

Kindergarten APS Technology SOL Checklist

NETS 1: Basic Concepts and Operations

- K.1.1 name technology in classroom and home
- K.1.2 monitor, mouse, disk drive, keyboard, CPU, printer
- K.1.3 use technology as part of classroom routines
- K.1.4 turn computer on/off, log-in/log-out, launch/close application, insert/eject disk, print
- K.1.5 use a mouse to make selections
- K.1.6 locate alphabet keys, numeric keys, space bar, return, delete, shift, arrows
- K.1.7 use printers, disk drives, CDs
- K.1.8 save and retrieve work
- K.1.9 save work to a disk

NETS 2: Social, Ethical, and Human Issues

- K.2.1 handle technology carefully
- K.2.2 operate with clean hands
- K.2.3 no food or drink around computer
- K.2.4 safe behavior with electrical cords
- K.2.5 prevent damage to equipment
- K.2.6 report problems to an adult
- K.2.7 respect each other's work
- K.2.8 share resources equitably
- K.2.9 close windows, log-out, leave area neat
- K.2.10 keep passwords private
- K.2.11 discuss safety issues (don't give away personal info on the Internet)

NETS 3: Technology Productivity Tools

- K.3.1 compose and publish written work – Appleworks
- K.3.2 pre-writing activities – Kidspiration
- K.3.3 create original art – KidPix, AppleWorks Draw or Paint
- K.3.4 create a table as a class – Appleworks Spreadsheet, Graph Club
- K.3.5 create a storyboard prior to all slide shows
- K.3.6 create a slide show with audio and graphics – Appleworks, Hyperstudio, KidPix

NETS 4: Technology Communication Tools

- K.4.1 participate in and respond to electronic field trips
- K.4.2 create collaboratively a storyboard prior to all slide shows
- K.4.3 create a slide show with audio and graphics – Appleworks, Hyperstudio, KidPix

NETS 5: Technology Research Tools

- K.5.1 retrieve and gather info from electronic media
- K.5.2 use ACORN

NETS 6: Technology Problem Solving and Decision Making Tools

- K.6.1 communicate solutions to problems through graphing/drawing – Appleworks, KidPix
- K.6.2 create and manipulate tables, pictographs – Graph Club, Appleworks Spreadsheet
- K.6.3 use critical thinking skills when viewing video – www.unitedstreaming.com, VHS tapes

First Grade APS Technology SOL Checklist

NETS 1: Basic Concepts and Operations

- _____ 1.1.1 disks, hard drives
- _____ 1.1.2 name technology in classroom
- _____ 1.1.3 name parts of computer
- _____ 1.1.4 turn computer on and off, insert and eject disk
- _____ 1.1.5 print, quit, new, open, save
- _____ 1.1.6 ., ?, escape, tab, shift, control, apple key
- _____ 1.1.7 use 2 hands
- _____ 1.1.8 use a printer, disk, CD
- _____ 1.1.9 observe a scanner and digital camera
- _____ 1.1.10 name a file
- _____ 1.1.11 save work

Nets 2: Social, Ethical, and Human Issues

- _____ 1.2.1 handle technology carefully
- _____ 1.2.2 operate with clean hands
- _____ 1.2.3 no food or drink around computer
- _____ 1.2.4 safe behavior with electrical cords
- _____ 1.2.5 prevent damage to equipment
- _____ 1.2.6 report problems to an adult
- _____ 1.2.7 respect each other's work
- _____ 1.2.8 share resources equitably
- _____ 1.2.9 close windows, log out, leave lab neat
- _____ 1.2.10 keep passwords private
- _____ 1.2.11 discuss safety issues (don't give away personal info on the Internet)
- _____ 1.2.12 use appropriate behavior

Nets 3: Technology Productivity Tools

- _____ 1.3.1 pre-writing activities - Inspiration, Kidspiration
- _____ 1.3.2 create and print written work
- _____ 1.3.3 add a sentence to art – KidPix
- _____ 1.3.4 create and print written work with art – KidPix or Appleworks Draw/Paint
- _____ 1.3.5 create a database – Appleworks Database
- _____ 1.3.6 discuss the database
- _____ 1.3.7 create a spreadsheet – Appleworks Spreadsheet
- _____ 1.3.8 organize information in spreadsheet – Appleworks spreadsheet
- _____ 1.3.9 create a storyboard – paper and pencil/chart paper
- _____ 1.3.10 slide show with audio – KidPix, MS PowerPoint, Appleworks Slide Show

Nets 4: Technology Communication Tools

- _____ 1.4.1 participate in telecommunication projects – email, video conferencing
- _____ 1.4.2 create a storyboard – paper and pencil / chart paper
- _____ 1.4.3 slide show with audio presented to an audience - KidPix, MS PowerPoint, Appleworks Slide Show

