphics explain and reinforce presentation		
Eye Contact	Reads entire presentation with no eye contact	Occasionally uses eye contact Reads most of presentation	Maintains eye contact but frequently refers to notes	Maintains eye contact with audience Occasionally refers to notes		
Elocution	Mumbles, incorrectly pronounces	Voice is low, incorrectly pronounces	Clear voice, pronounces most words correctly	Clear voice, correct & precise pronunciation of		

	terms, speaks quietly	terms		terms Clearly heard by audience		
Promptness	Handed in late Many items missing	Handed in late Some items missing	Handed in on time Few items missing	Handed in on time and complete		
Documentation & Research	Missing works cited	Partial evidence of works cited	Works cited	Works cited Variety of resources used		
					Total Score	

Final Grade _____

Comments: _____

_____

APPENDIX C

Elementary Technology Integration Units

Created 2006
Updated 2007
Reviewed 2008

Technology infusion at all grade levels across all areas of the curriculum is a goal of the Randolph Township School District and supports the philosophy of the New Jersey Department of Education standards for 2009. All staff members in the Randolph elementary schools deliver the following units as part of the integrated curriculum. The media specialists in each elementary school serve as a resource for staff and students. The Randolph School District is committed to providing exceptional professional development opportunities in the area of technology implementation.

Jennifer Fano, Director of Instructional Technology

ELEMENTARY TECHNOLOGY INTEGRATION PROJECT PLAN

Grade Level: First

Topic:	Mathematics/Time
Purpose (GOAL) of project:	To increase student knowledge and understanding of time using a multimedia approach.
Objectives (skills and concepts) *Student will be able to....*	Identify hour, minute, and second hand on an analog clock. Identify A.M. and P.M. (Knowledge) Read time to the hour, half-hour, quarter hour, and five-minute intervals using both analog and digital clocks. (Knowledge) Describe how we use time in daily life. (Comprehension) Demonstrate ability to solve time problems. (Application) Make connections between actual time and time-appropriate activities. (Analysis) Create a personal log of a day. (Synthesis) Present their personal log and explain how time effects the planning of their day/and or week. (Evaluation)
Content concept/skill lessons:	Everyday Math The following Everyday Mathematics Unit Lessons will provide students with the appropriate knowledge necessary to complete the final product. Unit 1 Lesson 1.1 Daily Routines Unit 1 Lesson 1.9 The Calendar Unit 2 Lesson 2.5 Analog Clocks Unit 2 Lesson 2.6 Telling Time to the Hour Unit 3 Lesson 3.7 Telling Time to the Half-hour Unit 4 Lesson 4.8 Telling Time to the Quarter-hour Unit 4 Lesson 4.9 Timelines Unit 6 Lesson 6.10 Digital Clocks Unit 6 Lesson 6.11 Timing in Seconds
Technology to be used *by teacher* during the teaching	Clocks-digital and analog Stopwatch

/learning process:	Overhead Projector LCD Projector/or Smartboard Computer/Laptop
Technology to be used *by students* during the teaching/learning process:	Clocks-digital and analog Stopwatch LCD Projector/or Smartboard Computer/Laptop
Technology skills lessons:	• Log on /off network • Use shift keys to capitalize letters and use two hands to type • Use arrow keys • Saves work to hard drive • Opens a file • Use drawing tools • Can print • Can make a simple Power Point slide with text and picture • Can access Internet; Copy and paste picture from Internet • Works cooperatively and collaboratively with peers • Use grade level software appropriately • Learn appropriate use of laptop • Identify parts of laptop
List of web sites:	www.unitedstreaming.com, Why is it important to know what time it is? Young students will see that their activities revolve around "time". This full motion videocassette shows how various types of clocks and watches aid in the understanding of what the numbers on a clock mean, the function of the clock hands, the meaning of seconds, minutes, half hours and hours. Children will see that different kinds of clocks and watches, such as the sundial, hour glass and stopwatch, all help keep track of time. They will also gain an understanding of how the earth spinning on its axis causes day and night.

	This video is composed of 12 segments: • The Importance of Telling Time (00:48) • Different Kinds of Clocks (00:51) • Parts of a Clock (01:58) • Digital Clocks (00:27) • Important Times of the Day (01:07) • What is a Minute? (01:30) • Using Hours and Minutes Together to Tell Time (02:22) • What is a Second? (02:11) • How did We Tell Time Before We had Clocks? (02:13) • Looking Closely at Different Kinds of Clocks (01:31) • What is a Day? (02:07) • Tick Tock: A Clock Review (01:18)) When you pull up the web site enter Tick Tock: All about the Clock into the search bar and click on it. This video contains 12 segments. Please review the segments and choose what is most appropriate for your class level and lesson. You may want to use several segments per lesson. www.trevor.org/index.htm, Click on link above and in the search box, type clocks. Next click on The Clock Quiz. Choose a child drawn clock and answer the questions together and/or individually http://www.bbc.co.uk/wales/snapdragon/yesflash/time-1.htm Click on link above and enjoy. www.yahooligans.com Click on link above and in the search bar type time. Scroll down to Identifying Time (it's a digital world, but it's still important to know how to tell time on a clock face). Test your clock reading skills here. This can also be done at home with parents.

	www.primarygames.com Click on above link and play "What time is it?" game. www.lil-fingers.com/holidays/backtoschool/index.html, Click on above link and play the telling time game. Children or teacher must drag the hands to show the correct time on the clock. www.enchantedlearning.com Use as teacher resource and be sure to type in telling time in the search bar. www.teach-nology.com Click on above link, and click on Worksheets, scroll down to Free Work Sheet Makers. Click on Time Line Generators and scroll down Step #1. Choose vertical time line and scroll down. In event date box put time instead (ex. 7:00 AM) In event name/descriptions put what happens at that time (I woke up). Choose a border graphic and generate a time line. After printing, kids use clock stamp or cut out clocks and draw analog time of activity. http://people.csp.edu/saylor/effective_powerpoint.htm Teachers can use this website if you need some guidelines to assist in creating an effective PowerPoint presentation.
Suggested Product Ideas (outcome of project):	Students will create a timeline log of their day and/or week. To allow for differentiation, options for timeline may include but are not limited to the following: *Paper-pencil timeline *Electronically produced timeline i.e. using www.teach-nology.com *PowerPoint Presentation *Video or Audio Recording *Picture Storybook (paper pencil or electronic i.e.: Storybook Weaver) Timelines will be displayed and presented to classmates.

	Additional Activities June 2007 -Allow students to orally present their completed timeline while recording presentation using Flip Video. -Act out timeline. -Encourage students to extend timeline to include alternative time periods (weekends, school vacations, seasons). -Compare and contrast two timelines from previous activity using prepared template (Venn diagram or T-chart). -Create a word search using puzzlemaker.com to incorporate grade-appropriate time vocabulary. -Create a calendar extending concept to weeks and months. -Visit www.teachervision.com for free printable worksheets.
Assessments of skills of project:	Math concept skills will be assessed using end of unit Everyday Math assessments. Technology skills will be assessed through teacher observation. This observation will be ongoing as the project progresses. Final Assessment will be demonstrating use of skills in timeline project. Project and presentation will be assessed using a teacher-designed rubric.
Timeline	Timeline will follow the Everyday Math curriculum (see Content concept /skill lessons). The games and United Streaming Videos can be utilized at the teacher's discretion. The final project could be started after Unit 4 Lesson 4.9. At this point it would also be beneficial to introduce and explore power point as a method of presentation.

Technology Standards

8.1.4.A.1: Use of basic technology terminology
8.1.4.A.2: Use basic features of an operating system (accessing programs, identify and select printer).
8.1.4.A.3: Input and access text and data, using appropriate keyboarding techniques or other input devices.
8.1.4.A.5: Interpret a simple graph by entering data onto a prepared template.
8.1.4.A.7: Create and maintain files and folders.
8.1.4.A.9: Use basic computer icons.
8.1.4.B.2: Recognize and practice responsible social and ethical behaviors when using technology and understand the consequences of inappropriate use including internet access and copyrighted materials.

First Grade Timeline Final Project Rubric

Check all criteria met.

Child Name Date	Meets all criteria & demonstrates firm understanding of concepts.	Meets most criteria. Demonstrates some understanding of concepts.	Meets some criteria. Demonstrates limited understanding of concepts.
Demonstrate ability to accurately write time to the minute using analog and/or digital representation.			
Shows connections made between actual time and time appropriate activities.			
Project presentation			

demonstrates an understanding of how time effects the planning of their day.			

ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN

Grade Level: First

Topic:	Mathematics/Money
Purpose (GOAL) of project:	To increase student knowledge, understanding and ability to use coins through a multi-media approach to learning.
Objectives (skills and concepts) *Student will be able to...*	• Identify coins (knowledge) • Compare coin values (comprehension) • Calculate total money values less than $5.00 (application) • Classify coins by pennies, nickels, dimes, and quarters (analysis) • Create and design store circular to make money exchanges (synthesis) • Select items from store circular and demonstrate an understanding of coin equivalencies by solving number stories (evaluation)
Content concept/skill lessons:	The following Everyday Mathematics unit lessons will provide students with the appropriate knowledge to complete the final technology product. Additional resources have been added where appropriate. Unit 1 1.13 Number Stories **View the United Streaming video: "Learning About Money" (15:00) With the help of two friends, students learn that money has value and comes in many denominations (from a penny to a $100 bill). Students will go inside one of our country's mints to discover how coins are made. Lastly, they will learn that every country has its own unique money and see some of the currencies used in different countries today. Grade: K-2 © 2001 100% Educational Videos **Create a money booklet from the teacher resource section from Enchanted Learning website

	Unit 2 2.8 Pennies 2.9 Nickels 2.10 Counting Nickels and Pennies **Students may interact with "JumpStart software" and, or the US Mint Website – "Coin Memory" 2.11 Number Models 2.13 Number Stories Unit 3 3.11 Dimes 3.12 Counting combinations of dimes, nickels, and pennies Unit 6 6.9 Quarters **Use the additional resources from Enchanted Learning website **Students will interact with "Make a Dollar" game from the website Unit 8 8.2 Dollars ** View the United Streaming video: "Math: Money and Time" (7:00) "When are we going to use math anyway?" If you've heard that before, here is a video with irrefutable evidence that we use math every day—whether counting change, changing an appointment, or balancing our checkbooks. • Money: Use the practical application of money to explain the basics of addition, subtraction, and multiplication of whole numbers and how to convert fractions into decimals. Grades K – 2 © 2002 Discovery Channel School

