

Grade 2 Computer Lab

Informational Media & Technology Literacy

Grade 2

Course Overview

Over the course of the year, the second graders learn the basic functions of computers. This includes starting and closing programs, logging on, and identifying the parts of a computer. A large amount of time is spent Using Google Workspace apps like Gmail, Drawings, Docs and Slides. They are introduced to keyboarding and digital citizenship, as well as computer coding using Code.org or other applicable programs. When appropriate, classroom themes are incorporated into the instruction of the online tool being taught. The students create artifacts/projects in each of these programs that help them demonstrate skills taught in class.

Scope and Sequence

Timeframe	Unit	Instructional Topics
Ongoing	Basic Computer Use and Vocabulary	1. Exploring Parts of a Computer
Ongoing	Keyboarding	2. Basic keyboarding instruction using Dance Mat Typing or other appropriate website
Ongoing	Gmail/email	3. Proper email etiquette
Ongoing	Word Processing using Google Docs	1. Formatting Fun 2. Draw Insects 3. Bear Slideshow
Ongoing	Digital Citizenship	1. Privacy and Security 2. Digital Footprint and Identity 3. Cyberbullying
Ongoing	Internet Skills	1. All About Bears!
Ongoing	Coding	1. Intro to Hour of Code Hour of Code 2. Code.org Course C or other applicable resource
Ongoing	3D Design and Printing	1. Tinkercad: design bookmark/keychain

Course Details

Unit: Basic Computer Use and Vocabulary (ISTE: 1.d) -- Ongoing

Description

Through the use of a Slideshow/Presentation or other means of engagement, 2nd graders will be introduced to these basic computer terms and parts of a computer- keyboard, printer, flash drive, Google Drive, files, folders, scanner, speakers, headphones/earbuds, laptop, desktop, monitor, CPU, and mouse. They will also learn how to properly use a mouse as well as understand click versus right click.

Materials and Resources

Basic Parts of a computer Slideshow
Computer Basics Digital worksheet
Computer Basics Quiz and/or Kahoot

Learning Targets

The students will identify the following basic parts of a computer: mouse, mouse pad, keyboard, printer, CD, drive, flash drive, monitor, speakers, and laptop.

- View Basic Computer Parts
- Discuss the function of each part
- Complete Computer Basics digital worksheet with a partner by using clipart or the Internet

(Google search for images) to find pictures of each computer part

- Computer Basics matching quiz (Match computer part to correct word)

Unit: Keyboarding (ISTE: 2.b, 3.b, 3.d., 5.a., 5.b, 6.a)--Ongoing

Description

In this unit the 2nd graders will receive proper keyboarding instruction with a focus on hand placement on the home row, thumbs on spacebar, and identifying these keys: backspace, tab, delete, shift, caps lock, control, enter, and the arrow keys.

Materials and Resources

Paper handouts of a Qwerty keyboard to practice coloring in their username, password, and the keys mentioned above in the description. Dance Mat Typing website or any age appropriate keyboarding website.

Learning Targets

The 2nd graders will identify the home row and to the best of their ability place their fingers properly on the keyboard.

Unit: Gmail (ISTE: 6.a., 6.b, 7.a., 7.b)-- Ongoing

Description

Second graders are introduced to Gmail/email and learn how to format an email and use all necessary parts: recipients, subject line, salutation, body, closing, signature and attachment.

Materials and Resources

Videos obtained from Safari Montage, YouTube, Brainpop, or Teacher Tube (other platforms as needed) that demonstrate proper email etiquette.

Learning Targets

Students will compose emails with recipients, subject line, salutation, body, closing, attachment and signature.

Unit: Digital Citizenship/School AUP (ISTE: 2.a., 2.b., 2.c., and 2.d.)--Ongoing

Description

Second graders will recognize that the internet and our school AUP has rules/expectations to keep them safe and although websites/apps can be fun there are hidden dangers that they can stay away from so they have a positive digital footprint.

Materials and Resources

[Common Sense Media](#) lessons (or other appropriate resources): That's Private!, Digital Trails, and Putting a STOP to Online Meanness.

Unit: Word Processing (ISTE: 2.b, 3.b, 3.d., 5.a., 5.b, 6.a) -- Ongoing

Description

In this unit, the students will utilize Google Drawings. They will draw insects, which correlates with what they are learning in homeroom thematic units. The students will also learn the basics of Google Docs, including centering, text, deleting information, highlighting, selecting font color, changing the font and the size, etc.....

Materials and Resources

For the insect aspect of this unit, the students will be drawing on knowledge that they gain in their homerooms. Post pictures of the various insects studied: bee, praying mantis, butterfly, ant, ladybug etc

TOPIC: Formatting Fun -- Ongoing

Description

Students open formatting fun document found on my website or Google Classroom and make a copy for their Google Drive. They are introduced to basic formatting options like fonts, font color, size, alignment, spacing, etc. They will continue to use these skills throughout the year for Valentine's letters as well as Mother's Day Cards, etc.

Learning Targets

The students will begin using basic formatting found in Google Docs or other word processing programs: fonts, font color, size, alignment, spacing, etc.

TOPIC: Draw Insects -- 4 Class Periods

Learning Targets

The students will create insects using Google Drawings or other online drawing program.

- shapes
- lines
- text
- border color
- fill

Unit: Internet Skills (ISTE: 2.c, 3.a., 6.b., and 6.d) -- Ongoing

Description

In this unit, the students use sites on the Internet to supplement what they are learning in their homeroom classes. Some examples are sites on frogs, toads, pioneers, simple machines, bears, Australia, and the Great Barrier Reef. These sites reinforce content learned in the classroom and introduce them to some of the functions of the Internet: links, back/forward arrows, URLs, etc.

Materials and Resources

It is important to check with the homeroom teachers to align the lessons with their units as they change periodically.

TOPIC: Bears and Other Classroom related themes -- Ongoing

Description

Introduce students to the Google search engine and discuss the number of "hits" received when we search for information about **bears** and how to use correct search terms to locate exactly what we are searching for. They will work with a partner (one of proficient reading ability and one less able) to complete a Google Form exit ticket.

Learning Targets

The students will navigate the internet to locate sites about black bears, polar bears, and brown/grizzly bears to complete an exit ticket to show their learning and questions they might have about bears.

TOPIC: All About Bears! -- 9 Class Periods

Learning Targets

The students will complete a Slideshow/Presentation that requires them to use PebbleGo and/or Kiddle to answer questions about bears.

· The students will need to be reminded of how to copy and paste information, which is a brand new skill for them. By copying and pasting, the students will not have to struggle to find the correct keys on the keyboard to answer the questions. Kiddle and PebbleGo also provide correct citations.

Unit: 3D Design (ISTE:4.a. & 4.c.) -- 4 Class Periods

Description

Dawn Schulz and I co-teach this unit. She introduces the 2nd graders to the design process using clay. In computer class they are then introduced to the computer assisted design program called Tinkercad (or other applicable program). They manipulate geometric shapes on a work plane to create a bookmark/keychain. They then download their file in .stl format for me or Mrs. Schulz to print on the Dreamer Flashforge 3D printer (or other applicable 3D printer).

Learning Targets

Second graders plan, design, and create an original 3D design.

Unit: Coding (ISTE:5.a.) -- 4 Class Periods

Description

Students will learn the basics of programming, collaboration techniques, investigation and critical thinking skills, persistence in the face of difficulty, and internet safety. At the end of this course students will create their very own custom game from Play Lab that they can share with a link.

Materials and Resources

Code.org course C (or other appropriate coding resources) is utilized for an introduction to coding using unplugged activities as well as online coding through the use of blocks-based coding.