Technology Projects

ICT & STEM Activities | Computer Curriculum

A collection of technology projects for Microsoft Office, Office Online, Google Docs, Adobe, programming, and more!
Contents

Technology Projects Overview .................................................................................................................. 1
  About TechnoKids Technology Projects .......................................................................................... 1
  What is a Technology Project? ......................................................................................................... 1
  How Can I Integrate Technology Projects into Curriculum? .......................................................... 1
  What Technology Skills Do Students Learn? .................................................................................. 1
  What is a TechnoKids Site License Agreement? ........................................................................... 1
  How Should I Select a Project to Teach? ......................................................................................... 2

About Student Workbooks ..................................................................................................................... 3

TechnoKids Technology Project Summary .......................................................................................... 4

TechnoKids Technology Project Matrix .............................................................................................. 5

Primary Technology Project Descriptions ............................................................................................ 8
  TechnoBookmaking ......................................................................................................................... 8
  TechnoGallery ................................................................................................................................ 9
  TechnoPainter .................................................................................................................................. 10
  TechnoMe .......................................................................................................................................... 11
  TechnoStart ...................................................................................................................................... 12
  TechnoStories .................................................................................................................................. 13
  TechnoWhiz ...................................................................................................................................... 14

Junior Technology Project Descriptions ............................................................................................... 15
  TechnoCandy ................................................................................................................................... 15
  TechnoInternet ............................................................................................................................... 16
  TechnoJournal ............................................................................................................................... 17
  TechnoPresenter ............................................................................................................................ 18
  TechnoResearch ............................................................................................................................. 19
  TechnoTimeline ............................................................................................................................. 20
  TechnoToon ..................................................................................................................................... 21
  TechnoTrivia .................................................................................................................................... 22

Intermediate Technology Project Descriptions ..................................................................................... 23
  TechnoBiography ............................................................................................................................ 23
  TechnoBlog ..................................................................................................................................... 24
  TechnoBudget ................................................................................................................................... 25
  TechnoCode ..................................................................................................................................... 26
  TechnoDebate ................................................................................................................................... 27
  TechnoHTML5 .................................................................................................................................. 28
  TechnoMap ....................................................................................................................................... 29
  TechnoNewsletter ............................................................................................................................ 30
Technology Projects Overview

About TechnoKids Technology Projects

TechnoKids Technology Projects are instructional materials that apply an interdisciplinary, project-based approach to learning. The lessons are filled with inquiry, innovation, and discovery. The activities help teachers meet curriculum objectives. Technology projects can be used as part of a unit of study, workshop, course, or after-school class.

What is a Technology Project?

A technology project includes activities that have students create a project such as a newsletter, presentation, or web page. Project based learning is an instructional approach that poses challenging questions or presents real-world problems that are personally meaningful to students and has them investigate these issues and propose viable solutions.

A technology project includes a teacher guide, student workbook, and resource files.

- A teacher guide is a document that contains lessons that are written with step-by-step instructions. Each step is point and click, meaning that there is a written explanation of where to point the mouse or what to type on the keyboard. Moreover, instructions include a screen shot, which is a picture of what the screen should look like when the action is complete.
- A student workbook is a collection of assignments that are followed independently by students to complete the lesson activities.
- Resource files are customizable materials such as templates, sample files, parent letters, certificates, or assessment tools.

How Can I Integrate Technology Projects into Curriculum?

TechnoKids Technology Projects include activities that integrate into subject areas such as language arts, mathematics, social studies, visual arts, science, history, geography, computer science, or business studies. Refer to the Technology Integration Ideas section in each teacher guide for suggestions. Technology projects are correlated to Common Core Standards.

What Technology Skills Do Students Learn?

TechnoKids Technology Projects teach word processing, spreadsheet, graphic design, presentation, programming, and data management skills. Students gain proficiency in Information Communication and Technology (ICT) and STEM. Refer to the Skill Summary section in each teacher guide for a detailed list of learning objectives. Technology projects are correlated to ISTE Standards.

What is a TechnoKids Site License Agreement?

TechnoKids Technology Projects are sold as a site license. A site is a single school or learning center. The site license permits unlimited printing/viewing rights of the teacher guides and student workbooks as well as unlimited transfer of digital files to devices at a given location to authorized users. It prohibits posting files in the public domain. Refer to your site license agreement for further details.
How Should I Select a Project to Teach?

TechnoKids Technology Projects provide teachers with flexibility. Select a technology project to teach based on curriculum objectives. Below are some tips to help you decide:

- **Category** – Technology projects are categorized as Primary (Grades 1-3), Junior (Grades 3-6), Intermediate (Grades 6-9), or Senior (Grades 8-12). Choose an option that is suitable for the grade you are teaching.

- **Technology Skill** – Technology projects includes activities that teach word processing, spreadsheet, graphic design, presentation, data management, and programming skills. Pick based upon the ICT or STEM skills required for your program.

- **Subject Area** – Some technology projects create a product that is specific to a subject area such as digital storytelling for language arts, timeline for history, interactive map for geography, or art gallery for visual arts. Decide using curriculum objectives as a guideline.