	**Students will interact with "Money Exchange" game 8.4 Application: Shopping at the school store 8.5 Making Change **Students will interact with "Pay Exact Amount" and "How Much Money" **As an introduction to the final project, students will play with the Vending Machine game from the JumpStart software and/or the US Mint website – "Plinky's Create a Card…level 1 or Just for fun". **Complete project
Technology to be used *by teacher* during the teaching /learning process:	Computer/Laptop LCD projector
Technology to be used *by students* during the teaching/learning process:	Computer/Laptops "Jumpstart First Grade" software/websites "KidPix" software/Microsoft Word
Technology skills lessons:	2.2 Log on/off network 1.4 Use shift keys to capitalize letters and use two hands to type 1.4 Use Arrow Keys 2.2 Saves work to hard drive 2.2 Open a file 3.1e, 3.3 Uses drawing tools 2.2 Use the print command 1.2b Access Internet, copy and paste picture from Internet 2.2 Works cooperatively and collaboratively with peers 1.2a, 3.1a, 5.1a Use grade level software Appropriately *As per state law, standards may be out of date. Please refer to technology

	standards attached at bottom of the page.
List of web sites:	www.unitedstreaming.com (Type "money" in the search box. Click on "Learning About Money" and play. For the second video clip, click on "Elementary Video Adventures: Math, money, and time" and then click the "video segments" tab. Click on "Money" at the top.) www.enchantedlearning.com/matching/coins/ Teacher resource to be printed www.enchantedlearning.com/sorting/colorandcount/coins/ Teacher resource to be printed www.enchantedlearning.com/books/howmany/coins Teacher resource to be printed – Money Booklet http://arcytech.org/java/money/money.html Interactive student game – Money Exchange http://nlvm.usu.edu/en/nav/vlibrary.html Interactive student games – "How Much Money, Pay Exact Amount, and Make a Dollar" (Click on "PreK-2" and scroll down to money. Interactive student game appears.) www.usmint.gov/kids/ Interactive student games – "Coin Memory, Plinky's Create a Card"
Suggested Product Ideas (outcome of project):	Students will create a store circular with stamps from the KidPix software program. If KidPix is not available use Microsoft Word to cut and paste pictures from the Internet. Students will price each item on their circular. Once the circular is created, students will print and then create a number story. They may choose to create five to eight number stories involving coin exchange, making change, and/or giving exact amounts. The project will be printed and given to a partner to solve. Outcome of project: Circular: Choose 10 items for their circular. Price each circular item. Number Stories: Create five – eight number stories based on coin exchange, making change, and/or giving exact amounts. Allow space for partner response.

	Additional Suggested Activities June 2007 -Using student created circulars, students could act out or role play the job of cashier and store keeper. -Encourage students to keep a running log of personal expenses throughout the week or weekend. Total expenses after making estimates and compare and contrast actual spending verses estimates. -Visit www.mathplayground.com and click on "count the money" as a differentiated activity for accelerated learners or with the use of the 100s chart for the "making change" activity. -Visit www.teachervision.com for free printable worksheets.
Assessments of skills of project:	Students will be assessed on technology skills through teacher observation. The project will be assessed twice. The first assessment will be based on creating a circular and writing number stories based on above criteria. The second assessment will determine if the student accurately compared, identified, and counted the coins while solving the number stories based on their partner's circular.

Technology Standards
June 2007

8.1.4.A.1: Use of basic technology terminology
8.1.4.A.2: Use basic features of an operating system (accessing programs, identify and select printer).
8.1.4.A.3: Input and access text and data, using appropriate keyboarding techniques or other input devices.
8.1.4.A.4: Produce a simple finished document using word processing software.
8.1.4.A.5: Interpret a simple graph by entering data onto a prepared template.
8.1.4.A.7: Create and maintain files and folders.
8.1.4.A.9: Use basic computer icons.
8.1.4.B.2: Recognize and practice responsible social and ethical behaviors when using technology and understand the consequences of inappropriate use including internet access and copyrighted materials.

ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN

Grade Level: Second

Topic:	Dinosaur Fossils
Purpose (GOAL) of project:	The students will gain a better understanding of what fossils are, how they are formed, and to use fossil characteristics to identify a specific dinosaur.
Objectives (skills and concepts) *Student will be able to....*	• Understand how fossils are formed • Identify dinosaurs through fossils • Understand the process of excavating dinosaur fossils • Distinguish the different conditions in which fossils can be formed • Explain the different patterns needed for a fossil to form • Describe tools needed for a fossil dig • Use information to describe a paleontologist's job • Apply information found in Dino-Hunt (An Internet Scavenger Hunt) • Create and design a multimedia fossil project • Summarize information by creating the multimedia fossil project
Content concept/skill lessons:	**1.** Introduction to dinosaur fossils through discussion and video (14 minutes and 42 seconds). Use Daily Question for their journal entry – What is a Paleontologist? http://www.unitedstreaming.com/search/assetDetail.cfm?guidAssetID=125FFB1D-7589-4632-9248-E6B4B3684CCD **2.** Discover how fossils may or may not be formed under different conditions. Use Daily Question for their journal entry – How are fossils formed? http://www.bbc.co.uk/sn/prehistoric_life/dinosaurs/making_fossils/ **3.** View a dinosaur fossil dig slide show to explore an actual archeological site in Montana, USA. Use Daily Question for their journal entry – What tools are needed for a fossil dig? http://www.dinosaurdiscovery.com/dinosaur-fossil.htm **4.** Be a paleontologist and excavate your own "fossils" using a chocolate chip cookie. (see suggested activities on website)

	http://www.marshall-es.marshall.k12.tn.us/jobe/Read-Write/dinosaur/dinosaurs.html 5. Take a virtual field trip to Michigan to find and explore fossils ($50 for a 45 minute virtual field trip). Use Daily Question – How can fossils help give a history of a specific area? http://museum.cl.msu.edu/ProgramsandPartnerships/Educational/VirtualOutreach/ScienceFieldTrips.html 6. View Digging Up Dinosaurs from the Reading Rainbow series as a preview to the class field trip. 7. Use the following website to explore The Museum of Natural History before the class field trip. Use Daily Question – What is one interesting fact you learned from The Museum of Natural History? www.amnh.org/ 8. As a follow-up to the class field trip the students complete a skeleton jigsaw. http://www.bbc.co.uk/sn/prehistoric_life/games/skeleton_jigsaw/ 9. Students use the information learned on how fossils are formed to create a project using a multimedia approach such as: PowerPoint, Kidspiration or Storybook Weaver. 10. Presentation of the student's multimedia fossil project.
Technology to be used *by teacher* during the teaching /learning process:	Computer/Laptops LCD Projector TV/VCR
Technology to be used *by students* during the teaching/learning process:	Computer/Laptops
Technology skills lessons:	1.2b Research a topic on the Internet 2.1, 6.1, 6.2 Work cooperatively and collaboratively with peers 2.2 Minimize/maximize an application 2.2 Save to teacher's file on V drive 3.1l Insert text box and graphic 3.1a Insert a border 3.1a Use delete key 3.1a Use undo/redo arrow

	3.1a Edit writing 3.1a Change font and size 3.1a Insert a border 3.1c Create a PowerPoint slide from template 3.2 Copy and paste a graphic from one program to another 5.1c Use "Favorites" or template hotlinks to research 5.1a, 1.2a, 3.1 Use grade level software appropriately
List of web sites:	Additional resources to supplement unit as needed: Streaming Video (20 minutes 39 seconds) Viewers learn that while whales swim in the ocean today, years ago, they were giant lizards: that along the seashore, living starfish are not that different than their ancient ancestors: on land where dinosaurs once roamed, we find the familiar deer, elk, and mountain lion: and where there was once a tropical rain forest, we now find snowy mountain pine forests. The planet's three major environments are explored comparing life in the past with the inhabitants of today. http://www.unitedstreaming.com/search/assetDetail.cfm?guidAssetID=17041758-DD83-4AE5-A92F-B24FBB11E6B8 Books on Streaming Video How Do Dinosaurs Say Goodnight? http://www.unitedstreaming.com/search/assetDetail.cfm?guidAssetID=F4A3645D-93C3-4F25-88DC-9EB55DCE1DF9 Danny and the Dinosaur http://www.unitedstreaming.com/search/assetDetail.cfm?guidAssetID=D0E301FC-4A0E-4DA4-8366-6DF241EC99C9
Suggested Product Ideas (outcome of project):	• Student journals • Multimedia fossil project on how fossils are formed Alternative project ideas: -poster -model of a fossil -puppet show -use google earth to locate where fossils were found then create a map identifying where fossils were found -make fact cards: picture of dinosaur and fossils on one side and on

	reverse side facts & location of fossil -memory game (facts and pictures), mobile- name- dinosaur- fossil- facts **Additional Suggested Activities June 2007** www.expertvillage.com/videos/make-clay-t-rex.htm This is a video giving instructions on how to make a clay t-rex
Assessments of skills of project:	• Teacher observation • Assessment of multimedia fossil project using Hartcourt Oral Presentation Rubric • Student journal entries

NJCCS: 8.1 Technology Literacy Standards

8.1.8 A 1
8.1.8 A 2
8.1.8 A 3
8.1.8 A 4
8.1.8 A 6
8.1.8 A 7
8.1.8 A 9
8.1.8 B 2
8.1.8 B 3
8.1.8 B 4
8.1.8 B 5
8.1.8 B 6

ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN

Grade Level: Second

Topic:	Three states of matter
Purpose (GOAL) of project:	Students will understand that everything is made of matter and that there are three states of matter with distinctive characteristics.
Objectives (skills and concepts) *Student will be able to….* Standards –3.2 3.3 3.7 3.8 3.1 3.1 3.11 3.12 4.2 4.5 5.1.2 5.2.2 5.4 5.2.4 5.4.1 5.5.3 5.8.1 5.8.2 5.8.3	*Classify matter according to the characteristics of matter (Analysis)* *Describe the properties and characteristics of solids, liquids, and gases (Knowledge)* *Compare & contrast the differences of solids liquids and gases (Analysis)* *Predict whether heating or cooling will change the state of the matter (Synthesis)* *Create and explain the 3 states of matter with culminating mobile (Evaluation)* *Identify the 3 states of matter (Comprehension)*
Content concept/skill lessons:	Lesson 1 - What is matter? Lesson (based off of McMillan science text) Lesson 2 – Intro to the 3 states of matter *(introduce all student web sites)* Lesson 3 - Characteristics of solids • Illustrate & list characteristics on paper and save for mobile Lesson 4 - Characteristics of liquids • Illustrate & list characteristics on paper and save for mobile Lesson 5 - Characteristics of gases • Illustrate & list characteristics on paper and save for mobile Lesson 6 - Comparing & contrasting the 3 states of matter • Graphic organizers on paper • Tables on paper

Lesson 7 - Adding heat to matter

- Evaporation – "water thief" assay
  Conduct a small evaporation experiment where students need to find where the water that was spilled on the desk goes. The students need to guess, "hypothesize" who stole the water.

Lesson 8 - Cooling off matter

- Condensation – "the sweaty bottle" assay
  Conduct a small condensation experiment where students need to guess or "hypothesize" where the water on a cold bottle comes from

Lesson 9 – Collaborative writing describing the 3 states of matter.

