SUBJECT: Computer GRADE: Kindergarten

#### GOALS: Students will . . .

- 1. Take physical care of the computer following classroom procedures.
- 2. Demonstrate basic trackpad use and simple keyboarding.
- 3. Develop and apply a technology vocabulary.
- 4. Construct basic drawing and text-based assignments using the Kid Pix software.
- 5. Work independently within grade-appropriate websites.

## CONTENT TOPICS: Knowledge/Skills/Values

- 1. Rules and procedures in Computer Lab.
- 2. Vocabulary: trackpad, keyboard, file, document, command, icons, desktop, print and quit.
- 3. Tools in the Kid Pix Program: Draw, Paint, Type, Stamp, Shape Maker, Eraser.
- 4. Execution of Basic Moves using the Smart Board.
- 5. Basic Internet usage: Page Navigation, Links.
- 6. Simple computer skills: Drag and Drop, Shift Key, Space Bar, and Return.

## **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Smart Board, Computers, Kid Pix Software, Websites, Scoring Guides.

SUBJECT: Computer

GRADE: 1

#### GOALS: Students will . . .

- 1. Take physical care of the computer following classroom procedures.
- 2. Demonstrate trackpad use and developing keyboarding skills.
- 3. Develop and apply a technology vocabulary.
- 4. Construct grade-appropriate document assignments using the Kid Pix software.
- 5. Work independently within grade-appropriate websites.
- 6. Locate information on websites.

## CONTENT TOPICS: Knowledge/Skills/Values

- 1. Rules and Procedures in Computer Lab.
- 2. Vocabulary: Icons, Dock, Save, Highlight, Import, Trash, Search Engine.
- 3. Organize document to present information.
- 4. Efficient use of the Smart Board to present information.
- 5. Integrated use of available technology to present thematic topics.
- 6. Developing Internet Usage: Page Navigation, Links, Disregard of Pop-Ups and Ads.
- 7. Emerging computer skills: Text Box, Highlight, Font, Font Size, Bold, Italics, Underline.

## **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Smart Board, Computers, Kid Pix Software, Websites, Scoring Guides.

SUBJECT: Computer

GRADE: 2

### GOALS: Students will . . .

- 1. Take physical care of the computer following classroom procedures.
- 2. Demonstrate efficient trackpad use and keyboarding skills.
- 3. Develop and apply a technology vocabulary.
- 4. Construct grade-appropriate document assignments using the Kid Pix software.
- 5. Work independently and collaboratively within grade-appropriate websites.
- 6. Work independently and collaboratively on Google Drive App assignments, including Docs, Slides, Forms, Sheets.
- 7. Locate and evaluate information on websites to create research assignments.

### CONTENT TOPICS: Knowledge/Skills/Values

- 1. Rules and Procedures in Computer Lab.
- 2. Vocabulary: Icons, Dock, Save, Highlight, Import, Trash, Search Engine.
- 3. File Management: Create, Save, Print and Retrieve Files.
- 4. Organize document to present information.
- 5. Efficient use of the Smart Board to present information.
- 6. Integrated use of available technology to present thematic topics.
- 7. Effective computer skills: Editing, Formatting and Arranging Text.
- 8. Review organizing documents to Present Information.
- 9. Effective Internet Usage: Page Navigation, Links, Disregard of Pop-Ups and Ads, Troubleshooting.
- 10. Find, evaluate and utilize electronic resources to create documents.

### **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Smart Board, Computers, Kid Pix Software, Google Drive Apps, Websites, Scoring Guides.

SUBJECT: Computer

GRADE: 3

### GOALS: Students will . . .

- 1. Use keyboard, trackpad, monitor and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policv."
- 3. Demonstrate responsible online conduct by using only assigned websites.
- 4. Use the drawing, painting, audio, and presentation tools of a drawing program (KidPix).
- 5. Collaborate with a classmate in a digital storytelling project, using KidPix.
- 6. Sign in to a school Google account with ease.
- 7. Access Google classroom and demonstrate the ability to open an assignment.
- 8. Demonstrate the ability to attach a computer file in Google classroom in order to turn in an assignment.
- 9. Construct appropriate written assignments using Google documents.
- 10. Open a word-processing document template, enter text, change fonts, insert graphics, and create WordArt, and use fill effects.
- 11. Open a 4-slide template of a presentation in Google slides, apply a background to a slide, insert a graphic.
- 12. Present a Google slides presentation to the class, using the navigation tools of the SmartBoard.
- 13. Enter numbers in an Google spreadsheet.
- 14. Recognize and locate letters, numbers, shift, and command keys on the keyboard.