- **Topic** – Some technology projects have open-ended topics that can be tailored to any unit of study. In these cases, multiple sample files demonstrate a range of subject matter. Select a technology project that fits with a topic you are already studying.

- **Student Interest** – Brain research indicates that students acquire new skills best when they have a personal connection to their learning. Allow your students to select a project by giving them two or three options. Describe the focus of the projects and allow them to select by a voting process and choose the most popular selection. Or, pick a project such as TechnoJournal, TechnoNewsletter, or TechnoDebate and let each student decide on a personal area of interest for the focus of their individual projects.
About Student Workbooks

The student workbook is available as a PDF booklet. This is ideal for printing double-sided. The content of the student workbook is also available as worksheets. These are suitable to working in a paperless classroom as they can be assigned individually.

The use of student workbooks is optional. It is just one more resource that TechnoKids offers. The decision to use them is entirely yours – determine if there is a need for this type of material considering your students, lessons, teaching style, and classroom setup. There is a lot of flexibility in how student workbooks are implemented. Below are some possibilities:

- Students view the workbooks using Adobe Acrobat Reader or a Chrome PDF extension. They type their answers into their own digital workbook.
- Student workbooks are printed and placed in a binder. They are distributed to students when they come to class. Students do not write in them; instead, handouts are still photocopied.
- The student workbooks are printed. The students keep the workbooks and write in them.
- The teacher only prints a workbook assignment for a student who has been absent.
- The teacher only prints a workbook assignment if the lesson has many steps and they worry their students may have difficulty.
- The teacher only prints a workbook assignment if they are going to be away and a substitute teacher is coming in to teach the class.

If you decide to use student workbooks below are a few suggestions:

- Teach students HOW to use the workbook. Bolded headings are the instructional steps. Triangular bullets explain each action to complete the instruction on the computer.
- Demonstrate how to use a PDF Extension to type answers into worksheets: https://www.technokids.com/blog/technology-integration/pdf-reader-technokids-files/
- Begin using the workbook by doing an assignment together on a demonstration computer, as students follow along in their workbooks.
- Encourage students to read the tips, hints, and labels of the pictures.
- If an action does not work out as it should, teach students problem solving strategies, for example: first, reread the instructions and make sure they have been followed accurately; second, ask the student sitting beside you for help; and third, raise your hand and ask the teacher for assistance.
- After students are confident with using the workbook, begin each class by introducing the assignment and explaining the purpose. Discuss the steps to the assignment. Have students work independently to complete the task following the steps outlined in their workbook. Offer support and suggestions.

The best way to determine if the student workbooks are of use to your class is to try them. Experiment to see if you like using them with your students. Only then will you know if workbooks are something you want to utilize in your classroom.
## TechnoKids Technology Project Summary

TechnoKids technology projects are available for Microsoft Office, Office Online, Scratch, Adobe, and Google. Refer to the table to identify projects that are right for you!

<table>
<thead>
<tr>
<th>Project</th>
<th>Primary Grades 1-3</th>
<th>Junior Grades 3-6</th>
<th>Intermediate Grades 6-9</th>
<th>Senior Grades 8-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>TechnoBookmaking</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoGallery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoMe</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoPainter</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoStart</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoStories</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoWhiz</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>TechnoBookmaking</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoInternet</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>TechnoJournal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoPresenter</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>TechnoResearch</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>TechnoTimeline</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoToon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoTrivia</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>TechnoBiography</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoBlog</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoBudget</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoCode</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoDebate</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>TechnoHTML5</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoMap</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoNewsletter</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoQuestionnaire</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoRestaurateur</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoRestaurateur</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoTravel</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoAdvertise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoSpecialist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoMission</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoInvestor</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoPlanner</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoWonderland</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoPhotoshop</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TechnoAnimate</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

NOTE: Grade levels are suggestions.
# TechnoKids Technology Project Matrix

TechnoKids technology projects are project-based. The instructional materials blend the use of technology into learning. Students develop essential skills while completing activities that are fun and meaningful.

## Primary Technology Projects (Grades 1-3)

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Software</th>
<th>ICT &amp; STEM integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TechnoStart</strong></td>
<td>Earn a computer operator license. Engage in fun activities to learn about hardware, terminology, computer rules, and keyboarding.</td>
<td>Paint or Drawings</td>
<td>visual arts with graphic technology skills and computer fundamentals</td>
</tr>
<tr>
<td><strong>TechnoStories</strong></td>
<td>Become an author. Use templates to plan, write, edit, and illustrate stories. Share the books during story time with friends or family.</td>
<td>Word or Docs</td>
<td>language arts with word processing technology skills</td>
</tr>
<tr>
<td><strong>TechnoMe</strong></td>
<td>Design an All About Me slide show. Outline personal information, accomplishments, goals, and interests in a mini biography.</td>
<td>PowerPoint or Slides</td>
<td>social studies with presentation technology skills</td>
</tr>
<tr>
<td><strong>TechnoPainter</strong></td>
<td>Spark creativity! Produce unique artwork using digital tools. Develop fine motor skills to paint original images and display them in a gallery.</td>
<td>Paint</td>
<td>visual arts with graphic technology skills and computer fundamentals</td>
</tr>
<tr>
<td><strong>TechnoBookmaking</strong></td>
<td>Publish a collection of books. Create a tiny picture book, flip flap story, unfolding riddle book, layer book of facts, bookmarks, card, and more!</td>
<td>PowerPoint or Slides</td>
<td>language arts with word processing technology skills</td>
</tr>
<tr>
<td><strong>TechnoWhiz</strong></td>
<td>Become a programming whiz kid. Build simple scripts and loops to create silly scenes, feed a pet monster, explore a magical land, and invent a racing game.</td>
<td>Scratch Jr</td>
<td>computer science and programming skills</td>
</tr>
</tbody>
</table>

