Unit 2: Math and Reading Skills with Technology

Content Area: **Technology**
Course(s): **Technology**
Time Period: **Marking Period 2**
Length: **Weeks**
Status: **Published**

Unit Overview

Marking period 2 continues with lessons to build on the previous mouse and keyboard skills as well as adding more math and reading variety. Some of the topics include sorting, rhyming, matching, counting, comparing, sentence word order, upper and lowercase, vowel sounds, letter sounds, patterns, and more. The teacher introduces and models activities, then provides guided / assisted practice sessions. Students will be given a basic introduction to engineering.

Standards

TECH.8.1.2.A.1	Identify the basic features of a digital device and explain its purpose.
TECH.8.1.2.A.2	Create a document using a word processing application.
TECH.8.1.2.A.3	Compare the common uses of at least two different digital applications and identify the advantages and disadvantages of using each.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.8.1.2.A.CS2	Select and use applications effectively and productively.
TECH.8.1.2.B.1	Illustrate and communicate original ideas and stories using multiple digital tools and resources.
TECH.8.1.2.B.CS2	Create original works as a means of personal or group expression.

Essential Questions

- 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?
- What online sites exist to help me practice what I am learning in kindergarten?
- How does technology improve our everyday lives?
- What are ideas?
- Why are ideas important?

Application of Knowledge: Students will know that...

- A tool is only as good as the person using it
- By using technology effectively, we can live, learn and work more effectively

- Engineers have an impact on the world they live in and their daily lives.
- That they can use virtual environments to further enhance their understanding of literature, science, and math.
- That websites, virtual environments, exist that allow them to paint, color, write, and hone their investigative learning skills.
- We develop our own powerful ideas and problemsolving skills

Application of Skills: Students will be able to...

- Consistently and regularly type the alphabet A-Z to develop letter recognition and basic keyboard literacy

Assessments

The teacher will informally assess students throughout the unit by observing their natural usage of the following skills:

- Navigate through a website using the mouse properly
- Type the appropriate keys while naviagting a website
- Identify letters A-Z on the keyboard

Suggested Activities

Engineer of the Week: Each week, a new engineer will be briefly introduced to the class, highlighting their impact on their current world.

Students will utilize the following websites:

Upper and Lower Case Letters:

- http://www.tvokids.com/games/keyboardclimber2
- http://www.abcya.com/typing_rocket_junior.htm

Letter Sounds:

- http://www.starfall.com/n/skills/ch/load.htm?f
- http://www.abcya.com/dolch_sight_word_bingo.htm
- http://www.starfall.com/n/picture-hunt/long-a/load.htm?f

Numbers:

- http://www.abcya.com/connect_the_dots_80.htm
- http://www.abcya.com/addition.htm
- http://www.abcya.com/numerical_order.htm
- http://www.abcya.com/number_bubble_skip_counting.htm

Money:

- http://www.abcya.com/money_bingo.htm

Engineering based Books:

- *Marvelous Mattie: How Margaret E. Knight Became An Inventor* by Emily Arnold McCully
- *Papa's Mechanical Fish* by Candace Fleming and Boris Kulikov
- *What Do You Do With An Idea?* by Kobi Yamada and Mae Besom

Activities to Differentiate Instruction

- Behavior modification reward system to encourage time on task so that work is completed
- Partner with a capable learner. Closely monitor partner work
- Students will brainstorm classroom rules, and the teacher will model proper keyboarding techniques while typing their responses.
- Periodically, review the student's maintenance of their folders and incomplete work
- Provide individualized check lists of the directions for a task in support of the thorough execution of directions.
- Proximal seating for all large group work

Enrichment Activities:

- http://www.abcya.com/road_rally.htm
- http://www.abcya.com/alphabet.htm
- http://www.abcya.com/letter_match_uppercase_lowercase.htm
- http://www.abcya.com/dolch_sight_word_spelling.htm
- http://www.abcya.com/learning_coins.htm
- http://www.abcya.com/numerical_order.htm
- http://www.sesamestreet.org/games?uuid=7380c2a5-163c-11dd-98c7-b9f43dcf5330
- http://www.sesamestreet.org/games?uuid=6759e8da-163b-11dd-98c7-b9f43dcf5330
- http://www.abcya.com/flash_book_sugarbugs.htm
- http://www.abcya.com/number_bingo.htm

Integrated/Cross-Disciplinary Instruction

- ELA: Letter recognition, letter recognition/sounds, sorting, rhyming, sentence word order, upper and lowercase, vowel sounds and letter sounds
- Math: Color, shape recognition, matching, counting, comparing and patterns
- Engineering: Storybooks

Resources

Websites:

- http://www.abcya.com/keyboarding_practice.htm
- http://www.abcya.com/cup_stack_typing_game.htm
- http://www.tvokids.com/games/sortit
- http://www.sesamestreet.org/games?uuid=44e4e33a-163d-11dd-98c7-b9f43dcf5330
- http://pbskids.org/lions/games/skyriding.html
- http://practicadelmouse.altervista.org/
- http://pbskids.org/lions/games/monkeymatch.html
- http://pbskids.org/lions/games/messyattic.html
- http://www.abcya.com/counting_fish.htm
- http://www.abcya.com/counting_sorting_comparing.htm
- http://www.starfall.com/n/level-k/letter-i/
- http://www.starfall.com/n/make-a-word/en/load.htm?f
- http://www-tc.pbskids.org/dinosaurtrain/media/swfs/howBig.swf
- http://www.starfall.com/n/level-k/letter-l/load.htm?f
- http://www.professorgarfield.org/Phonemics/IntroCharacters.swf
- http://www2.learningtoday.com/player/swf/Algebra_ConcretepictorialPatterns_LK_V1_t3a.swf
- http://pbskids.org/curiousgeorge/games/how_tall/how_tallV15.swf?
- http://www.starfall.com/n/level-k/letter-b/load.htm?f
- http://www.starfall.com/n/level-k/letter-d/load.htm?f
- http://www.abcya.com/connect_the_dots_30.htm
- http://pbskids.org/peg/games/magical-shape-hunt
- http://www.starfall.com/n/level-k/letter-p/load.htm?f
- http://www.abcya.com/connect_the_dots_50.htm
- http://www.abcya.com/connect_the_dots_30.htm
- http://www.starfall.com/n/level-k/letter-v/load.htm?f

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