Lesson 10 – Culminating Project

- Create a mobile with 3 states of matter and transitional verbs

Technology to be used *by teacher* during the teaching /learning process:

http://www.1001-periodic-table-quiz-questions.com/grade_1_science_quizzes.html (quizzes)
http://www.gardenofpraise.com/matter.htm (3 states of matter song)
http://www.teach-nology.com/web_tools/rubrics/sciences/ (create a rubric)
http://yorkcountyschools.org/mes/what's%20the%20matter%20webquest/index.htm
(unit extension- web quest)
LCD Projector
Laptop computer

Technology to be used *by students* during the teaching/learning process:

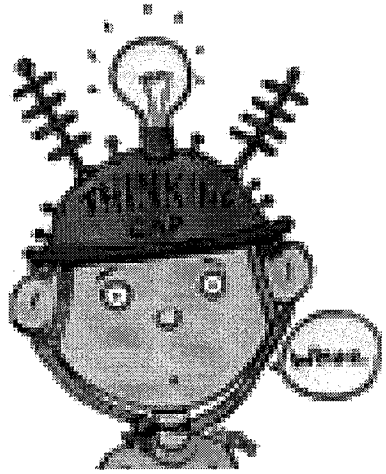
http://www.harcourtschool.com/activity/states_of_matter/
http://www.grc.nasa.gov/WWW/K-12/airplane/state.html
http://www.bbc.co.uk/schools/scienceclips/ages/8_9/keeping_warm.shtml
http://www2.mcdaniel.edu/Graduate/TI/pages/LEWIS/matterweb.htm
http://www.unitedstreaming.com/search/assetdetail.cfm
http://www.brainpop.com/
Laptops

Technology skills lessons:

5.1c – Use "favorites" or template hotlinks to research
2.1, 6.1, 6.2 – Work cooperatively and collaboratively in groups with peers

List of web sites:

http://www.harcourtschool.com/activity/states_of_matter/
http://www.grc.nasa.gov/WWW/K-12/airplane/state.html
http://www.bbc.co.uk/schools/scienceclips/ages/8_9/keeping_warm.shtml
http://www2.mcdaniel.edu/Graduate/TI/pages/LEWIS/matterweb.htm
http://www.unitedstreaming.com/search/assetdetail.cfm
http://www.brainpop.com/
http://www.1001-periodic-table-quiz-questions.com/grade_1_science_quizzes.html
http://www.gardenofpraise.com/matter.htm
http://www.teach-nology.com/web_tools/rubrics/sciences/
http://yorkcountyschools.org/mes/what's%20the%20matter%20webquest/index.htm



Suggested Product Ideas (outcome of project):	Creating tables and graphic organizers 3 states of matter mobile

Additional Suggested Activities June 2007

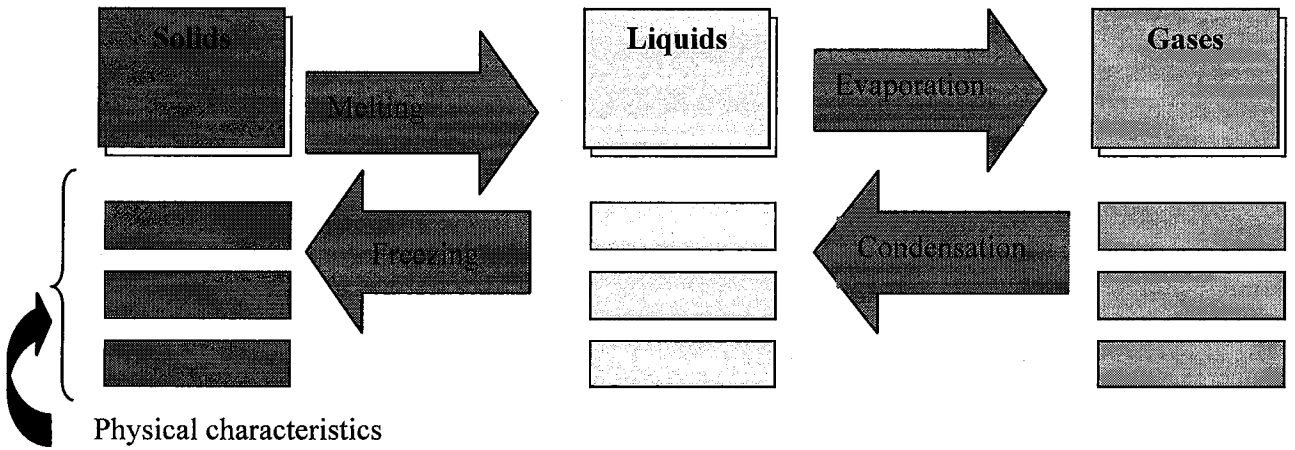
- video of the process
- create storyboard
- power point presentation of facts
- photo collage/album of solid/ liquid/gas around school
- states of matter book
- observation log
- tri-fold displaying the process from a solid to a gas

Website for tri-fold directions: http://its.guilford.k12.nc.us/act/grade2/act2.asp?id=758

	Mobile of the three states of matter (see example below)
Assessments of skills of project:	Quizzes – website based Collaborative group writing Informal evaluations – discussion Graphic organizers / tables of activities

Technology Literacy Standards

8.1.8 A 1
8.1.8 A 2
8.1.8 A 3
8.1.8 A 4
8.1.8 A 6
8.1.8 A 7
8.1.8 A 8
8.1.8 A 9
8.1.8 B 2
8.1.8 B 3
8.1.8 B 4
8.1.8 B 5
8.1.8 B 6



ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN

Grade Level: Third

Topic:	Community Life
Purpose (GOAL) of project:	To develop an understanding of the components for a successful community.
Objectives (skills and concepts) *Student will be able to....* NJCCS:6.1, 6.4, 6.6, 3.1, 3.2, 3.3, 3.4, 3.5, 9.2, 8.1, 8.2	1. recall information learned about the communities and their needs(Knowledge) 2. interpret learned knowledge to create a community map(Comprehension & Synthesis) 3. examine aspects of other communities in relation to their own(Application) 4. arrange their community in logical manner(Analysis) 5. explain their understanding of the components necessary of successful community(Evaluation)
Content concept/skill lessons:	• Community Needs and Wants(Unit 1 in SS text) • Type of community(Unit 2 in SS text) • Persuasive Writing(Changing Patterns Theme 1 in Trophies)
Technology to be used *by teacher* during the teaching /learning process:	Various websites Laptops LCD projector / SMART Board
Technology to be used *by students* during the teaching/learning process:	Various websites Laptops Kid Pix program(if available) PowerPoint for final presentation
Technology skills lessons:	Web based searching Various computer program skills such as: • PowerPoint slides from template • Edit writing • Research a topic on the Internet • Use grade level software appropriately • Work cooperatively and collaboratively

List of Web Sites: See attached for detailed description of web sites.	www.Fodors.com www.planning.org/kidsandcommunity www.googleearth.com www.eduref.org/Virtual/Lessons www.unitedstreaming.com www.puzzlemaker.com
Suggested Product Ideas (outcome of project): Upon completion of content concept/skill lessons, any of the following projects may be done.	Kid Pix Map : 1. Students create a blue print of their community. 2. With Kid Pix program students will transfer blue print to the program Persuasive Writing: 1. After the map is done students will write a persuasive piece. 2. The piece will describe their community and persuade people to come and visit. PowerPoint: 1. Students will create a PowerPoint slide presentation to show their community. 2. The slides can have tour information. Friendly Letter: 1. Students will write to local businesses recognizing contributions to the community. Word Puzzle: 1. Using the vocabulary words, students will make a word puzzle by going on the given web site. **Additional Activities June 2007** -Visit www.iearn.org. Click on projects, social studies to complete "Here at Home" and "Local History Project" to learn about, experience and share community life. This site allows students to create personalized web pages about their communities. -Visit www.teachervision.com for free printable worksheets.
Assessment of skills of project:	Kid Pix Map (teacher can observe where the students placed certain buildings and landforms) Scavenger Hunt Rubric(see attached rubric) Writing rubric(see Trophies rubric) Presentation Rubric(to create rubric go to www.rubistar.com)

Technology Literacy Standards

8.1.4.A.1: Use of basic technology terminology
8.1.4.A.2: Use basic features of an operating system (accessing programs, identify and select printer).
8.1.4.A.3: Input and access text and data, using appropriate keyboarding techniques or other input devices.
8.1.4.A.4: Produce a simple finished document using word processing software.
8.1.4.A.6: Create and present a multimedia presentation using appropriate software (power point, windows movie maker).
8.1.4.A.7: Create and maintain files and folders.
8.1.4.A.9: Use basic computer icons.
8.1.4.B.1: Discuss the common uses of computer applications and identify their advantages and disadvantages.
8.1.4.B.2: Recognize and practice responsible social and ethical behaviors when using technology and understand the consequences of inappropriate use including internet access and copyrighted materials.
8.1.4.B.4: Recognize the ethical and legal implications of plagiarism of copyrighted materials.
8.1.4.B.5: Recognize the need for accessing and using information.
8.1.4.B.6: Identify and use web browsers, search engines and directories to obtain information to solve real-world problems.
8.1.4.B.7: Locate specific information by searching a database.
8.1.4.B.8: Recognize accuracy and/or bias of information.
8.1.4.B.9: Solve problems individually and/or collaboratively using computer applications.

GRADE 3 – Community Life

The following websites will be used to supplement Grade 3 Community Unit.

1. www.fodors.com
   This website offers information necessary for students to complete culminating Powerpoint project on planning an effective community. Students can browse and obtain realistic pictures of structures to incorporate into slide presentation. Students may wish to include "tourist" information (hotel prices, airfare, restaurant, entertainment) in order to persuade people to "visit" their created community.
2. www.planning.org/kidsandcommunity
   This website provides students with an interactive experience which takes them on a scavenger hunt through a fictitious community. Students may explore various components that make up a community and are prompted to "ask" or "do" to complete their task. This site provides students with an in depth look at what communities must include to be operational.
3. www.googleearth.com
   This website provides students with a "true view" of the world. Students are able to enter addresses or names of specific places and are instantly given a topographic view using satellite picture technology. A fun way for students to explore real-life communities!

4. www.eduref.org/Virtual/Lessons
   This website provides teachers with interactive supplemental lessons to incorporate throughout Unit 1-2 *Living in Our World.* Students are offered the opportunity to write letters to local merchants and businesses explaining how they contribute to their specific communities.
5. www.unitedstreaming.com
   This website offers a wide range of educational videos that will enhance the curriculum. Students are able to view full videos in full screen format. Please note that all schools may not have a user subscription.

Create a Crossword Puzzle

1. Teacher may first create a classroom account where students will save puzzles.
2. Students can choose 10 of the 21 vocabulary words in Lessons 1-4 of Unit 1 and their definitions.
3. Students will create a crossword puzzle using www.puzzlemaker.com

Student directions below:

Make a Community Crossword Puzzle

Go to web site www.puzzlemaker.com, and in Create Puzzles Online area, choose Criss-Cross Puzzle from drop down menu.

1. On puzzlemaker.com, input the title of your puzzle. Include your first name.

2. Leave the number of squares at 50 x 50.

3. Leave the size of the square at 30.

4. Input your vocabulary words and the clues that will help solve your puzzle.
The first word you type will appear in the puzzle. Then type the clue words without putting in a dash or other punctuation. (Example: community a group of people who live and work together). When done entering clues, click Create My Puzzle.

Click Save to my classroom account button.