## Junior Technology Projects (Grades 3-6)

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Software</th>
<th>ICT &amp; STEM integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TechnoJournal</strong></td>
<td>Express ideas and describe experiences in a journal. Reflect upon an event, make a note of favorite things, and list personal wishes.</td>
<td>Word or Docs</td>
<td>language arts with word processing technology skills</td>
</tr>
<tr>
<td><strong>TechnoInternet</strong></td>
<td>Embark on an online expedition to become a responsible digital citizen. Apply search strategies, access digital resources, and communicate safely.</td>
<td>web browser</td>
<td>digital citizenship and Internet technology skills</td>
</tr>
<tr>
<td><strong>TechnoPresenter</strong></td>
<td>Present information effectively. Summarize facts using a slide show and organize speaker notes. Deliver a speech to an audience.</td>
<td>PowerPoint/Word or Slides/Docs</td>
<td>public speaking and research with presentation technology skills</td>
</tr>
<tr>
<td><strong>TechnoResearch</strong></td>
<td>Research to design a fact card. Apply strategies to retrieve quality information from reliable sources. Combine images and text in a one-sheet report.</td>
<td>Word or Docs</td>
<td>language arts with word processing technology skills</td>
</tr>
<tr>
<td><strong>TechnoCandy</strong></td>
<td>Devise a strategy to boost candy sales. Conduct a survey and study packaging to investigate a problem. Recommend a solution based on the evidence.</td>
<td>Excel/PowerPoint/Word, or Sheets/Slides/Docs/Forms</td>
<td>math and problem solving with spreadsheet technology skills</td>
</tr>
<tr>
<td><strong>TechnoToon</strong></td>
<td>Animate a graphic story. Plan the characters, setting, and plot. Divide the scenes using transitions. Time events to produce a one-of-a-kind cartoon.</td>
<td>Scratch Jr</td>
<td>language arts with presentation and animation technology skills</td>
</tr>
<tr>
<td><strong>TechnoTrivia</strong></td>
<td>Invent a trivia game. Formulate questions to test knowledge about a topic. Set the answer key to calculate points. Analyze quiz results.</td>
<td>Google Forms</td>
<td>math and social studies with information management skills</td>
</tr>
<tr>
<td><strong>TechnoTimeline</strong></td>
<td>Explain the significance of events with a timeline. Research a topic to connect important moments in time. Display information using a graphic organizer.</td>
<td>PowerPoint or Slides</td>
<td>social studies and history with presentation technology skills</td>
</tr>
</tbody>
</table>
**Intermediate Technology Projects (Grades 6-9)**

Intermediate technology projects are for middle or high school students. They develop proficiency in using ICT applications. Activities emphasize critical and creative thinking. Students design publications, analyze data, code web pages, and more!

---

**TechnoNewsletter**

Publish a fan club newsletter. Write an informative article, construct a word search, and express an opinion. Format pages to lay out content attractively.

Software: Word or Docs

ICT & STEM integration: language arts with word processing technology skills

---

**TechnoRestaurateur**

Launch a business venture. Plan a restaurant concept, conduct a survey, create a logo, generate funds, build a floor plan, manage finances, and more!

Software: Excel/PowerPoint/Word or Sheets/Slides/Docs/Drawings/Forms

ICT & STEM integration: math and entrepreneurship with ICT skills

---

**TechnoTravel**

Promote a weekend getaway for tourists. Research trip details. Customize a slide master to create a unique marketing tool that persuades visitors to vacation.

Software: Excel/PowerPoint/Word or Sheets/Slides/Docs

ICT & STEM integration: language arts and geography with presentation skills

---

**TechnoBiography**

Celebrate a remarkable person. Format the bio using styles, graphic organizer, and media artifacts table. Build a table of contents. Cite sources in a bibliography.

Software: Word or Docs/Drawings

ICT & STEM integration: language arts and history with word processing technology skills

---

**TechnoBudget**

Justify a spending plan for a shopping trip. Calculate, and graph data to form a budget. Report financial choices and explain money management strategy.

Software: Excel/Paint/Word or Sheets/Drawings/Docs

ICT & STEM integration: math and financial literacy with spreadsheet technology skills

---

**TechnoMap**

Highlight the importance of a location by constructing an interactive map. Connect facts about an area or issue using markers and hyperlinks.

Software: PowerPoint/Word or Slides/Docs

ICT & STEM integration: geography or history with presentation technology skills

---

**TechnoCode**

Spark an interest in computer science. Design an Activity Studio for kids using Scratch. Build games, puzzles, and games.