## CONTENT TOPICS: Knowledge/Skills/Values

- 1. Proper use of computer, including opening programs from the dock, opening and closing files, naming files, saving, and quitting applications.
- 2. Sign in and sign out of student Google account.
- 3. Navigate through tools and menu of Google apps.
- 4. Proper use of SMARTboard pens, eraser, select tool.
- Basic Internet safety.
- 6. Vocabulary: monitor, printer, trackpad, document, delete, undo, save, quit, font, slide, spreadsheet.
- 7. Art tools in KidPix: paint, stamps, shapes, slideshow, colors, fill, text.
- 8. Word processing: use of shift key for capitalization, spacing, end punctuation, delete, insert graphics.
- 9. Use of spreadsheet template to reinforce math facts.
- 10. Use of bookmarking site, <u>I Keep Bookmarks</u>.
- 11. Collaborate with a partner for digital storytelling, including use of storyboard, artwork, audio, and presentation to the class.
- 12. Correct finger placement on home keys.

# **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Computers, student Google accounts managed by the designated administrator, Google apps for Education (documents, slides, sheets, drawing), Google classroom, Notebook software for SMARTboard, KidPix, Safari browser, <a href="LKeep Bookmarks">LKeep Bookmarks</a>, <a href="DanceMat Typing">DanceMat Typing</a>, searchable links to teacher resources on <a href="Diigo">Diigo</a>.

SUBJECT: Computer

GRADE: 4

### GOALS: Students will . . .

- 1. Use keyboard, trackpad, monitor and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy."
- 3. Demonstrate understanding of responsible online conduct.
- 4. Demonstrate the ability to sign in to the student Google account.
- 5. Demonstrate the ability to search for files in the Google Drive.
- 6. Access Google classroom and demonstrate the ability to open an assignment.
- 7. Demonstrate the ability to attach a computer file in Google classroom in order to turn in an assignment.
- 8. Demonstrate ability to independently open a word-processing document, enter text, change fonts, and insert graphics.
- 9. Use spell check tool correctly.
- 10. Name a file according to class procedures.
- 11. Use Google search for an image and download it to the desktop.
- 12. Use in-app search in Google slides to find and insert an image.
- 13. Open a template of a presentation (Google slides), apply a background to a slide, insert a graphic, and slide transitions. Save it with a correct file name to the Google drive and turn in to Google classroom..
- 14. Present a presentation to the class, using the navigation tools of the SmartBoard.
- 15. Search the Internet for an assigned topic of research using a search engine effectively.
- 16. Move from an Internet browser (ex., Safari) to a document to record information there. Use the in-app search in a Google document.
- 17. Demonstrate the ability to use Google drawing, then insert the drawing into a document or slide.
- 18. Print a document.
- 19. Enter numbers in an Google spreadsheet, then move that data into a chart.
- 20. Fill chart bars with color in Google spreadsheet.
- 21. Use the home keys on the keyboard.

## CONTENT TOPICS: Knowledge/Skills/Values

- 1. Proper use of computer, including opening programs from the dock, saving, and quitting applications.
- 2. Sign in and sign out of student Google account.
- 3. Navigate through tools and menu of Google apps.
- 4. Proper use of SMARTboard pens, eraser, select tool.
- Basics of Internet safety and digital citizenship.
- 6. Use a search engine to find appropriate content for research.
- 7. Vocabulary: save as, download, word art, callout,
- 8. Word processing: use of shift key for capitalization, spacing, end punctuation, delete, insert graphics, use of fonts, spell check.
- 9. Mastery of rearranging text through copy and paste.
- 10. Use of Google spreadsheet template to reinforce math facts.

- 11. Use of bookmarking site, <u>I Keep Bookmarks</u>, to find information for research.
- 12. Correct finger placement on home keys and modifier keys.

## RESOURCES, ACTIVITIES, AND ASSESSMENTS:

Computers, student Google accounts managed by the designated administrator, Google apps for Education (documents, slides, sheets, drawing), Google classroom, Notebook software for SMARTboard, KidPix, Safari browser, <a href="LKeep Bookmarks">LKeep Bookmarks</a>, <a href="Keyboarding practice and games with Aunt Lee">Keyboarding practice and games with Aunt Lee</a>, searchable links to teacher resources on <a href="Diigo">Diigo</a>.

