

4th Grade 1st Quarter

APS Technology Objectives*

- 4.1.1 -- Discuss computer memory and amounts of memory needed to complete task
- 4.1.2 -- Estimate, predict, and determine storage mediums for various tasks
- 4.1.3 -- Identify bits, bytes, kilobytes, megabytes, and gigabytes as units of measure
- 4.2.1 – Discuss and respect guidelines for technology use and handling equipment
- 4.2.3 – Use courteous language and good manners
- 4.2.4 – Discuss and demonstrate appropriate behavior
- 4.2.6 – Share resources and supplies equitably
- 4.3.1 – Use editing functions, font, style, and size; Writing tools, drawing tools to create, edit, revise, and publish a document
- 4.3.2 – Create and publish a newsletter collaboratively using columns
- 4.3.3 – Create and publish a multi-page document, where another file is inserted into the document
- 4.3.4 – Integrate images from multiple sources into documents
- 4.5.1 – Apply age appropriate information literacy skills to electronic resources
- 4.5.2 – retrieve articles from electronic sources
- 4.5.3 – Use keyword searches on the Internet
- 4.5.5 – Retrieve text, graphics from the Internet
- 4.5.7 – Use ACORN

**The APS Objectives listed above are correlated to the 6 areas of the ISTE NETS•S and to the Virginia Computer/Technology Standards of Learning (VA C/T SOL).*

Theme: Hispanic Heritage, Exploration

Enduring Understanding:

Essential Questions:

CONTENT

Paragraph Writing ♦ Map Skills ♦ Regions of Virginia ♦ US Industries ♦ Plants and Animals ♦ Living Systems ♦ Self Image ♦ Safety ♦ Place Value ♦ Operations ♦ Data Presentation

Integrated Ideas

It All Comes Down to Size

Discuss computer memory and storage mediums (see vocabulary list). Create a word processing fact sheet about memory and storage mediums. Experiment with font, style, and size.

Microsoft Word

Press Time

Create an individual or class newsletter about the class, the Virginia Regions, industries, plants and animals, and / or self-image and safety. Use factual information and appropriate literacy / Internet skills.

Microsoft Word, Appleworks Word Processing, Internet

Mini-Book

Each student will create a mini-book about a plant, an animal, or Virginia. The book will be multi-page in nature, will include images, and will cite Internet sources.

Microsoft Word, Appleworks Word Processing, Internet

What's in Virginia?

Use Inspiration or Kidspiration to create a template of a map of Virginia and its resources, industries, or characteristics. Students drag/place icons of the resources and industries to the proper geographical region.

Kidspiration, Inspiration

4th Grade 2nd Quarter

APS Technology Objectives*

4.1.4 – Discuss how computers are networked

4.2.2 – Prevent data loss

4.2.7 – Close windows, log out, leave area neat

4.2.8 – Keep data and documents in shared folders in their original conditions

4.3.5 – Explain when to use a database and when to use a spreadsheet

4.3.6 – Manipulate database information; use sort and record select functions, create reports and layouts

4.3.7 – Use spreadsheet information to create different graphs

4.6.1 – Use technology tools to solve a problem

**The APS Objectives listed above are correlated to the 6 areas of the ISTE NETS•S and to the Virginia Computer/Technology Standards of Learning (VA C/T SOL).*

Theme: Balance: Connecting the Past to the Present (da Vinci unit)
Enduring Understanding:
Essential Questions:

CONTENT

Essays ♦ Dialogues ♦ Colonial Virginia History ♦ Early nation building ♦ Forms of Energy ♦ Force ♦ Electricity ♦ Tobacco ♦ Substance Abuse ♦ Geometry ♦ Fractions

Integrated Ideas

Computer Networking

Discuss how computers are networked and how shared folders work. Have students create folders in their home directories to help organize work.

Important Virginians

Create a database about important Virginians. Include the individual's name, contribution, time period, contemporaries, and picture. Use sort and find functions to create and answer questions about the Virginians.