Software: Scratch

ICT & STEM integration: computer science and programming skills

---

**TechnoHTML5**

Develop a web page using HTML and CSS. Write code to set the style of the background, text, lists, graphics, hyperlinks, and tables. Upload to share.

Software: Notepad or other text editor

ICT & STEM integration: computer science and programming skills

---

**TechnoDebate**

Collaborate with a partner to debate the pros and cons of an issue. Create an animated conversation that presents a persuasive argument. Defend a position.

Software: PowerPoint Online or Slides

ICT & STEM integration: language arts and debate techniques with presentation technology skills

---

**TechnoBlog**

Become a blogger. Write a series of blog posts based on personal experience. Participate in an online community. Learn to express ideas appropriately.

Software: blogging service (e.g. Kidblog.org)

ICT & STEM integration: digital citizenship and language arts with blogging technology skills

---

**TechnoQuestionnaire**

Investigate a research question. Select a sample and construct a questionnaire. Conduct a pre-test to tweak the design. Analyze data to interpret findings.

Software: Google Forms

ICT & STEM integration: math and the scientific process with information management skills
## Senior Technology Projects (Grades 8-12)

Senior technology projects are for middle or high school students. They prepare students for higher learning and career readiness. Activities emphasize real-world applications of technology. Students market products, build databases, and more!

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Software</th>
<th>ICT &amp; STEM integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TechnoWonderland</strong></td>
<td>Manage an amusement park to learn about Microsoft Office. Produce a flyer, design a map, create signs, poll customers, advertise rides, and more!</td>
<td>Word, Excel, PowerPoint, Publisher, Access</td>
<td>computer studies with ICT skills</td>
</tr>
<tr>
<td><strong>TechnoMission</strong></td>
<td>Manage data. Plan a simple database. Build a table and data entry form. Filter and sort records. Generate a report that summarizes information.</td>
<td>Access, Paint</td>
<td>computer studies with database technology skills</td>
</tr>
<tr>
<td><strong>TechnoAdvertise</strong></td>
<td>Role play a marketing executive. Submit a cover letter and résumé to apply for the job. Once hired, design a flyer, catalog, custom mailer, and newsletter.</td>
<td>Word</td>
<td>marketing with word processing technology skills</td>
</tr>
<tr>
<td><strong>TechnoSpecialist</strong></td>
<td>Develop an information package about hardware. Explain the attributes of computer components to educate the public in making purchasing decisions.</td>
<td>PowerPoint</td>
<td>computer hardware with presentation technology skills</td>
</tr>
<tr>
<td><strong>TechnoPlanner</strong></td>
<td>Construct a database for a party planning business. Build tables, forms, queries, and reports to organize customer and event information.</td>
<td>Access, Publisher</td>
<td>business studies with database systems</td>
</tr>
<tr>
<td><strong>TechnoPhotoshop</strong></td>
<td>Edit photos to produce a digital scrapbook. Filter, retouch, crop, warp, recolor, and superimpose images. Apply design techniques to lay out pages.</td>
<td>Adobe Photoshop CC</td>
<td>media arts with graphic design and photo editing</td>
</tr>
<tr>
<td><strong>TechnoAnimate</strong></td>
<td>Animate drawings to make a movie. Create scenes with motion tweens, shape tweens, and motion paths. Set the action and sound on the Timeline.</td>
<td>Adobe Animate CC</td>
<td>media arts with animation technology skills</td>
</tr>
</tbody>
</table>
Primary Technology Project Descriptions

TechnoBookmaking

In this project, students make, print, and share books. They use inspiring templates to publish a unique collection. Each assignment teaches a new word processing skill. Lessons explain how to make a tiny picture book, flip flap story, unfolding riddle book, layer book of facts, bookmarks, and greeting card. Place the publications on a bookshelf or put a fresh twist on a Young Authors Conference. Optional activities include additional templates that offer unlimited creativity. Rethink how PowerPoint or Slides can be used in language arts. Explore the possibilities with bookmaking.

The technology project contains the following assignments:

- **Assignment 1 Make a Tiny Picture Book**
  Publish a mini wordless picture book using an accordion style template and images.

- **Assignment 2 Create a Flip Flap Book**
  Write and illustrate a story using a template that reveals a hidden object behind a flap.

- **Assignment 3 Make a Folding Riddle Book**
  Devise clues to create a riddle book using a template with tabs that unfold to display the answer.

- **Assignment 4 Design a Layer Book of Facts**
  Summarize facts using a template that includes layered headings to classify information.

- **Assignment 5 Craft Bookmarks**
  Express a love of reading by adjusting the object order of text and images to design bookmarks.

- **Assignment 6 Send an Invitation or Greeting Card**
  Design an invitation to a book sharing event or a thank you card for an author.

- **Assignment 7 Share Books**
  Celebrate authorship. Start a book club, lead a bookmaking workshop, or exchange stories.