Input a name for your puzzle (your name).

Your teacher will then complete the login and password.

ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN
Grade Level: Third

Topic:	Native American research paper/ Presentation
Purpose (GOAL) of project:	Learners will research, write and present a comprehensive research report utilizing related technology.
Objectives (skills and concepts) *Student will be able to....*	1-Knowledge:*Collect & examine* information from various reference resources (encyclopedias, books, atlas, internet sites)(3.1.H.1,2,3). 2- Comprehension: Use information gathered from various reference resources to *describe* selected culture(3.1.H.2,3). 3- Application: *Demonstrate* knowledge of culture and research gathering and writing through written research paper(3.2.A, 3.2.B.3,5). 4-Analysis: *Explain,* describe and summarize information through a prepared oral presentation (3.3.D). 5- Analysis: *Compare & contrast* chosen Native American culture based on similarities and differences among cultures as understood during classmates' presentations (3.4). 6-Synthesis: *Draw conclusions* based on similarities and differences among the cultures during peer presentations(3.4.B). 7-Application: *Use* technology (if time permits) to create a graphic organizer to show similarities and differences(3.1.G.10, 5.1.A, 1.2.A, 3.1).
Content concept/skill lessons:	Integrate Native American social studies theme with Trophies, Theme 5 (Westward Expansion) encompassing writers' workshop and research skills. -Theme 2 (On Your Mark) Writer's Craft: Research Report. -Lesson 1-Prewrite (pg. 167C-D) -Lesson 2-Outline (pg. 193 E-F) -Lesson 3-Draft (pg. 167C-D) -Lesson 4-Edit (pg. 261 E-F) -Lesson 5-Publish (pg. 297 E-F)
Technology to be used *by teacher* during the teaching /learning process:	The following is a list of websites to gather information and provide background information to be used by the facilitator: webtech.kennesaw.edu/cshackelford/webquest.htm coe.west.asu.edu/students/cscanlon/wqNA.htm

	http://www.si.edu/resource/faq/nmai/resource.htm mrsdell.org/nativeamericans/ http://falcon.jmu.edu/~ramseyil/native.htm http://students.wsc.ma.edu/sabel5053/data/Native%20American%20WebQuest.htm Laptops LCD projector Color printer Overhead projector
Technology to be used *by students* during the teaching/learning process:	Internet: kidinfo.com/AmericanHistory/NativeAmerican World Book online Yahooligans Microsoft Word Power Point (optional) Kidspiration or other electronic organizer (if time permits)
Technology skills lessons:	Keyboarding (3.1c, 1.2b) Formatting a paragraph-double spacing (3.1a) Use Spell Check (3.1a) Web (research) evaluation (3.3a, 4.1c, 4.3) Research Internet using a search engine (2.2) Use an electronic encyclopedia for research (6.1, 6.2) Incorporating text and graphics as a way to display information (2.1, 3.1c) Use grade level software appropriately (5.1.A, 1.2.A, 3.1)
List of web sites:	http://www.kstrom.net/isk/maps/usmapindex.html http://www.mce.k12tn.net/indians/navigation/native_american_chart.htm http://www.curtis-collection.com/tribalindex.html http://www.si.edu/resource/faq/nmai/resource.htm http://mrsdell.org/nativeamericans/resources.html http://falcon.jmu.edu/~ramseyil/native.htm http://students.wsc.ma.edu/sabel5053/data/Native%20American%20WebQuest.htm http://www.kent.k12.wa.us/staff/danastandlee/nativeamericans/doublebubble.doc www.unitedstreaming.com kidinfo.com/AmericanHistory/NativeAmerican World Book online Yahooligans
Suggested Product Ideas (outcome of project):	1-Multi-paragraph research paper typed in word. 2-Oral presentation with one visual component. 3-Kidspiration or other electronic organizer (optional)

	Additional Activities June 2007 -Make a museum exhibit. -Create Native American artifact specific to their tribe. -Make and present diary entries from the perspective of a day in the life of a tribe member. -Create interview questions to conduct a simulated interview of a tribe member. -Visit www.teachervision.com for free printable worksheets.
Assessments of skills of project:	See attached rubrics: 1-Written research paper 2-Oral presentation with visual component

Technology Literacy Standards

8.1.4.A.1: Use of basic technology terminology
8.1.4.A.2: Use basic features of an operating system (accessing programs, identify and select printer).
8.1.4.A.3: Input and access text and data, using appropriate keyboarding techniques or other input devices.
8.1.4.A.4: Produce a simple finished document using word processing software.
8.1.4.A.6: Create and present a multimedia presentation using appropriate software (power point, windows movie maker).
8.1.4.A.7: Create and maintain files and folders.
8.1.4.A.8: Use a graphic organizer.
8.1.4.A.9: Use basic computer icons.
8.1.4.B.1: Discuss the common uses of computer applications and identify their advantages and disadvantages.
8.1.4.B.2: Recognize and practice responsible social and ethical behaviors when using technology and understand the consequences of inappropriate use including internet access and copyrighted materials.
8.1.4.B.4: Recognize the ethical and legal implications of plagiarism of copyrighted materials.
8.1.4.B.5: Recognize the need for accessing and using information.
8.1.4.B.6: Identify and use web browsers, search engines and directories to obtain information to solve real-world problems.
8.1.4.B.7: Locate specific information by searching a database.
8.1.4.B.8: Recognize accuracy and/or bias of information.
8.1.4.B.9: Solve problems individually and/or collaboratively using computer applications.

Concept Plan Outline

I. Selecting a tribe
- A. Use "Tribal Map" (word search format) found in social studies curriculum packet
  or
- B. Use websites to generate additional tribe names.
  1. kidinfo.com
  2. http://mrsdell.org/nativeamericans/resources.html

II. Place headings on note cards (*Differentiation*: provide students with a hard copy of power point slides to record research information).
- A. Where they live(d). How long ago? What kind of a home did they live in?
- B. Lifestyle, Jobs and Home Life
- C. Interesting Facts
- D. Resources/Bibliography

III. Begin gathering research
- A. Library book specific to select topic
- B. Reference source (choose one or more)
  1. Encyclopedia
  2. worldbookonline
  3. atlas
- C. Internet research (choose one or more)
  1. www.kidinfo.com
  2. http://mrsdell.org/nativeamericans/resources.html
  3. www.yahooligans.com

IV. Outline information
- A. Trophies transparency pg. 203. or similar outline template
- B. Trophies pg. 193 E-F, related lesson material

V. Prewriting Process-Use outline to write rough draft
- A. Trophies pg. 167C-D, related lesson material
- B. Trophies pg. 221 E-F, related lesson material

VI. Editing Process- Trophies pg. 261 E-F, related lesson material

VII. Type document into Microsoft Word
- A. Double spaced
- B. Spell checked
- C. Print 2 copies- one for student to use for presentation and one to be graded by the teacher using rubric (see attached).

VIII. Prepare oral presentation-present information gathered using visual component (*Choose one product*; these are differentiated by learning style).

A. Dress up in the character of one of your people.
B. Use the overhead projector to make a slide show.
C. Make a poster with hand-drawn or printed pictures.
D. Make a model of the shelter used by your culture.
E. Create a slide show presentation using the prepared Power point template (see attached).
F. Come up with your own special ideas (Check with your teacher to see if it's O.K.).

IX. Present oral presentation (tasks for speaker and audience)

A. Use attached rubric to score student presentation.
B. Use attached fact sheet for students to record interesting facts throughout the listening process to keep students actively engaged.
C. Ask students to allow for questions and comments at the end of their presentations.

X. Additional activities (optional at teacher's discretion)

A. Peer conferencing to promote critical thinking skills, analysis of similarities and differences between chosen tribes, listening and provide peer feedback on presentation.
B. Use (attached graphic organizer) or create a Venn diagram or Double bubble for students to compare their tribe with another.
   1.http://www.kent.k12.wa.us/staff/danastandlee/nativeamericans/doublebubble.doc
   2. Use Kidspiration or electronic organizer (SMART Ideas) to create a graphic organizer.

B. Additional Trophies resources: Guided reading books
   1. "Cocoa Ice"- The Trading Post (on-level)
   2. "Cocoa Ice"- Trading Days (advanced)

C. United Streaming video from discovery channel education (www.unitedstreaming.com) to watch over 90 topic related videos on various Native American tribes.

ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN

Grade Level: Fourth

Topic:	The three branches of state government and the role they play in elections
Purpose (GOAL) of project:	To increase student knowledge of elections and the three branches of state government using multi-media technology in cooperative groups.
Objectives (skills and concepts) *Student will be able to....* Standard 6.2	Identify the 3 branches of state government. Describe the function of each branch. Explain checks and balances on each branch Compare and contrast each branch Predict the qualities needed for a good governor Define qualities and characteristics of 5 (number of homerooms) candidates for governor Demonstrate qualities of a good governor Identify 2 state problems from the point of view of the executive branch Convince people to vote for a particular candidate Draw conclusions about how a governor would best serve the people Verify value of evidence by a mock election
Content concept/skill lessons:	TLW name the three branches of government, describe the role of each branch, and explain the importance of each branch by completing a Webquest. Evaluation: Quiz TLW work cooperatively to create a mural and explanatory plaque about the three branches of government using a Webquest. Evaluation: Rubric TLW be divided into 5 groups. Each group will brainstorm the qualities that make a good governor. They will determine the physical characteristics and political and intrinsic qualities of their candidate. **In each headquarters:** Some learners will create a life-size replica of their candidate. Some learners will create a curricula vitae to represent their candidate.

	Some students will write a speech outlining 2 important state issues from the point of view of the executive branch. Some students will create a political cartoon best showcasing their candidate. Some students will create posters and election materials to help showcase their candidate. The learners will select one person to represent their candidate and deliver the speech. All 4th graders will vote for the BEST candidate in the primary election. All votes are tallied and the top 2 candidates prepare for a run-off. A new speech is prepared by the top two candidates as the other teams prepare election posters for them. Final speeches are delivered. A final vote is taken and the winner is announced.
Technology to be used *by teacher* during the teaching /learning process:	LCD projector Laptop computers Digital Cameras SMART Board optional
Technology to be used *by students* during the teaching/learning process:	Laptop computers LCD projector / SMART Board
Technology skills lessons:	TLW be introduced to the Webquest site Toggle between the Internet and another program (1.5) Copy and paste text from the Internet and a word document (2.2) Create a personal folder (2.2) Rotate text and change indents (3.1) Evaluate Web site resources (3.3, 4.1)
List of web sites:	http://webquest.org/questgarden/lessons/28856-060627071555 * www.state.nj.us/hangout_nj/government.html http://bensguide.gpo.gov/3-5/index.html www.pbs.org/democracy/kids
Suggested Product Ideas (outcome of project):	Mural and plaque defining the 3 branches of state government Life-size depiction of candidate Speeches

	Curricula vitae Posters Political cartoons **Additional Activities June 2007** 1. a mock Congressional debate 2. write a class Constitution based on the three branches of government
Assessments of skills of project:	Quiz on the 3 branches Each student is assessed individually by job rubric Group product / candidate Reflection sheet (metacognition)

Note: Timeline: This might be best taught the week before elections in November. If conferences are scheduled then, ½ days could be devoted to teaching this unit. It incorporates math, language arts, social studies and technology.