Nets 5: Technology Research Tools

- _____ 1.5.1 single word search using electronic media
- _____ 1.5.2 summarize & publish info received from electronic media
- _____ 1.5.3 observe teacher citing an electronic source
- _____ 1.5.4 use ACORN

Nets 6: Technology Problem Solving and Decision Making Tools

- _____ 1.6.1 communicate solutions to problems through drawing and written description – KidPix, Appleworks Draw / Paint
- _____ 1.6.2 create and manipulate tables, pictographs – Graph Club, Appleworks Spreadsheet
- _____ 1.6.3 use critical thinking skills when viewing video – <http://www.unitedstreaming.com/>, VHS tapes

Second Grade APS Technology SOL Checklist

NETS 1: Basic Concepts and Operations

- _____ 2.1.1 list storage devices – disk, hard drive, CD-ROM, server
- _____ 2.1.2 rank storage capacity – floppy disk, CD-ROM, hard drive
- _____ 2.1.3 explain multimedia (combination of visual and audio/video)
- _____ 2.1.4 identify examples of multimedia presented via computer
- _____ 2.1.5 identify pop up menu, dialog box, tool palette
- _____ 2.1.6 use instructional software for exploration and learning
- _____ 2.1.7 place fingers on home keys, use 2 hands
- _____ 2.1.8 locate and use all keys on keyboard
- _____ 2.1.9 use the shift key
- _____ 2.1.10 use shortcuts as alternatives to pulldown menus (i.e., apple key and S for File, Save)
- _____ 2.1.11 use peripheral devices
- _____ 2.1.12 discuss how peripheral devices can be used (camera, TV, VCR, DVD player)
- _____ 2.1.13 load paper into printer
- _____ 2.1.14 name files with student's name and file content

NETS 2: Social, Ethical, and Human Issues

- _____ 2.2.1 discuss and respect guidelines for technology use and handling
- _____ 2.2.2 prevent data loss through proper practices
- _____ 2.2.3 use courteous language, good manners, and be respectful
- _____ 2.2.4 discuss and demonstrate good behavior when using technology
- _____ 2.2.5 access only appropriate web sites
- _____ 2.2.6 share resources equitably
- _____ 2.2.7 close windows, log out, leave area neat
- _____ 2.2.8 keep data in shared folders in their original condition
- _____ 2.2.9 ideas and work are the property of the author/creator
- _____ 2.2.10 discuss and practice the APS Technology Code of Ethics (cite sources)

NETS 3: Technology Productivity Tools

- _____ 2.3.1 use writing software for pre-writing (Kidspiration, Inspiration, Appleworks)
- _____ 2.3.2 create, edit, revise, and publish a short document (Appleworks, Hyperstudio, Story Book Weaver, MS Office)
- _____ 2.3.3 select and insert computer graphics into a writing document
- _____ 2.3.4 define and understand the differences between databases and spreadsheets (Appleworks)
- _____ 2.3.5 define appropriate categories for labeling database fields and spreadsheet cells
- _____ 2.3.6 add information to group databases and spreadsheets
- _____ 2.3.7 discuss and analyze, in groups, info in databases and spreadsheets
- _____ 2.3.8 create a storyboard prior to all slide shows
- _____ 2.3.9 create electronic slide show with audio and graphics; share w/ audience (Hyperstudio, PowerPoint)

NETS 4: Technology Communication Tools

- _____ 2.4.1 participate in electronic communication (Internet, email, telecommunication projects)
- _____ 2.4.2 create a storyboard prior to all slide shows
- _____ 2.4.3 create electronic slide show with audio and graphics; share w/ audience (Hyperstudio, PowerPoint)

NETS 5: Technology Research Tools

- _____ 2.5.1 use keyword searches for an electronic encyclopedia, network resource, & Internet
- _____ 2.5.2 select records from an electronic database using keywords
- _____ 2.5.3 summarize and publish info retrieved from electronic media
- _____ 2.5.4 locate several related articles from electronic references
- _____ 2.5.5 locate graphics within electronic references
- _____ 2.5.6 incorporate at least one citation of an electronic reference into a report
- _____ 2.5.7 locate text info and graphics while using the Internet

NETS 6: Technology Problem Solving and Decision Making Tools

- _____ 2.6.1 communicate solutions to problems through webbing (Kidspiration, Inspiration)
- _____ 2.6.2 use graphing software to manipulate tables, pictographs, bar graphs (Appleworks, Graph Club)
- _____ 2.6.3 apply critical thinking skills when viewing and discussing video
- _____ 2.6.4 participate in a project that uses reference materials on CD (World Book, library)