**Extension Activities:**
Discover Accordion Style Books, Make Flip Flap Books, Write a Story That Unfolds, Build Fast Fact Books, Publish Story Books, Get Story Ideas, Plan a Story

**Technology Skills:** Word Processing

**Technology Integration:** Language Arts

**Software Applications:** PowerPoint | PowerPoint Online | Slides
TechnoGallery

In this project, students produce an animated art gallery with artwork they create using Google Drawings. The fun begins with an exploration of line and shape tools. Once familiar with how to create and format objects, artists apply their creative talents to make cartoon faces and characters. Next, students transform text into a beautiful picture by formatting the style and color of letters. The final art project, has students experiment with recoloring and cropping options to create stunning images. Upon completion, each piece of artwork is placed into picture frames using Google Slides. Students share their artwork and explain their artistic choices during a digital art show.

The technology project contains the following assignments:

- **Assignment 1 Become an Art Critic**
  Examine a sample animated art gallery to spark creativity.

- **Assignment 2 Discover Lines**
  Gain fine motor skills. Experiment with drawing straight, curvy, and jagged lines.

- **Assignment 3 Design a Pattern using Lines**
  Study patterns in common objects. Repeat stylized lines to draw unique artwork.

- **Assignment 4 Express Yourself as a Cartoon Face**
  Create an original character that reveals emotion using lines.

- **Assignment 5 Explore Shapes**
  Experiment with drawing and formatting shapes. Customize color and object order.

- **Assignment 6 Construct Animals using Shapes**
  Combine shapes to build cartoon animals such as a cat, tiger, or bear.

- **Assignment 7 Tell a Story**
  Paint a picture that illustrates a story using shapes and lines.

- **Assignment 8 Have Fun with Text**
  Experiment with text and word art. Format font, size, style, color, and alignment.

- **Assignment 9 Make a Picture from Text**
  Communicate a message by transforming text into artwork using WordArt.

- **Assignment 10 Try Recolor and Crop Options**
  Take risks. Explore recolor and cropping options to format an image.

- **Assignment 11 Create Colorful Artwork from Pictures**
  Convey a personal interest by duplicating images to produce a repetitive design.

- **Assignment 12 Save Pictures to use in Art Gallery**
  Convert artwork made in Google Drawings to picture files.

- **Assignment 13 Exhibit Artwork in an Animated Gallery**
  Frame pictures to showcase artwork in an animated art gallery. Apply transitions between slides.

- **Assignment 14 Host a Digital Art Show**
  Exhibit artwork displayed in a slideshow. Explain artistic choices to an audience.

**Extension Activities:**
- Edit Points, Trace Photo to Make a Cartoon, Print as a Handout

**Technology Skills:** Graphics, Computer Fundamentals, Presentation, Word Processing

**Technology Integration:** Visual Arts

**Software Applications:** Drawings, Slides
TechnoPainter

In this project, students become “techno” painters. They paint beautiful artwork using digital art tools. By applying their artistic talents, students earn an Awesome Artist certificate. Each assignment blends technology with visual arts. Students develop fine motor skills while learning essential computer knowledge such as how to open and close a program, set tool options, use the keyboard, print a document, save a file, and open a saved document.

The technology project contains the following assignments:

- **Assignment 1 Become a Painter**
  Explore the program window. Form a connection between traditional and digital art tools.

- **Assignment 2 Pencil It**
  Develop fine motor skills. Learn how to draw freehand using a digital pencil.

- **Assignment 3 Fill It**
  Color objects with the paint bucket. Troubleshoot to fix drawings that cannot be filled.

- **Assignment 4 Design It**
  Make a coloring book page using a digital pencil. Trade pictures with a friend to color the picture.

- **Assignment 5 Keyboard It**
  Identify common keys on the keyboard such as the SHIFT key, BACKSPACE key, and spacebar.

- **Assignment 6 Try It**
  Discover the function and location of keys on the keyboard. Format font, font size, and font style.

- **Assignment 7 Name and Print It**
  Practice basic keyboard skills. Produce a picture using student name as the subject matter.

- **Assignment 8 Brush It**
  Experiment with different types of brushes to understand the effect of each style.

- **Assignment 9 Rainbow It**
  Gain confidence with using digital art tools including a brush, calligraphy pen, crayon, or marker.

- **Assignment 10 Smile It**
  Illustrate a happy scene. Magnify the canvas to add details.

- **Assignment 11 Explore It**
  Outline and fill colorful shapes. Adjust the size and position of objects.

- **Assignment 12 Stamp It**
  Create a unique pattern by formatting shapes and arranging them on the canvas.

- **Assignment 13 Study It**
  Spark inspiration by examining a collection of picture frames.

- **Assignment 14 Decorate and Save It**
  Apply artistic talents to paint a frame with an attractive pattern. Save the file.

- **Assignment 15 Picture It**
  Open the saved frame. Craft an original piece of art.

- **Assignment 16 Award It**
  Celebrate success with an Awesome Artist award.

**Extension Activities:**
- Color It, Check It, Finish It, Copy, Paste, and Flip It, Edit It, Celebrate It

**Technology Skills:** Graphics, Computer Fundamentals, Word Processing

**Technology Integration:** Visual Arts

**Software Applications:** Paint
TechnoMe

In this project, students celebrate their own unique characteristics. They use a template to create an All About Me slideshow. The mini biography outlines personal details, accomplishments, goals, and interests. Upon completion, students share their slideshow with a friend to compare how they are similar and different. This is an excellent way to enhance self-esteem, foster relationships, and develop fundamental technology skills.