Technology Literacy Standards

8.1.4.A.1
8.1.4.A.2
8.1.4.A.3
8.1.4.A.4
8.1.4.A.6
8.1.4.A.7
8.1.4.A.9
8.1.4.B.2
8.1.4.B.4
8.1.4.B.5
8.1.4.B.6
8.1.4.B.7

ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN

Grade Level: Fourth

Topic:	Land and Erosion: Dams and Slope Erosion
Purpose (GOAL) of project:	Increase student knowledge of erosion and its effect on land and then use the knowledge to solve everyday problems. This project plan is to be used in conjunction with the lessons on dams and slope.
Objectives (skills and concepts) *Student will be able to....*	Students will work cooperatively in groups to: 1. utilize internet and text to collect information about a specific topic . 2. toggle between webpage, Power Point and a Word document. 3. examine information text and record answers to questions. 4. utilize concepts learned to create visual and oral presentation. 5. present presentation to the class. 6. develop and administering an assessment for peers. 7. utilize the scientific method to respond to a teacher generated problem using the information gathered from groups' research. Students will work independently to: 1. write a written conclusion using the scientific method; hypothesize, experiment, analyze, conclude and reflect. 2. answer questions to groups' quizzes
Content concept/skill lessons:	Content: 1. Dams- how they hold back water and why? -Google earth must be installed on the computers before doing this project 2. Flow of water and the slope of land affect erosion. 3. Strategies to effectively prevent erosion.
Technology to be used *by teacher* during the teaching /learning process:	Computers and/or laptops LCD Projector / SMART Board (optional)

Technology to be used *by students* during the teaching/learning process:	Computers and/or laptops World Wide Web Power Point Software Microsoft Word Software
Technology skills lessons:	Lesson on toggling between webpage, Word document and Power Point; cutting and pasting text and pictures if necessary. Power Point skills: animate, transition, and add slide effects to slides. (Presentation Tool)
List of web sites:	• http://www.unitedstreaming.com/search/assetDetail.cfm?guidAssetID=43ABA125-FFC3-4A11-8A19-4BD34DBB699A&tabStart=videoSegments • http://www.brainpop.com/science/theearthsystem/erosion/ • http://npdp.stanford.edu/index.html • http://www.pbs.org/wgbh/buildingbig/dam/arch_forces.html • http://www.watersheds.org/earth/field.htm
Suggested Product Ideas (outcome of project):	1. Oral and visual group presentation 2. Group created quiz 3. Group created stream table. 4. Individual written evaluation of project outcome **Additional Activities June 2007** Nature Walk- looking for signs observed in stream table -identify characteristics of erosion - video using Windows Movie Maker - still pictures using digital camera
Assessments of skills of project:	Assessments correlate with objectives. 1, 2, & 3. Teacher observation. 4. Teacher/Group Conference 5. Rubric defining oral and visual presentation 6. Teacher observation of group identification of key concepts

	7. Teacher observation of students solving the problem in their stream table 8. Rubric

Technology Literacy Standards

8.1.4.A.1
8.1.4.A.2
8.1.4.A.3
8.1.4.A.4
8.1.4.A.6
8.1.4.A.9
8.1.4.B.4
8.1.4.B.5
8.1.4.B.6
8.1.4.B.7
8.1.4.B.9

ELEMENTARY TECHNOLOGY INTEGRATION PROJECT PLAN
Grade Level: Fifth

Topic:	Branches of Government
Purpose (GOAL) of project:	To increase student knowledge of how the branches of government of the United States operates using a multi-media approach to research
Objectives (skills and concepts) *Student will be able to....*	• Identify branches of federal government (knowledge) • Describe the general functions of each branch (comprehension) • Examine and explain specifics of each branch (application) • Describe the relationships between branches, including examples of "checks and balances" (analysis) • Create a model which integrates the functions and relationships of governmental branches (synthesis) • Assess presentation of models based on provided criteria (evaluation) • Use common features of an operating system
Technology Standards	8.1.8.A.2: Use common features of an operating system (e.g., creating and organizing files and folders) 8.1.8.A.3: Effective, accurate and uses proper techniques when inputting text and data, using touch keyboarding

	8.1.8.A.5: Create documents with advanced text formatting and graphics using word processing 8.1.8.A.6: Create a file containing customized information by merging documents 8.1.8.A.8: Design and produce a basic multimedia project 8.1.8.A.10: Use network resources for storing and retrieving data 8.1.8.A.11: Choose appropriate electronic graphic organizers to create, construct, or design a document 8.1.8.B.2: Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse 8.1.8.B.3: Explain the purpose of an Acceptable Use Policy and the consequences of the inappropriate use of technology
Content concept/skill lessons:	• Chapter 12 content in We the People • Other supplementary sources
Technology to be used *by teacher* during the teaching /learning process:	• Computer • LCD projector or teacher demo station
Technology to be used *by student*	• PowerPoint or other Multi-media • Word processing • Internet research i.e. electronic encyclopedia • Video camera • Excel • Electronic graphic organizers i.e. Inspiration, Kidspiration • Laptops

Technology skills lessons:	• Work cooperatively and collaboratively with peers • Use handouts and note cards in PowerPoint presentations • Build PowerPoint presentations without templates • Use electronic encyclopedia to access information independently • Use Auto Shapes on drawing toolbar • Insert WordArt • Can insert, move, and delete a graphic object
List of web sites:	• www.brainpop.com • www.unitedstreaming.com • http://bensguide.gpo.gov Branches of Government – Good visual representation of branches and summary with links for vocabulary. • http://www.usconstitution.net/constop_cnb.html Constitutional Topic: Checks and Balances. Kidfriendly page, lists checks and balances by branch. • http://nanunet.lhric.org/highviewelem/Grade4/G4government/governmentstart.htm Fourth Grade level webquest, easily understood. Final product uses Microsoft Publisher, grading rubric included. • http://www.trumanlibrary.org/whistlestop/teacher_lessons/3branches/front.htm 3 Branches of Government Interactive Teaching Unit Grade 5-8.

	• www.edhelper.com American Government Units Grades 6-8 The Powers of the Judicial Branch The Powers of the Legislative Branch The Executive Branch Handouts, comprehension checks, puzzles and quizzes.
Products (outcome of project):	• Government branch functions: Mobile (Directions attached) • Branch specifics: Brain Pop video and quiz • Relationship between branches: Electronic graphic organizer • Integrative model: Theme Park guide (Directions attached)
Assessments of skills of project:	• Branches of Federal Government Rubric (attached) • Theme Park Guide Rubric (attached) • Brain Pop quizzes • http://www.educationworld.com/a_lesson/04/lp341-02.shtml

ELEMENTARY TECHNOLOGY INTEGRATION
PROJECT PLAN

Grade Level: Fifth

Topic:	Ecosystems
Essential Question:	How do people impact an ecosystem?
Purpose (GOAL) of project:	To increase student understanding of the balance of nature portion of the ecosystem science curriculum.
Product	Presentation on human impact on environment
Objectives (skills and concepts) *Student will be able to....*	• Read and understand informational text on the Everglades & Chesapeake Bay ecosystems. (Knowledge) Week 1 of Ecosystems unit • Summarize the evolution of the Everglades in the form of a review. (Comprehension) Follow story • Illustrate the effect of pollution by experimentation and using a photo journal. (Application) Lesson 2 Ecosystems unit • Compare & Contrast the Everglades ecosystem with the Chesapeake Bay ecosystem. (Analysis) Lesson 14 of Ecosystems unit; pull the article during terrarium growing phase • Assess human impact on the environment from different points of view (role play). (Evaluation) Lesson 15 Ecosystems unit and final presentation; see assignment sheet.
Content concept/skill lessons:	• Comprehend balance of nature in the Everglades through Trophies story "Everglades" – Theme 3 • Write a review of "Everglades" Trophies Theme 3 TE 273 E & F. Writer's Craft Trophies Teaching Transparency 100A & B and 101. Review includes creation, destruction, and restoration of the Everglades. • Comprehend dangers to Chesapeake Bay ecosystem – STC Ecosystems Lesson 14 Article. • Compare & Contrast the Chesapeake Bay to the Everglades using a Venn Diagram, either photocopy or Inspiration.

	• Create a photo journal to catalog the changing environments of each terrarium. Photos will be taken once a week and photos will be printed or uploaded for use in final presentation. • Research various websites to gather information on the causes, effects and solutions for a specific pollutant. (see student website sheet). • Create a final presentation (see assignment sheet) showcasing the ecocolumns, photo journals, and results of research of the specific pollutant.
Technology to be used *by teacher* during the teaching /learning process:	Laptop, Internet access, United Streaming Video segment, digital camera, LCD projector, Camcorder, blank VCR tape, Video: STC KIT *Living on the Edge: The Chesapeake Bay,* VCR
Technology to be used *by students* during the teaching/learning process:	Laptop, digital camera, camcorder, Inspiration software,
Technology skills lessons:	Use of digital camera Use of Excel Use of Power Point
List of web sites:	www.unitedstreaming.com www.brainpop.com www.thinkfinity.org www.mped.org www.harcourtschool.com/activity/exploring_ecosystems/index.html www.bellmuseum.org/distancelearning/watershed/watershed2.html www.hackensackriverkeeper.org.html
Suggested Product Ideas (outcome of project):	• Student comprehension of the story (individual) • Written Summary (individual) • Photo Journal (group) • Venn Diagram (individual) • Final Presentation – Oral/Visual (group)

	<u>Additional Activities June 2007</u> Poster Create a news article summarizing finding from all the data collected Cross curricula activity: Using Microsoft Excel, create a graph to document the amount of water required each time the ecosystem was watered
Assessments of skills of project:	• Trophies End of Selection Test (individual) • Writing Rubric (individual) • Integration pf photo journal into final presentation (group) • Oral/Visual Presentation Rubric (group)

Technology Literacy Standards-

8. 1. 8. A. 1
8. 1. 8. A. 2
8. 1. 8 A 3
8. 1. 8 A 4
8. 1. 8 A 5
8. 1. 8 A 8
8.1.8 B 2
8.1.8 B 3
8.1.8 B 4
8.1.8 B 6

Using Related Websites (Teacher)

www.brainpop.com
Brainpop is an interactive site with video and mini-lessons on varied curriculum topics.

Go to www.brainpop.com

Username _____

Password _____

Click on Science
Select Ecosystems
Click, Full Screen Movies
View Movie

www.unitedstreaming.com

Unitedstreaming is a video clips website.
Go to www.unitedstreaming.com

Username _____

Password _____

Go to Search box and type in: Jeff Corwin: The Florida Unique Ecosystem
Click on Go
Click on 15 segments
Select: Exploring the Everglades (time 5:45 minutes)
Click on View Full Screen

www.harcourtschool.com/activity/exploring_ecosystems/index.html
This brings you directly to the Harcourt online science resource page. Students can explore the Everglades and click on unfamiliar words to view definitions. As an extension, they can also investigate the Arctic coastal or Sonoran desert ecosystem.