SUBJECT: Computer

GRADE: 5

### GOALS: Students will . . .

- 1. Use keyboard, trackpad, monitor and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy."
- 3. Use responsible online conduct.
- 4. Demonstrate the ability to sign in to the student Google account.
- 5. Demonstrate the ability to find files in the Google Drive.
- 6. Access Google classroom and demonstrate the ability to open an assignment.
- 7. Demonstrate the ability to attach a computer file in Google classroom in order to turn in an assignment.
- 8. Enter effective search terms in a search engine for an assigned topic of research.
- 9. Master the skills required to manage a computer file over time, including creating and naming a file, saving in the Google drive, save and replace, save a file to the desktop, and then upload it to the Google drive.
- 10. Master these text-editing skills: copy, paste, undo, bulleted list, insert a header, and insert graphics.
- 11. Demonstrate the ability to download a graphic to the desktop, and insert it into a document.
- 12. Convert a file, for example, export a KidPix file as a jpeg.
- 13. Independently create a presentation, enter text, apply a background to a slide, insert graphics and animated gifs, and add slide transitions.
- 14. Use Google search tools to find for a copyright-free photo. Demonstrate the ability to use the in-app search to find images and research for Google docs.
- 15. Move from an Internet browser (ex., Safari) to a document to record information.
- 16. Use the Google classroom to check homework assignments, turn in work, and follow links.
- 17. Enter numbers and addition and multiplication formulas in an Google spreadsheet, then move that data into a chart. Interpret the chart.
- 18. Use Google apps to support Science Fair. Manage these files over 2 months.
- 19. Act in accordance with responsible online conduct, through collaborative effort on an online, interactive website, ex., <u>TimelineJS</u>.
- 20. Use spell check and grammar check effectively in Google apps.
- 21. Automatically fill data within a Google spreadsheet.
- 22. Fill chart bars with color and insert text boxes as labels in Google spreadsheets.
- 23. Use of basic keyboarding skills.

### CONTENT TOPICS: Knowledge/Skills/Values

- 1. Proper use of computer, including opening and closing files, naming files, saving, navigating to the desktop and Google drive, and quitting applications.
- 2. Vocabulary: save as, toolbar, URL, callout, insert, menu, function, text box, header.
- 3. Art tools in Google drawing: 3-D effect, insert clip art, fill.
- 4. Use of Google spreadsheet to enter and calculate data.
- 5. Use of bookmarking site, <u>I Keep Bookmarks</u> and <u>SaintGerard'sBookmarks</u>.

## **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Computers, <u>CoolText</u>, Google apps, Google classroom, Safari browsers, <u>I Keep Bookmarks</u>, <u>Keyboarding practice and games with Aunt Lee</u>, <u>Create a Graph</u>, <u>Science Fair Central</u>, searchable links to teacher resources on <u>Diigo</u>.

**SUBJECT:** Computer

GRADE: 6 Keyboarding and Research

## GOALS: Students will . . .

- 1. Use keyboard, trackpad, monitor and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy."
- 3. Use responsible online conduct.
- 4. Demonstrate the ability to sign in to the student Google account and a Chrome account.
- 5. Demonstrate the ability to find files in the Google Drive.
- 6. Use Google forms, and create a Google form.
- 7. Access Google classroom and demonstrate the ability to open an assignment.
- 8. Demonstrate the ability to attach a computer file in Google classroom in order to turn in an assignment.
- 9. Use enter effective search terms to search the Internet for a topic of research using the following types of searches: define, and, or, exact words, excluded word, reverse image.
- 10. Use a search engine to choose and help refine a topic for research.
- 11. Search Google usage-rights search tools for copyright-free photos.
- 12. Calculate conversions (ex., miles in kilometers), and calculate sums using Google.
- 13. Evaluate a website for reliability of information.
- 14. Navigate the online catalog of <u>Saint Louis County Library</u>, <u>Internet Public Library</u>, and <u>St. Gerard Library</u> to find, reserve, and download research materials.
- 15. Present a Google slides presentation to the class, using printed speaker notes.
- 16. Use the Google classroom to check homework assignments, calendar, and follow links.
- 17. Navigate worksheets and charts within a Google spreadsheet.
- 18. Interpret a variety of types of charts using Google spreadsheet, including column, bar, pie, bubble.
- 19. Build speed and accuracy in keyboarding using a student account in Typing.com.
- 20. Use keyboard shortcuts, including screen capture, navigate to desktop, switch application, copy, paste, cut, undo, select all, quit, refresh, find.