Third Grade APS Technology SOL Checklist

NETS 1: Basic Concepts and Operations

- _____ 3.1.1 identify bits and bytes as units of measure in computer technology
- _____ 3.1.2 discuss binary logic in terms of on/off current in the computer
- _____ 3.1.3 identify and explain: modem, server, fax machine
- _____ 3.1.4 discuss how telecommunication allows information sharing near and far
- _____ 3.1.5 use terms appropriately: memory, email
- _____ 3.1.6 distinguish between info in computer's memory and on a storage medium
- _____ 3.1.7 select appropriate computer applications for a given task
- _____ 3.1.8 select other types of technology or software for a given task
- _____ 3.1.9 participate in keyboarding class (10 words/minute or better and 80% accuracy)
- _____ 3.1.10 use proper keyboarding techniques
- _____ 3.1.11 use camcorders, TVs, VCRs, peripheral devices
- _____ 3.1.12 use a CD-ROM to play an audio CD
- _____ 3.1.13 use prescribed or logical file naming to identify a student's saved work

NETS 2: Social, Ethical, and Human Issues

- _____ 3.2.1 discuss and respect guidelines for technology use and handling
- _____ 3.2.2 prevent data loss through proper practices
- _____ 3.2.3 use courteous language, good manners, and respect
- _____ 3.2.4 discuss and demonstrate appropriate behavior
- _____ 3.2.5 access only appropriate web sites
- _____ 3.2.6 share resources and supplies equitably
- _____ 3.2.7 close windows, log out, leave area neat
- _____ 3.2.8 keep data in shared folders in their original condition
- _____ 3.2.9 ideas and works are the property of the author/creator
- _____ 3.2.10 discuss and practice the APS Technology Code of Ethics with regard to copyright & fair use

NETS 3: Technology Productivity Tools

- _____ 3.3.1 use editing functions (copy, cut, paste) and font, style, size to create, edit, revise, & publish (Appleworks)
- _____ 3.3.2 insert images from digital sources (scanner, camera, CD, Internet, etc.)
- _____ 3.3.3 edit images (resize, flip, crop) and insert into a document (Picture Viewer, Graphic Converter)
- _____ 3.3.4 collect info and create a database and spreadsheet (AppleWorks database or spreadsheet)
- _____ 3.3.5 create simple database layouts and reports (AppleWorks)
- _____ 3.3.6 create graphs from spreadsheet data (AppleWorks, MS Excel)
- _____ 3.3.7 create multimedia projects with audio and graphics for an audience (Hyperstudio or PowerPoint)
- _____ 3.3.8 participate in creating a class video (iMovie)
- _____ 3.3.9 insert a video clip into a slide show (www.unitedstreaming.com, PowerPoint)

NETS 4: Technology Communication Tools

- _____ 3.4.1 exchange info w/ an audience in another location using network communications
- _____ 3.4.2 create multimedia projects with audio and graphics to share with an audience
- _____ 3.4.3 participate in creating a class video and share with an audience (iMovie)
- _____ 3.4.4 insert a video clip into a slide show (www.unitedstreaming.com, PowerPoint)

NETS 5: Technology Research Tools

- _____ 3.5.1 apply age appropriate information literacy skills
- _____ 3.5.2 retrieve at least 3 articles from an electronic encyclopedia using keyword searches
- _____ 3.5.3 find records in an electronic database using keywords (ACORN)
- _____ 3.5.4 select material from electronic reference sources (on-line encyclopedias, almanacs)
- _____ 3.5.5 use copy and paste functions to create notes for writing projects
- _____ 3.5.6 incorporate several citations from electronic references into a project
- _____ 3.5.7 retrieve text and graphics from the Internet
- _____ 3.5.8 use ACORN

NETS 6: Technology Problem Solving and Decision Making Tools

- _____ 3.6.1 communicate solutions to problems through webbing (Inspiration, Kidspiration)
- _____ 3.6.2 use graphing and spreadsheet software to create and manipulate graphs (AppleWorks, Graph Club)
- _____ 3.6.3 use a database to identify information that can be applied to a problem
- _____ 3.6.4 plan and present, using multimedia, a project that addresses a problem solving activity
- _____ 3.6.5 participate in a class project that uses network and the Internet to exchange info to help solve a problem

Fourth Grade APS Technology SOL Checklist

NETS 1: Basic Concepts and Operations

- _____ 4.1.1 discuss computer memory and amounts of memory needed to complete tasks
- _____ 4.1.2 estimate, predict, and determine storage mediums for various tasks
- _____ 4.1.3 identify bits, bytes, kilobytes, megabytes, & gigabytes as units of measure
- _____ 4.1.4 discuss how computers are networked
- _____ 4.1.5 select appropriate applications for a given task
- _____ 4.1.6 select other technologies for tasks
- _____ 4.1.7 select and operate peripheral devices (printer, scanner, camera, disk drive)