Go to www.harcourtschool.com/activity/exploring_ecosystems/index.html

Click on Everglades.
Follow arrows

http://www.thinkfinity.org
This site brings you the home page of Thinkfinity where you will select an interactive game about oil spills around the world and the impact on wildlife. You may choose to divide the students in groups and assign a continent or a country to each one.

Go to http://www.thinkfinity.org

Under Teacher Resources on the left, click on Lesson Plan Index
Search selecting the following:

- Subject - Science
- Content – All
- Grade Band 3-5
- Resource Type – Student Interactives
- Records per Page – 25

Select Oil Spills
Type in a Group Name and select Start on the bottom right
Select a continent and then a country (only those continents and countries highlighted in blue have experienced oil spills).
Read about the spill then click on the Arrow on the right and add a summary
Students can share what they learned

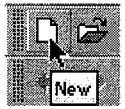
www.bellmuseum.org/distancelearning/watershed/watershed2.html
This site is an interactive game dealing with the watershed and a platform for discussion.
Go into novice level. Type in your name. Click "Let's begin." Read questions. Answer them and at the end it will review your results and explain the correct answer.

www.hackensackriverkeeper.org.html
This site allows to view a video on the pollution and clean up of the Hackensack River.
Go to the site. Click on Turning the Tide. Select "Hackensack River Cleanup" video

Using Excel in a Classroom

Creating a Chart or Graph

Step 1 - Launch Excel - If Excel is already open on your workstation open a new Excel workbook, There are three ways to do that.



1. Go to the Standard toolbar and click on the New Workbook button.

2. Go to the File menu and select New.

3. Use a keyboard combination: on a Macintosh use Command + N and on a Windows computer use Ctrl + N

Step 2 - Enter the data to be graphed. For the purpose of this lesson you will use data from a Favorite Fruit Survey. Enter it as you see below:

	A	B
1	Fruit	Number
2	Apple	8
3	Orange	4
4	Banana	3
5	Grapes	5
6	Peach	3
7	Pear	1

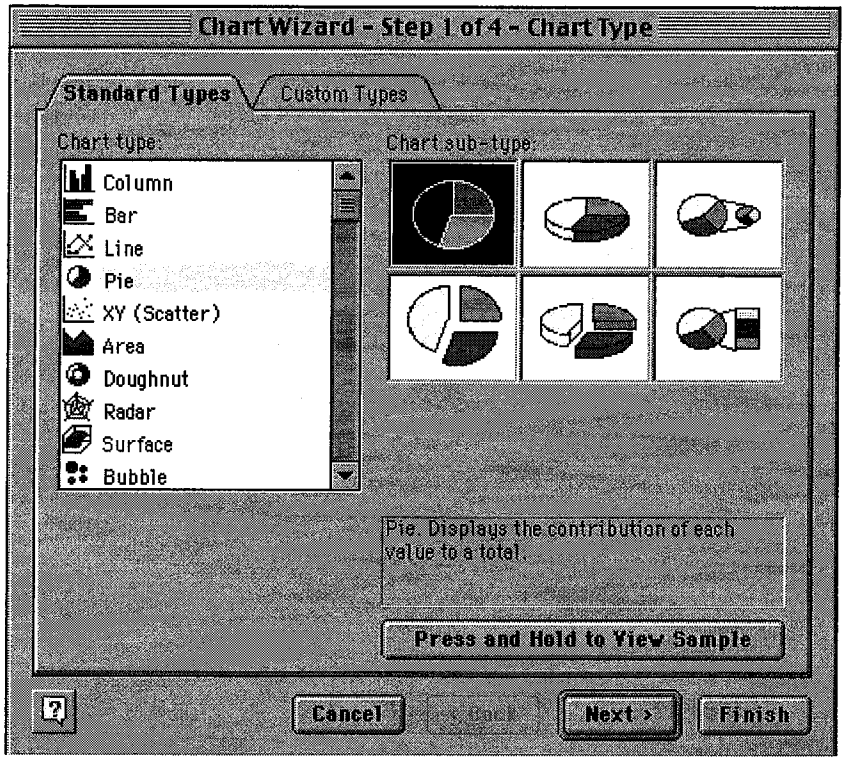
Step 3 - Highlight data to be graphed. Do not include the row with heading titles, only the names of fruit and the numbers. If your worksheet looks like the one above; put your cursor in call A2, click hold the mouse button down and drag to cell B7. Highlighted data should look like the image below:

	A	B
1	Fruit	Number
2	Apple	8
3	Orange	4
4	Banana	3
5	Grapes	5
6	Peach	3
7	Pear	1

Note: Cell A2 is selected, the select color extends around the cell

Step 4 - Select the Chart Wizard. That is done by going to the Insert menu and selecting Chart. You can also click on the Chart Wizard button on the Standard toolbar.

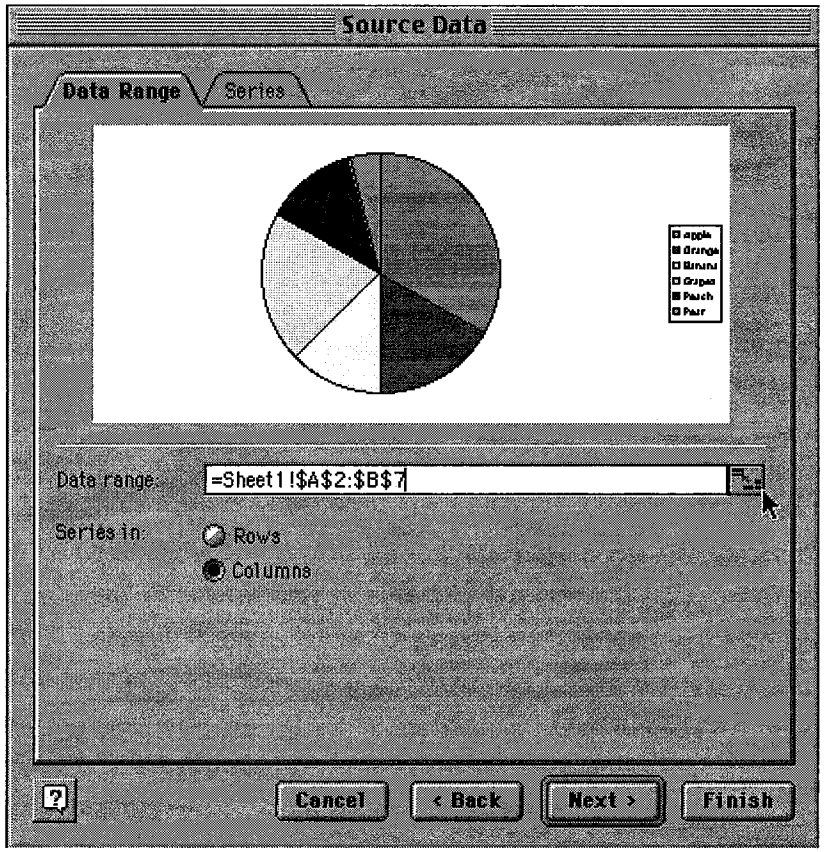
Step 5 - From the Chart Wizard box that opens select Chart type. For this activity, I selected pie.



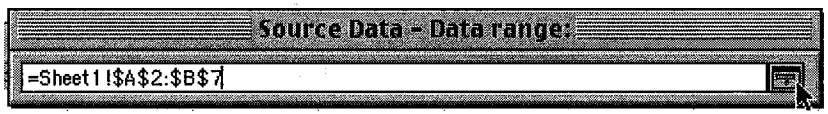
After you have selected the Chart type, click and hold your mouse pointer down on the Press and Hold... button to see what your data looks like in the chart type you selected. If you do not like the look, select another chart type. After you have selected the chart type you will have two options:

- Select Next and let Chart Wizard show you a series of options to make changes to your chart.
- Select Finish and Chart Wizard puts your completed chart on the spreadsheet. You can see the finished product below.

The second step taken by Chart Wizard is to verify the range of data being used for this chart. The Data range displayed below is read "all cells from A2 to B7."

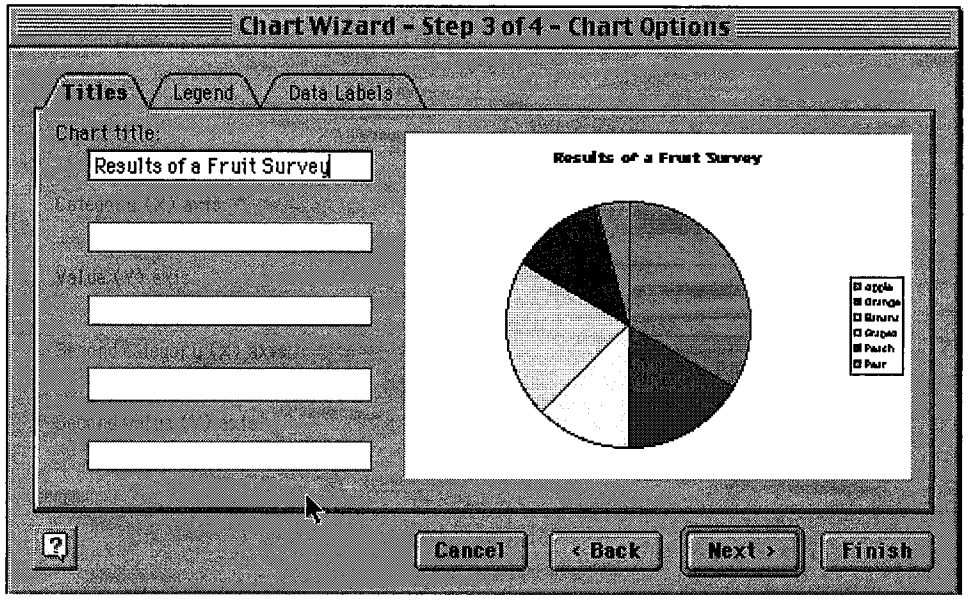


Notice where the cursor is located in the dialog box above. It is pointing to the small box at the end of the line where the Data range is displayed. If the data range should be changed, click on the box the cursor is pointing to.

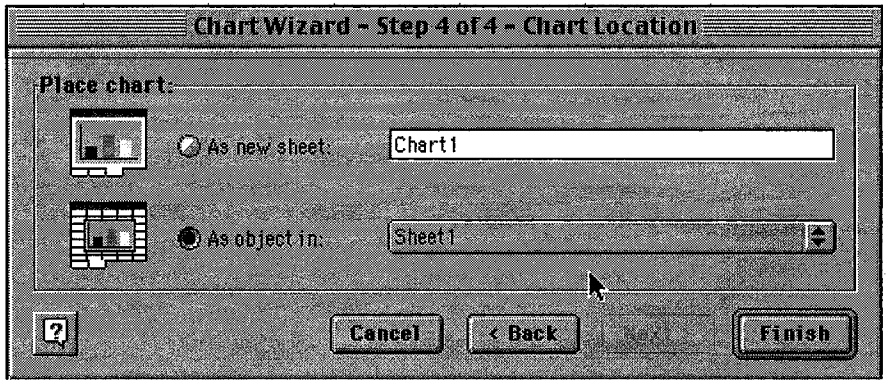


The dialog box shrinks allowing you to see your entire spreadsheet. You can edit the data range in this small window. When you are finished, click the same box at the end to restore the window.