Appleworks Database

Geometry Figures

Create a database about geometrical figures (lines, rays, cube, etc.). Include the name of the figure, the number of vertices, the number of faces, and a picture of the figure. Use sort and find functions to create and answer questions about the geometrical figures.

Appleworks Database

Make a Spreadsheet

Collect data and graph on a spreadsheet. Data could be historical or present. Collect or glean data from a source.

MS Excel, Appleworks Spreadsheet

Virginia's Clock

Create a timeline of Virginia events. Include date and event. Incorporate images.

Timeliner

4th Grade 3rd Quarter

APS Technology Objectives*

4.1.5 – Select appropriate applications for a given task

4.1.6 – Select other technologies for a task

4.1.7 – Select and operate peripheral devices (printer, scanner, camera, disk drive)

4.2.5 – Access only appropriate websites

4.2.9 – Ideas and work are the property of the author/creator

4.2.10 – Discuss and practice the APS Technology Code of Ethics

4.3.8/4.4.2 – Plan and create interactive multimedia projects; share with an audience

4.4.1 – Implement a project that can be electronically shared with others in a remote location (email with attachments, video, webpage)

4.5.4 – Incorporate materials from electronic sources into multimedia projects

4.5.6 – Exchange info electronically with others

4.6.3 – Participate in collaborative projects that use the network and the Internet to exchange information for problem solving

**The APS Objectives listed above are correlated to the 6 areas of the ISTE NETS•S and to the Virginia Computer/Technology Standards of Learning (VA C/T SOL).*

Theme: Exploration / Black History Month / Women's History

Enduring Understanding:

Essential Questions:

CONTENT

Letter Writing ♦ Poetry ♦ 18th and 19th century Virginia ♦ Weather
♦ Body Systems ♦ Double Digit Multiplication ♦ Long Division

Integrated Ideas

One Piece of the Story

Students create a multimedia presentation on Virginia from storyboard to the final presentation. Use a digital camera or scanner to insert graphics. Include graphics and website links from the Internet. Add audio and a video clip where appropriate. Share completed multimedia with an audience.

MS PowerPoint, Hyperstudio

PenPals

Write to students in another location. Share information about where you live with them. Share this information electronically via email, the school webpage, video, or school television channels.

Applications will vary.

Scene Selection

Create a multimedia presentation about a novel read in class. Include all elements of a storymap and include major scenes from the book.

MS PowerPoint, Hyperstudio, Scanner

Code of Ethics

Discuss the APS Technology Code of Ethics and copyright.

4th Grade 4th Quarter

APS Technology Objectives*

4.3.9 / 4.4.3 -- Use a video camera to record video segments

4.3.10 / 4.4.4 – Participate in creating class video projects; share with an audience

4.6.2 – Apply age appropriate critical thinking skills to gather information and critique content

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Theme: Exploration / Asian & Pacific American History Month
Enduring Understanding:
Essential Questions:

CONTENT

Persuasive Writing ♦ Advertising ♦ 20th century Virginia ♦
History SOL Review ♦ Outer Space ♦ Family Life ♦ Fractions ♦
Decimals ♦ Probability

Integrated Ideas

Create a Class Video*

Plan a video project from the storyboard to the final product. Take video clips, edit the clips, add transitions, music, and audio where necessary. Video length will vary depending on the topic (30 seconds to 5 minutes). Critique video and make additional edits if necessary. Share the video with an audience.

iMovie

Suggested Topics for Video Projects:

Be Persuasive – Students write a persuasive piece and create a short video about their piece. Peers watch the video. Critique the video to determine if the piece was persuasive.

Market It! – Students pick a topic to advertise. Create a short video advertisement or commercial.

It Happened in Virginia – Create a scrapbook tour of Virginia. Share this video with an audience or as a way to introduce Virginia to next year's fourth graders.

Where in Outer Space? – Create a non-fiction piece about Outer Space describing the planets, spacecraft, and galaxy.

***Note:** Creating a video entails drafting a storyboard, filming clips, editing footage, adding audio and transitions as necessary, and saving the final product. Video projects are time-intensive, so you may want to focus on one video project for the entire quarter or divide the class into several groups with each group completing one of the projects listed above.