## CONTENT TOPICS: Knowledge/Skills/Values

- 1. Vocabulary: save, save as, autoshape tool, WordArt, callout, font, dingbat, insert, menu, function, text box, header, formatting palette, format menu.
- 2. Mastery of rearranging text using copy and paste.
- 3. Format cells and insert formulas for addition, subtraction, multiplication and division in an Excel spreadsheet, then move that data into a chart.
- 4. Create a title page, informal outline, and works cited page in MS Word for a research paper.
- 5. Master these text-editing skills: automatic numbered list, font style, hanging indent, insert a header, insert graphics, insert page break.
- 6. Build a works cited page for a research paper using MLA format.
- 7. Practice keyboarding at least 10 min. per week, outside of classtime, using their <a href="Typing.com">Typing.com</a> acount.
- 8. Build speed and accuracy in keyboarding to 25 wpm with 95% accuracy.
- 9. Increase speed and facility in navigating the computer.
- 10. Increase facility and independence in searching for support, help with tasks.

- 11. Use a website to help create a citation for books (EasyBib).
- 12. Install Chrome apps, add-ons, and extensions, ex., EasyBib, TabResize, EasyAccents, Speaklt (converts text to speech).
- 13. Manage settings in Chrome browser.

## **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Computers, Google apps, Google classroom, Chrome browser, <u>Typing.com</u>, searchable links to teacher resources on <u>Diigo</u>.

**SUBJECT:** Computer

**GRADES:** 6-8 Coding one-semester elective course

### GOALS: Students will . . .

- 1. Use keyboard, trackpad, headphones, and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy."
- 3. Use responsible online conduct. Special emphasis is placed on digital citizenship regarding posting of images and comments.
- 4. Access Google classroom and demonstrate the ability to open an assignment, upload a link to Google classroom in order to turn in an assignment.
- 5. Use Google forms to answer questions about debugging projects.
- 6. Use Google sites to build a website that will showcase the coding projects for this semester course.

## CONTENT TOPICS: Knowledge/Skills/Values

- 1. Vocabulary: sprite, remix, screenshot, debugging, event, variable, array, scratch, stage, script, costume, block, control, sensing, operator, data, x y coordinate system, degrees.
- 2. Increase speed and facility in navigating the computer.
- 3. Increase speed and facility in using Google apps, including Google sites and classroom.
- 4. Increase facility and independence in searching for support.
- 5. Present creative gaming projects for the class and the school in a website portfolio.

## **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Computers, Google apps, Google classroom, <u>CS club</u>, headphones, searchable links to teacher resources on Diigo.

SUBJECT: Computer

**GRADES:** 6-8 GarageBand one-semester elective course

<u>GarageBand</u> is Mac software designed to create music and podcasts. GarageBand builds music by adding tracks of melodies and rhythms that we create.

#### GOALS: Students will . . .

- 1. Use keyboard, trackpad, monitor, microphone, speakers, headphones and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy."
- 3. Use responsible online conduct. Special emphasis is placed on avoiding copyright infringement of commercial music.
- 4. Demonstrate the ability to convert a GarageBand file to an MPEG-4 audio file.
- 5. Access Google classroom and demonstrate the ability to open an assignment, and attach a computer file in Google classroom in order to turn in an assignment.
- 6. Search the Internet using Creative Commons search tools for copyright-free audio files.
- 7. Navigate GarageBand software on laptop, save, and export files.
- 8. Navigate GarageBand app on iPad or iPhone, including Smart instruments, save and export files.
- 9. Record a live track from instrument or voice.
- 10. Create music to serve as the soundtrack of a video.

### CONTENT TOPICS: Knowledge/Skills/Values

- 1. Vocabulary: steps, octave, thirds, fifths, chords, scale, half-step, beat-box, quantization, loop, track, score.
- 2. Mastery of rearranging loops and tracks, and adjusting volume within a track.
- 3. Increase speed and facility in navigating the computer.
- 4. Increase facility and independence in searching for support.
- 5. Present creative music projects for the class.
- 6. Develop mastery of file conversion.

## RESOURCES, ACTIVITIES, AND ASSESSMENTS:

Computers, Google apps, Google classroom, GarageBand software, iPads with GarageBand app, speakers, digital microphone, searchable links to teacher resources on Diigo.