Select Next to go to the dialog box below. This box allows you to add a title to the chart, make changes on the legend, or make changes on the data labels.



Select Next to move to the final dialog box which allows you to see the chart as a new sheet or place it on one of the sheets in your workbook.



Put name on paper using a text box.

Ecosystem Final Presentation

Name: _____
Date Due: _____

Presentation Expectations:
Follow the Oral/Visual Presentation Rubric
2 causes of pollution, 2 effects of pollution, 2 solutions
Use ecocolumn in presentation
Digital photography to show the progression of terrarium changes
Length of presentation: 10 minutes

Overview:
Each group must present effects of human impact on an ecosystem (Chesapeake Bay or the Everglades). The presentation must include 2 causes, 2 effects, and 2 possible solutions to the pollution problem. The presentation must include visual aids.

Step by Step:
Use what you know about the Everglades, the Chesapeake Bay, ecosystems, and pollution to create a presentation on human impact on environment.

Use your Everglades review, the Harcourt website, and the Jeff Corwin video clip on the Everglades to identify the causes and effects of pollution. Your group will be assigned to do some additional research on the impact of one of the following topics:

- fertilizers
- oils spills
- acid rain
- detergents
- road salt

Use Lesson 15 in Ecosystem Lab Manual to understand the issues from different points of view. Prepare your presentation and keep track of information on note cards. Some class time will be allotted to prepare your visuals. Keep your focus on how people impact the environment.

Ideas for presentation: PowerPoint, Poster, News Cast., Role Play

Website Resources for Pollution Presentation

Road Salt
When Salt Isn't Safe
STC Lesson 8
Salt and the Environment – www.dot.state.oh.us/ltap/Flyers/Archive/salt_and_the_environment.htm
Road Salt and Trees
www.cce.cornell.edu/monroe/horticulture/factsheets/fs18.htm

Fertilizers
Crops and Cows – What's the Problem?
STC Lesson 8
Fertilizers – Less is Better
http://gardening.wsu.edu/column/02-18-01.htm
Lawn Alternatives
http://eartheasy.com/grow_lawn_alternatives.htm

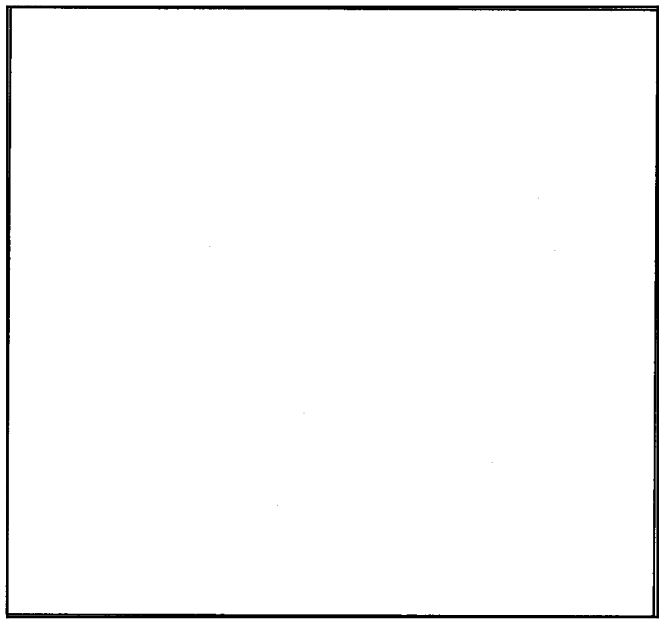
Oil Pollution
Hand out: Lesson 18 Oil Pollution
Hand out: What's the Story?
United States EPA
http://www.epa.gov/oilspill/index.htm

Acid Rain
Hand out: Lesson 13 Acid Rain
United States EPA
http://www.epa.gov/airmarkets/acidrain/
The Green Lane: Acid Rain
http://www.ec.gc.ca/acidrain/acidfact.html

Phosphates
Hand out: Lesson #22 Phosphates, Lead and Road Salt
The Phosphate Problem
http://www.shannon-fishery-board.ie/aboutus/phosphates.htm
EPA/Detergents
http://www.environment.nsw.gov.au/small_business/car_yards/detergents.htm

Digital Journal Template

Each week you will take pictures of your ecocolumns and write an observation of the changes. Be sure to include the date. These photos will be used in your final presentation.



Today's Date:_____

Observations:_____

_____

CURRICULUM/TECHNOLOGY INTEGRATION PROJECT PLAN

SAMPLE

Grade Level: _____

Topic:	
Purpose (GOAL) of project:	To
Objectives (skills and concepts) *Student will be able to....*	**Identify** (*knowledge*) **Describe** (*comprehension*) **Examine** and explain (*application*) **Compare** and contrast (*analysis*) **Predict** (*synthesis*) **Convince** (*evaluation*)
Content concept/skill lessons:	
Technology to be used *by teacher* during the teaching /learning process:	LCD Projector, computer
Technology to be used *by students* during the	SMART Board

teaching/learning process:	
Technology skills lessons:	
List of web sites:	
Product(s) (outcome of project)**:**	
Assessments of skills of project:	**Class developed rubric for oral/visual presentation**

APPENDIX E

Library / Media Lessons

October 2008

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Care of Materials and Facility

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ Selection of technology should be based on personal needs. ✓ Technology use can have positive or negative impact on both users and those affected by their use.	✓ How do I choose which technological tools to use and when it is appropriate to use them? ✓ What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*

Students will know: How to care for materials; practice safe and responsible technology techniques and respect the media center facility and its contents	**Students will be able to** 1. Borrow and return a book responsibly (K-5) 2. Share materials with small and large groups (K-5) 3. Practice Internet Safety (3-5) 4. Explore and adhere to the terms of the district Acceptable Use Policy (AUP) (3-5) 5. Respect the rights of others to utilize the media center space (K-5) 6. Identify a copyrighted sources (3-5) 7. Demonstrate knowledge of copyrighted materials with respect to plagiarism (4-5)	8.1.A.1 8.1.B.2 8.1.B.3 8.1.B.4

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Athena Library Circulation Program

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ A tool is only as good as the person using it. ✓ Selection of technology should be based on educational need.	✓ How do I choose which technological tools to use and when it is appropriate to use them? ✓ How can I transfer what I know to new technological situations/experiences?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*
Students will know: How to navigate the electronic card catalog	**Students will be able to:** 1. Locate the computer in the library appropriate for searching (1-5) 2. Locate and identify the correct icon (1-5) 3. Open the database (1-5) 4. Identify and use the author, title, subject search icons (1-5) 5. Accurately determine and spell search terms (1-5) 6. Develop a vocabulary as it applies to searching (1-5) • Tabs vs. Bars • Author • Title • Subject 7. Determine the advantages between quick search and advanced search (3-5) 8. Utilize multiple-word search, including "Quick Search" and "Advanced"(3-5) 9. Explore the database for additional information in order to locate materials (3-5) 10. Obtain information for the purpose of citation (3-5) 11. Show respect for equipment and database (K-5) 12. Interpret symbols and icons utilized in the database (2-5) 13. Record appropriate information for location of materials (1-5)	8.1.A.1 8.1.A.2 8.1.A.5 8.1.A.9 8.1.B.1 8.1.B.2 8.1.B.5 8.1.B.7

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Locate Materials, Print and Electronic

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS

✓ A tool is only as good as the person using it. ✓ Technology is constantly changing and requires continuous learning of new skills.	✓ When are the most sophisticated tools required and when are the simplest tools best? ✓ How can I transfer what I know to new technological situations/experiences?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*
Students will know: How to explore and locate materials and information within a library setting.	**Students will be able to:** 1. Employ the components of the Dewey Decimal System (3-5) • History • Melvil Dewey, biography • Organization and utilization • Call numbers, letters, spine identifiers • Vocabulary and terminology 2. Differentiate between various library organization systems (4-5) 3. Record information in order to locate books (1-5) 4. Apply learning to other library venues (1-5)	8.1.A.1 8.1.A.3 8.1.A.9 8.1.B.5 8.1.B.7

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Research and Information Collection

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ A tool is only as good as the person using it. ✓ Technology use can have positive or negative impact on both users and those affected by their use.	✓ How can I transfer what I know to new technological situations/experiences? ✓ What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*
Students will know: How to identify, locate, and access information for the purpose of specific research.	**Students will be able to:** 1. Determine a research need (K-5) 2. Develop a research strategy (3-5) 3. Determine the appropriate tool(s) to meet the research need (3-5) 4. Explore and extract information from a variety of sources including electronic encyclopedias and data bases, books, periodicals, and other appropriate sources. (3-5) 5. Explore search engines (3-5) 6. Explore data bases, such as EBSCO 7. Evaluate information obtained from the Internet as to appropriateness, accuracy, authenticity and quality (3-5) 8. Employ effective search techniques (2-5) 9. Save information electronically (4-5) 10. Recognize differences between opinion, fact, advertising and fabrication (4-5)	8.1.A.1 8.1.A.2 8.1.A.3 8.1.A.7 8.1.A.9 8.1.B.1 8.1.B.2 8.1.B.3 8.1.B.4 8.1.B.5 8.1.B.6 8.1.B.7 8.1.B.8 8.1.B.9

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Literature Extension, Development and Exploration

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ Selection of technology should be based on personal and/or career needs assessment.	✓ How do I choose which technological tools to use and when it is appropriate to use them? ✓ How do I choose and age appropriate texts?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*

Students will know:	Students will be able to:	
And become familiar with a variety of age-appropriate literature	1. Locate and borrow appropriate reading materials (K-5) 2. Explore literary genre (K-5) 3. Interact with a variety of Internet sources reflective of literature (K-5) • Author/Illustrator sites • Award (such as Newbery or Caldecott) • Interactive web sites 4. Compare and contrast print and non-print materials (K-5) 5. Explore differences between fiction and non-fiction (K-5) 6. Identify differences between biography and other non-fiction (2-5) 7. Appreciate an oral presentation of literature (K-5) 8. Attend to oral presentations and directions (K-5) 9. Explore and develop a variety of reading skills including, but not limited to, compare and contrast; evaluating; predicting; etc. (K-5) 10. Identify author/illustrator characteristics (K-5) 11. Identify and locate picture books, easy readers and novels (K-5)	8.1.A.1 8.1.A.2 8.1.A.9 8.1.B.1 8.1.B.2 8.1.B.5 8.1.B.7

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Award Winning and Enduring Classic Literature

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ Selection of technology should be based on personal and/or career needs assessment.	✓ How do I choose which technological tools to use and when it is appropriate to use them?