The technology project contains the following assignments:

- **Assignment 1 Create a Title Slide**
  Produce a slideshow using a template. Format font, size, style, and color of text.

- **Assignment 2 What Makes You Special?**
  Construct an informative slide that includes details such as name, age, home town, and a talent.

- **Assignment 3 What are Your Goals?**
  Set a goal. Illustrate a future career choice using a picture.

- **Assignment 4 What do You Like?**
  Express personal interests. Decorate a flower template with images of likes. Crop a photo.

- **Assignment 5 Finish the Slideshow**
  Apply transitions to divide the action between slides. Complete additional slides if time permits.

- **Assignment 6 We are the Same! We are Different!**
  Present the All About Me slideshow. Pose questions to learn about similarities and differences.

- **Assignment 7 Make an Animated Class Album (optional)**
  Build a sense of community. Assemble an album to display at an Open House or in the classroom.

*Extension Activities:*
Set Goals, Share Fun Facts, Build a Family Tree, Make a Puzzle from a Picture, Compare Similarities and Differences

*Technology Skills:*
Presentation

*Technology Integration:*
Language Arts, Social Studies

*Software Applications:*
PowerPoint | PowerPoint Online | Slides
**TechnoStart**

In this project, students have fun learning computer fundamentals. This introduction provides beginners with basic knowledge such as the function of hardware, mouse or touch terminology, and computer rules. By making simple drawings, they develop essential skills. Upon completion, students receive a Computer Operator License.

The technology project contains the following assignments:

- **Assignment 1 What is a Computer?**
  Identify devices and describe computer use in daily life.

- **Assignment 2 About Parts of the Computer**
  Distinguish computer parts. Solve computer riddles.

- **Assignment 3 Get to Know the Mouse**
  Define mouse terminology related to common actions.

- **Assignment 4 Get to Know Touch Actions**
  Form a connection between finger movements and computer commands.

- **Assignment 5 Practice Using the Mouse or Touch Actions**
  Play the role of a detective. Find computer parts.

- **Assignment 6 About Computer Care**
  Classify a behavior as a do or don't.

- **Assignment 7 Show Good Behavior**
  Explore the paint program. Follow computer rules and exhibit appropriate conduct.

- **Assignment 8 Follow Rules for Printing**
  Paint a simple picture. Practice printing procedures.

- **Assignment 9 About the Keyboard**
  Locate keys on the keyboard such as the SHIFT key, ENTER key, and spacebar.

- **Assignment 10 Be the Fastest Typist in the World**
  Draw a text box and type letters. Format the font, font size, font style, and font color.

- **Assignment 11 Learn to Left and Right Click**
  Label left click and right click actions with a mouse or touch device.

- **Assignment 12 Left and Right Click to Make a Design (or Edit a Picture)**
  Create artwork using left click and right click actions.

- **Assignment 13 About Saving Your Work**
  Learn about saving options, naming a file, and avoiding lost work.

- **Assignment 14 Follow Rules for Saving**
  Manipulate digital art tools to produce a picture. Save the file.

- **Assignment 15 Open a Saved File and Make Changes**
  Edit an existing picture to include additional details.

- **Assignment 16 Earn a Computer Operator License**
  Rate ability to identify hardware, perform computer-related tasks, and show responsible behavior.

**Extension Activities:**
Pick the Computer to Do the Job, Play Computer Spy Game, Label It Input or Output, Turn the Computer On and Sign In, Sign Out or Shut Down the Computer, Keep Your Files Safe, Make a Copy to Save Time, Pick Print Settings, Zoom In and Zoom Out, Use Save As to Save Time, Clean Up Your Files, Edit Colors

**Technical Skills:** Graphics, Computer Fundamentals, Word Processing

**Technology Integration:** Visual Arts

**Software Applications:** Paint | Drawings

**Note:** Assignment titles and sequence vary slightly between the Microsoft and Google versions.
TechnoStories

In this project, students create storybooks. They develop basic word processing skills to plan, write, illustrate, edit, and publish stories. Upon completion, authors share their work during story time. Optional activities challenge students with keyboarding tasks, advanced word processing techniques, and the creation of a flipbook.

The technology project contains the following assignments:

- **Assignment 1 Edit My Puppy Story**
  Transform text in a story to make the words look like their meaning.

- **Assignment 2 Illustrate My Day at School**
  Insert images onto story pages and format the appearance to compose an interesting book.

- **Assignment 3 Finish the About Me Story**
  Apply word processing skills to author a personal story by completing sentence starters.

- **Assignment 4 Plan your Story**
  Organize ideas for an original story using a planning sheet. Use book titles as a source of inspiration.

- **Assignment 5 Make a Storybook**
  Write the beginning, middle, and end of a story using a book template. Illustrate each story page.

- **Assignment 6 Complete your Storybook**
  Proofread the storybook using a checklist. Revise spelling, content, and design.

- **Assignment 7 Share your Book at Story Time**
  Publish the storybook and share it with a teacher, friend, or parent.