SUBJECT: Computer

GRADES: 6-8 KSGM one-semester elective course

#### GOALS: Students will . . .

- 1. Use keyboard, mouse, trackpad, monitor, microphone, speakers, tripod, digital camera, and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy."
- 3. Use responsible online conduct.
- 4. Demonstrate the ability to join and sign in to our class wiki.
- 5. Access Google classroom and demonstrate the ability to open an assignment, follow links, and attach a computer file in Google classroom in order to turn in an assignment.
- 6. Write a script online on the class wiki.
- 7. Plan a shows with partners, including writing the script and rehearsals.
- 8. Practice good camera technique.
- 9. Create a Google form to collect feedback from the audience.
- 10. Work in teams to brainstorm new material for show.
- 11. Navigate Google classroom, Google drive, and Wikispaces.

## CONTENT TOPICS: Knowledge/Skills/Values

- 1. Vocabulary: teleprompter, wiki, live, trend, zoom, tilt, pan.
- 2. Be responsible for one performance per week, which is broadcast live to the whole school.
- 3. Increase speed and facility in navigating the computer.
- 4. Increase facility and independence in searching for support.
- 5. Present creative projects for the class and the school on a live TV broadcast.
- 6. Practice good digital citizenship, avoiding plagiarism when writing scripts.

## **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Computers, Google apps, Google classroom, iMovie software, iPads with iMovie app, speakers, searchable links to teacher resources on <u>Diigo</u>.

SUBJECT: Computer

**GRADES:** 6-8 Movie one-semester elective course

### GOALS: Students will . . .

- 1. Use keyboard, trackpad, monitor, microphone, speakers, tripod, iPad or digital camera, and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy."
- 3. Use responsible online conduct. Special emphasis is placed on avoiding copyright infringement of commercial music.
- 4. Demonstrate the ability to convert an iMovie file to an mp4 video file.
- 5. Access Google classroom and demonstrate the ability to open an assignment, and attach a computer file in Google classroom in order to turn in an assignment.
- 6. Search the Internet using Creative Commons search tools for copyright-free image and audio files.
- 7. Plan a video project with partners, including writing the script and storyboard.
- 8. Practice good camera technique.
- 9. Rehearse the story with actors and videotape the performance.
- 10. Use iMovie software on laptop to edit, save, and export files.
- 11. Navigate iMovie app on iPad or iPhone, and save and export files.
- 12. Record video in front of a green screen and substitute an image or video as background for the green.

### CONTENT TOPICS: Knowledge/Skills/Values

- 1. Vocabulary: raw footage, green screen, special effect, creative commons, zoom, tilt, pan.
- 2. Mastery of rearranging clips and sound tracks, and adjusting volume.
- 3. Increase speed and facility in navigating the computer.
- 4. Increase facility and independence in searching for support.
- 5. Present creative video projects for the class and the school.
- 6. Develop mastery of file conversion.

### **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Computers, Google apps, Google classroom, iMovie software, iPads with iMovie app, speakers, digital microphone, searchable links to teacher resources on <u>Diigo</u>.

SUBJECT: Computer

**GRADES:** 6-8 Photo one-semester elective course

### GOALS: Students will . . .

- 1. Use keyboard, trackpad, tripod, iPad, cell phone or digital camera, and other computer hardware responsibly.
- 2. Pass a test of the procedures in St. Gerard's "Acceptable Computer and Internet Use Policy" and "Cellphone User Agreement."
- 3. Use responsible online conduct. Special emphasis is placed on digital citizenship regarding posting and labeling of images.
- 4. Access Google classroom and demonstrate the ability to open an assignment, upload an image to Google drive, and attach an image file in Google classroom in order to turn in an assignment.
- 5. Search the Internet using Creative Commons search tools for copyright-free images and image-editing software.
- 6. Edit images, using sites such as iPhoto, PicMonkey, BeFunky.
- 7. Practice good camera technique.
- 8. Use planning to capture a variety of subjects of photos.
- 9. Navigate cellphone or iPad apps to save, edit, and export files.

## CONTENT TOPICS: Knowledge/Skills/Values

- Vocabulary: collage, lomo, special effect, creative commons, zoom, tilt, tint, lens flare, cool color, warm color, sepia, HDR, photo sphere, panorama, blur, border, rule of thirds, composition.
- 2. Mastery of composition and framing.
- 3. Increase speed and facility in navigating the computer.
- 4. Increase speed and facility in using Google apps, including Google calendar and classroom.
- 5. Increase facility and independence in searching for support.
- 6. Present creative photo projects for the class and the school.

### **RESOURCES, ACTIVITIES, AND ASSESSMENTS:**

Computers, Google apps, Google classroom, iPhoto software, iPads with Photo and photo editing apps, searchable links to teacher resources on <a href="Diigo">Diigo</a>.