	✓ How do I choose and age appropriate texts?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*
Students will know: Various techniques necessary to experience and explore a variety of outstanding literature.	**Students will be able to:** 1. Define and locate Caldecott award books (K-5) 2. Define and locate Newbery award books (4-5) 3. Define and locate other award winning books, such as the Coretta Scott King Award, Garden State Book Award, etc. (K-5) 4. Locate and explore classic literature at all levels (1-5) 5. Participate in celebrations recognizing quality literature (K-5) 6. Locate information about authors and illustrators in print / non-print sources (1-5)	8.1.A.1 8.1.A.2 8.1.A.9 8.1.B.1 8.1.B.5 8.1.B.7

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Assessment of Research Materials

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ A tool is only as good as the person using it. ✓ Technology use can have positive or negative impact on both users and those affected by their use.	✓ How can I transfer what I know to new technological situations/experiences? ✓ How do I assess and document research materials?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*
Students will know: Techniques for assessing, recording, and documenting research materials	**Students will be able to:** 1. Define plagiarism (4-5) 2. Understand copyright infringement implications (4-5) 3. Develop a bibliography (4-5) 4. Cite a source (4-5) • Identify citation elements • Cite print and non-print materials 5. Identify and record components of research material, print and non-print, for the purpose of citation (4-5) 6. Search the Internet safely (3-5) 7. Use the library printer appropriately (2-5) 8. Cut and paste information or images into a separate document to be saved on a community drive (3-5) 9. Rate collected information for the purpose of determining value as applied to specific research. (4-5) 10. Conserve resources (K-5)	8.1.A.1 8.1.A.2 8.1.A.3 8.1.A.4 8.1.A.7 8.1.A.9 8.1.B.1 8.1.B.2 8.1.B.3 8.1.B.4 8.1.B.5 8.1.B.6 8.1.B.7 8.1.B.8 8.1.B.9

RANDOLPH TOWNSHIP SCHOOL DISTRICT
October 2008
Library / Media Technology Project
UNIT: Technology Terminology

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ Technology is constantly changing and requires continuous learning of new skills.	✓ How can I transfer what I know to new technological situations/experiences?

KNOWLEDGE	SKILLS	NJCCCS *Randolph Standards*

Students will know:	**Students will be able to:**	
How to use and apply appropriate vocabulary as it reflects upon learning	1. Identify and use vocabulary associated with (K-5) • Parts of a book, as per grade levels K - author, illustrator, title 1 – Spine, label, call number 2 – Cover, Title Page 3 – Publisher and publishing elements 4 - © (copyright), Place of Publication 5. Citation, Sources Cited Page • Parts of a computer • Areas of the library facility • Technology Hardware • Web 2.0 applications • Advanced literary terms (3-5) • Literary genre (3-5) • Research terms (3-5) • Internet Terms (2-5) • SMARTt Board Terms	8.1.A.1 8.1.A.2 8.1.A.9 8.1.B.1 8.1.B.2 8.1.B.5 8.1.B.7

Library / Media Technology Integration
Unit 1.1 – Lesson Plan
Borrow and Return Books

Concept/Objective:

SWBAT – Borrow and return an age-appropriate book responsibly
(Book is returned in good condition and on time)

Materials:

Library circulation desk
Circulation computer
Bar code reader
Books (collection)

Strategies/Procedures:

Rules
Borrowing time
Number of books allowed to borrow
Bar code reader
Proper care of book

Assessment:

Immediate: Successful checking out of book
One week: Returned book in a timely manner

Standards:

NJCCCS 3.4.A.1
8.1.A.1
8.1.A.2
8.1.B.2

Library / Media Technology Integration
Unit 1.3 – Lesson Plan
Internet Safety

Objective: Students will learn how to safely use the Internet in a classroom setting, the library, and on their home computer.
Basic Skills:

1) Ask permission before using the Internet
2) Where to find proper web sites
    Sites recommended by your teacher or librarian
    Approved search tools
3) Make sure search terms are typed correctly
4) What to do if you come across inappropriate content
    - Stop searching
    - Close the laptop or turn off computer monitor
    - Talk to your teacher, librarian, or other adult
5) Do not put your personal information online
6) Use proper etiquette when using the Internet

Materials:

Computer / Smartboard
Laptops for students
Worksheet

Strategies:

Determine students' level of skill in using the Internet.
    Ask: How many of you have used the Internet?
Pull up a search engine on the Smartboard
Have students go to approved search engine on their laptops
Students will type in a search term
    Persimmon
    Kumquat
    Kiwi
Students will fill out worksheet to evaluate the information found with their search term
Discuss the differences found in the search results

Assessment:

Worksheet and follow-up discussion to determine their knowledge of navigating the Internet

Standards:

NJCCCS	8.1.A.1
	8.1.A.3
	8.1.B.2
	8.1.B.5
	8.1.B.6
	8.1.B.7
	8.1.B.9

Unit 1.3 - Worksheet

Are You Ready to Search the World Wide Web?

Name _____

1. Go to www.kids.yahoo.com

2. At Yahoo Kids, click in the text box next to the Search button. Type the keyword.

3. Click the Search button.

I used this search term _____

What did you find?

Correct Match – Appropriate to your search

- Were all of the results related to your search term?
- How many web sites were related to your search?
- Name one interesting fact you found from your search:

Correct Term – Not appropriate to my search word

- You thought you would find:
- This is what you found:

No Match at All

- Why were there no results for your search?
- Did you spell the word correctly?
- What would you do differently?

Library / Media Technology Integration
Unit 1.4 – Lesson Plan
Understand the Acceptable Use Policy

Objective: Students will be able to describe the school district's Acceptable Use Policy (AUP), describe consequences for misusing school computers/network, and identify need for Acceptable Use Policies.

Materials:

Computer/Smartboard
Activity Sheet (either print or on Smartboard Notebook)
Randolph Township Acceptable Use Policy
Cyber Smart poster

Strategies:

- Introduce – Invite students to imagine themselves as parents. Discuss how a busy street is a dangerous place for children.
- Ask – How do you know that your child is ready to cross the street by herself? Is it when she reaches a certain age? Or, will she have to show you that she is ready?
- Discuss with students the need for children to follow safety rules. Have them list rules they, as parents, would teach their children.
- Ask – What will you do if your child breaks the rules? (impose punishments, lose privilege of crossing street alone)
- Explain that parents, teachers, and principals think about similar issues when students go into cyberspace.

- Teach 1 Pull up the activity sheet on Smartboard. Have one student read "Think About This." Help them understand that going into cyberspace connects their computer to other people's computers around the world.

- Teach 2 Have district's Acceptable Use Policy (AUP) on Smartboard, paraphrase the rules for the class. Then have students complete "Read the Fine Print" as a group on the Smartboard.
- Close Remind students that they need permission to use the Internet.
- Ask: What might happen if students used school computers without knowing the rules of school computing? (They might break a rule and be punished or they might get into trouble in cyberspace.)

Assessment:

Immediate: Quality of discussion
Future: Proper use of Internet and following of district's AUP.

Standards:

NJCCCS 8.1.A.1
8.1.B.2
8.1.B.3
ISTE® National Technology Standards Performance Indicator # 3

Library / Media Technology Integration
Unit 4.6 – Lesson Plan
Website Evaluation

Overall Objective: Students will be able to evaluate websites for reputability, content, accuracy, location, age appropriateness, audience, authority, and purpose.

Definition of web evaluation:

Introduction Lesson:
Location – defining the domains

- What is the site's address/URL?
- Is the server at a school or university? A business? A government agency? An organization?

Purpose – Why does the website exist

- Is the site trying to sell something? To inform? To persuade?
- Is the same information found in other easy to find sources?
- Who is the website's target audience?

Objective: Students will be able to evaluate websites to determine the location of the site and the purpose for its existence.
Materials:

Computer / SMART Board / Websites
http://www.nutrition.gov http://www.nutritionforkids.co http://www.nutrition.net
http://kidshealth.org/kid

Strategies/Procedures:

Discussion about evaluation – defining the term, understanding the students' current level of evaluation
Have websites pulled up on Smartboard before class begins
Explain the different domain locations
Pull up each domain type one at a time to show sample (.gov, .com, .org, and .edu)
- Further discuss the domain locations
- Begin discussion about purpose

Assessment: Quality of discussion with students
Standards:

NJCCCS 8.1.A.1
8.1.B.1
8.1.B.2
8.1.B.8
3.1
3.3
3.4

Second Lesson:

Content –

- Is the content accurate? Error free? Are there spelling or grammar errors?
- Is the information presented in an objective manner, with a minimum of bias?
- Is there real depth-of-content or is the information limited and superficial?
- Does the site overwhelm the user with too much information?
- Are links from the site appropriate and are they supportive of the content?
- Does the content have educational or informational value?

Audience –

Age Appropriateness –

- Is the page easy to understand and use? Is it well organized?
- Does the page load in a reasonable amount of time?
- Do all of the links work?
- Is the page free from (excessive amounts of) advertising?

Materials:

Computer
Smartboard
Websites

http://kids.msfc.nasa.gov
http://nasa.gov
http://www.cmom.org
http://www.metmuseum.org

Objective: Students will be able to evaluate websites for their content, audience, and age-appropriateness.

Strategies:

Quick review about evaluation – including location domains and purpose.
Have (2 NASA) websites pulled up on Smartboard before class begins
Search for similar topic on each site
Have students discuss
Which site would they chose?
Why is that site more appropriate for their needs/reading level?
Discuss terms – age-appropriate and audience

Assessment: Quality of discussion with students.

Standards:

NJCCCS 8.1.A.1
8.1.B.1
8.1.B.2
8.1.B.8
3.1
3.3
3.4

Third Lesson:
Authority –
Accuracy –

Who is sponsoring the site
Who is writing for the site

- Does this person responsible for the website appear to be knowledgeable about the content?
- Is this person a true authority or expert on the topic?
- Can you contact this person from the site? Is there a working email address or phone number?
- Who sponsors the site? Are there links to the sponsor's website?
- Are there references/citations listed on the website?
- Is the information current? Does the current date matter?

Objective: Students will be able to evaluate websites based on their authority and accuracy.

Materials:

Computer
Smartboard
Specific websites

Website evaluation worksheet

Strategies:

Quick review about evaluation – location domains and purpose – content and audience.
Have websites pulled up on Smartboard before class begins
Discuss the points above on how to determine the accuracy and authority of the content included on the website.
Hand out website evaluation worksheet

Assessment: Discussion and their ability to evaluate websites based on the worksheet.

Standards:

NJCCCS 8.1.A.1
8.1.B.1
8.1.B.2
8.1.B.8
3.1
3.3
3.4

Unit 4.6 – Worksheet

Website Evaluation Form

Your Name: _____

Website Name: _____

WHO is responsible for the web site?
Is the person a true authority or expert on the topic?
YES NO

WHAT is the content/subject matter of the web site?
The main subject of this web site is _____

Does the content have educational or informational value?
YES NO

Are there references listed for the information on this site?
YES NO

WHEN the web site was last updated?
Is the information current? Is there a date listed?
YES NO

WHERE does the web site reside?
___ .gov ___.com ___.edu ___.org

WHY does this web site exist?
Is the site trying to:
___ sell something
___ inform
___ persuade
___ entertain
___ fool

HOW does the main page look and function?

Is the page easy to understand and use?
YES NO

This site is written for:

___ students
___ adults