**Extension Activities:**
About the Keyboard, Be a Keyboard Detective, Insert a Saved Photo or Take a Web Cam Photo, Story Writing Ideas, Make a Flip Book

**Technology Skills:** Word Processing

**Technology Integration:** Language Arts

**Software Applications:** Word | Word Online | Docs
TechnoWhiz

In this project, students jump into the world of coding. They learn how to sequence blocks in Scratch Jr to build simple scripts and loops. The coders design silly scenes, feed a pet monster, explore a magical land, race to the finish line, and more! This fun-filled introduction to programming will spark students’ imaginations. Invite curious young minds to become whiz kids!

The technology project has 16 assignments that are divided into 6 Sessions:

- **Session 1 Become a Whiz Kid**
  In session 1, students become programming whiz kids. Their first assignment is to sequence a series of tasks to learn about the job of a programmer. Next, they open Scratch Jr to investigate the function of many of the tools. By adding Motion blocks to the programming area, they learn how to code a character’s movement. Next, they connect blocks together to form a script that sequences actions. Finally, students cause the script to loop. At the end of the session, they combine their coding skills to create a silly scene. It comes to life by combining a colorful background with moving characters.

- **Session 2 Count and Code**
  In session 2, the programming whiz kids take the Counting Challenge. They learn to direct how many steps a character moves to reach a goal. To start, they solve puzzles to help the cat eat the cake, the dog catch the ball, and the horse reach the barn. Next, they explore how to edit the Motion coding blocks to set the number of steps. Once they have mastered this skill, students build scripts to help characters get home. Can they do it?

- **Session 3 Create a Pet Monster Game**
  In session 3, the programming whiz kids design a game. They build code that has a player feed a pet monster. To start, they create an opening sequence to attract attention. It has the character talk, grow, shrink, and blink. The action is controlled using the Wait and Repeat blocks. Afterwards, students apply their knowledge to add food to the stage that when clicked moves to the pet monster and then disappears. What does the pet monster like to eat?

- **Session 4 Design a Magical Land**
  In session 4, the programming whiz kids design an interactive magical land. The game invites players to explore the place to discover surprises. By clicking on objects, they can cause flowers to grow, a sun to spin, or dragons to hop. The speed of the action is controlled to make it happen slow or fast. What amazing things are hidden in the scene?

- **Session 5 Race to the Finish**
  In session 5, the programming whiz kids build a racing game. Players watch the action and then must select the winner. If they pick correctly, the racer will do a celebration dance. Who will reach the finish line first?

- **Session 6 Game Time**
  In session 6, the programming whiz kids invite others to play their racing game. Players rate what they liked the most about the activity. Afterwards, the young game designers answer questions about coding the Scratch Jr project.

**Extension Activities:**
Move a Character Diagonally, Move Around Town Game, Be a Gamer, Edit a Character, Paint a Background, I am a Programmer

**Technology Skills:** programming

**Technology Integration:** Computer Science, Mathematics, Language Arts, Social Studies, Visual Arts

**Software Applications:** Scratch Jr
Junior Technology Project Descriptions

TechnoCandy

In this project, students develop a plan to boost candy sales. They investigate a problem by conducting a survey and researching candy packaging. A spreadsheet is used to organize, calculate, and graph data. Based on the evidence students recommend a solution in a written report. Optional activities challenge students to explore formulas, learn advanced graphing techniques, or design a candy package.

The technology project contains the following assignments:

- **Assignment 1 Spreadsheets and You**
  Recognize the practical application of spreadsheets. Set a goal for learning.

- **Assignment 2 Explore Spreadsheets**
  Learn spreadsheet terminology and acquire basic skills.

- **Assignment 3 Understand the Problem**
  Grasp the challenge facing the candy business. Formulate a plan to collect information.

- **Assignment 4 Conduct a Survey**
  Administer a survey about color preferences to investigate the problem.

- **Assignment 5 Record Survey Results in a Spreadsheet**
  Organize survey results in a spreadsheet. Format the data to make it easy to read.

- **Assignment 6 Calculate Survey Data**
  Compute totals using the Sum function.

- **Assignment 7 Graph the Survey Results**
  Represent data in a column chart. Customize the chart style. Interpret the survey results.

- **Assignment 8 Research the Candy**
  Investigate candy packaging. List predictions and actual amounts of colored candies.

- **Assignment 9 Record Research Results**
  Organize data in a new worksheet. Calculate totals using the Sum function.

- **Assignment 10 Make a Comparison Chart**
  Sort data. Create a double bar graph. Edit the title, legend, and axes. Analyze research findings.

- **Assignment 11 Report Solution to the Problem**
  Recommend a proposal based on the evidence. Support reasoning using graphs.

- **Assignment 12 Submit the Report**
  Verify the report is complete using a checklist. Revise the content. Print or share the document.

Extension Activities:
Play Spreadsheet Bingo, Have Fun with Cell References, Experiment with Sum, Explore Chart Types or Advanced Chart Editing, Explore Pie and Line Graphs, Draw Packaging, Conduct a Poll or Survey*  
Technology Skills: Spreadsheets, Word Processing, Graphics  
Technology Integration: Language Arts, Mathematics, Visual Arts, Business Studies  
Software Applications: Excel, PowerPoint, Word | Excel Online, Forms for Excel, PowerPoint Online, Word Online | Sheets, Slides, Docs, Forms  
*Note: Activity in the Office Online and Google versions only
TechnoInternet

In this project, students have fun exploring the Internet. This online expedition allows them to safely discover the wonders online as well as learn the importance of responsible digital citizenship. The assignments revolve around an imaginary world. Students can travel to the Visitor's Center, e-Library, e-Media Center, e-Playground, e-Message Depot, or e-Café. Each destination is tracked by adding a marker to an Internet map. Use this project, to create a foundation for future learning.