NETS 2: Social, Ethical, and Human Issues

- _____ 4.2.1 discuss and respect guidelines for technology use and handling equipment
- _____ 4.2.2 prevent data loss
- _____ 4.2.3 use courteous language and good manners
- _____ 4.2.4 discuss and demonstrate appropriate behavior
- _____ 4.2.5 access only appropriate web sites
- _____ 4.2.6 share resources and supplies equitably
- _____ 4.2.7 close windows, log-out, and leave area neat
- _____ 4.2.8 keep data and documents in shared folders in their original condition
- _____ 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

NETS 3: Technology Productivity Tools

- _____ 4.3.1 use editing functions, font, style, & size; writing tools & drawing tools to create, edit, revise, and publish a document
- _____ 4.3.2 create and publish a newsletter collaboratively using columns (Appleworks, MS Word)
- _____ 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
- _____ 4.3.5 explain when to use a database and when to use a spreadsheet (Appleworks, MS Excel)
- _____ 4.3.6 manipulate database information -- use sort and record select functions, create reports & layouts
- _____ 4.3.7 use spreadsheet info to create different graphs
- _____ 4.3.8 plan & create interactive multimedia projects; share w/ an audience (Hyperstudio, MS PowerPoint)
- _____ 4.3.9 use a camcorder to record video segments
- _____ 4.3.10 participate in creating class video projects; share w/ an audience (iMovie)

NETS 4: Technology Communication Tools

- _____ 4.4.1 implement a project that can be electronically shared w/ others in a remote location (e-mail w/ attachments, video, webpage)
- _____ 4.4.2 plan & create an interactive hypermedia project (PowerPoint, Hyperstudio)
- _____ 4.4.3 use a camcorder to record video segments
- _____ 4.4.4 participate in creating a class video project (iMovie)

NETS 5: Technology Research Tools

- _____ 4.5.1 apply age appropriate information literacy skills to electronic resources
- _____ 4.5.2 retrieve articles from electronic sources (on-line searches)
- _____ 4.5.3 use keyword searches on the Internet
- _____ 4.5.4 incorporate materials from electronic sources into multimedia projects
- _____ 4.5.5 retrieve text, graphics from the Internet
- _____ 4.5.6 exchange info electronically with others
- _____ 4.5.7 use ACORN (Arlington County On-line Resource Network website)

NETS 6: Technology Problem Solving and Decision Making Tools

- _____ 4.6.1 use technology tools to solve a problem
- _____ 4.6.2 apply age appropriate critical thinking skills to gather info and critique content
- _____ 4.6.3 participate in collaborative projects that use the network and the Internet to exchange info for problem solving

Fifth Grade APS Technology SOL Checklist

NETS 1: Basic Operations and Concepts

- 5.1.1 Correlate computer units of measure (bits, bytes, kilobytes, megabytes, & gigabytes) to storage devices
- 5.1.2 discuss similarities and differences between units of measure and the base 10 system
- 5.1.3 explore correlation between units of measure, base two, and binary logic
- 5.1.4 select and combine technology components to prepare assignments
- 5.1.5 select and operate peripheral devices (printer, scanner, camera)

NETS 2: Social, Ethical, and Human Issues

- See and refer to K-3 objectives

NETS 3: Technology Productivity Tools

- 5.3.1 create & publish a multi-page document that incorporates writing tools (MS Word)
- 5.3.2 incorporate a brief video clip into documents (<http://www.unitedstreaming.com/>)
- 5.3.3 use record selection and sort functions of a database to answer questions (Appleworks, MS Excel)
- 5.3.4 write simple formulas to calculate spreadsheet information (MS Excel)
- 5.3.5 create hypermedia projects incorporating audio & visuals; share w/ an audience (PowerPoint)
- 5.3.6 complete multimedia projects; share w/ an audience
- 5.3.7 participate in creating a small video project; share w/ an audience (iMovie)

NETS 4: Technology Communication Tools

- 5.4.1 implement a long-term group project that is shared electronically w/ another group elsewhere
- 5.4.2 use network communications to publish work
- 5.4.3 create interactive hypermedia projects w/ audio & visuals; share w/ an audience (PowerPoint)
- 5.4.4 complete multimedia projects; share w/ an audience
- 5.4.5 participate in creating a small video project; share w/ an audience (iMovie)

NETS 5: Technology Research Tools

- 5.5.1 apply age appropriate information literacy skills to electronic references
- 5.5.2 research electronic sources using search strategies
- 5.5.3 cite all electronic references in projects
- 5.5.4 retrieve information using the Internet
- 5.5.5 exchange information electronically w/ others

NETS 6: Technology Problem Solving and Decision Making Tools

- 5.6.1 use network resources and the Internet to solve a problem
- 5.6.2 use simulations to form, test, confirm, disconfirm, and revise hypotheses; model events
- 5.6.3 apply age appropriate critical thinking skills when viewing video
- 5.6.4 identify & debate the advantages & disadvantages of various materials & technologies as they are used