The technology project contains the following assignments:

- **Assignment 1 Practice Internet Safety** - Earn an Internet Citizenship card.
- **Assignment 2 Take a Tour of the Internet** - Discover the meaning of terminology.
- **Assignment 3 Search the Internet** - Master search strategies to find information fast.
- **Assignment 4 Collect Bookmarks** - Search the Internet and then bookmark web pages.
- **Assignment 5 Bookmark Sources** - Explore encyclopedias, atlases, dictionaries and thesauruses.
- **Assignment 6 Examine Information Sources** – Evaluate the trustworthiness of a website.
- **Assignment 7 Read News on Current Events** - Inspect articles from newspapers and magazines.
- **Assignment 8 Search the Image Gallery** - Filter online images to collect pictures. Respect copyright.
- **Assignment 9 Discover the Video Theater** - View documentaries, speeches, demos, and more.
- **Assignment 10 Survey the Map Collection** - Plot a location and generate directions.
- **Assignment 11 Explore the Sound Stage** - Listen to online radio stations, sound clips, and songs.
- **Assignment 12 Visit Webcam Observatory** - Observe remote events and attractions.
- **Assignment 13 Experience the Arcade** - Play online games and rank the entertainment value.
- **Assignment 14 Learn About Email** - Compare traditional mail to email.
- **Assignment 15 Email Guidelines and Safety Tips** – Score email safety readiness and netiquette skills.
- **Assignment 16 Exchange Email** - Compose, send, receive, reply, and forward messages.
- **Assignment 17 Send an Email Attachment** - Attach a file to an email message.
- **Assignment 18 Prevent Cyberbullying** - Discuss harmful or hurtful online behavior.
- **Assignment 19 Study Chat Guidelines and Safety Tips** – Prepare to chat responsibly by taking a quiz.
- **Assignment 20 Chat with Friends** - Exchange messages with friends in real time.
- **Assignment 21 Network at Social Media Place** - Explore social media sites.
- **Assignment 22 Explore the Blogosphere** - Study blog posts.

**Extension Activities:**
Get Homework Help, Study Online Shopping, Study Online Banking, Visit the Ecard Shop

**Technology Skills:** Digital Citizenship

**Technology Integration:** Foundation for Future Learning

**Software Applications:** Web Browser
TechnoJournal

In this project, students are introduced to word processing by creating a personal journal. They express ideas and describe experiences by writing a series of entries. Students reflect upon a recent event, make a note of favorite things, and list personal wishes. The text on each journal page is formatted and pictures are added to produce an eye-catching booklet. Reader responses to the entries are logged to celebrate the accomplishment.

The technology project contains the following assignments:

- **Assignment 1 Journal Writing**
  Read about journaling. Examine journals to ignite writing ideas.

- **Assignment 2 Be a Detective**
  Investigate the program window. Identify the function of common word processing tools.

- **Assignment 3 Create a Front Cover – Step 1**
  Begin a title page for the journal. Apply text formatting techniques to attract interest.

- **Assignment 4 Create a Front Cover – Step 2**
  Illustrate the journal title page. Explore simple picture formatting techniques.

- **Assignment 5 Yesterday Journal Entry**
  Write a journal entry about a recent event. Decorate using clip art and adjust the text wrapping.

- **Assignment 6 Things I Like Journal Entry**
  Write a journal entry about three favorite things using a bulleted list. Set the line spacing.

- **Assignment 7 Make a Wish Journal Entry**
  Write a journal entry listing three wishes using a numbered list. Apply a border to pictures.

- **Assignment 8 Complete the Journal**
  Proofread the journal using a checklist. Revise the spelling, content, and design of entries.

- **Assignment 9 Print the Journal**
  Prepare the journal for publication. Insert page numbers and then print the journal as a booklet.

- **Assignment 10 Share the Journal**
  Invite readers to respond to the journal by recording their reaction to a favorite entry.

*Extension Activities:*
About the Keyboard, Journal Writing Ideas

*Technology Skills: Word Processing*

*Technology Integration: Language Arts*

*Software Applications: Word | Word Online | Docs*

*Note: Sequence of assignments varies slightly between the Microsoft and Google versions.*
TechnoPresenter

In this project, students deliver an informative speech. To start, they study a sample slideshow to gain insight into the purpose of a presentation. Next, they apply an inquiry-based approach to generate a meaningful research question. Students then investigate their topic. Using presentation software, slides are created that apply graphic elements such as bulleted lists and tables to organize facts. To prepare for public speaking, students compose a set of notes to accompany each slide. Upon completion, they communicate their findings to an audience. Optional activities explain how to collaborate with a partner, insert a video, create a graphic organizer, or animate text.

The technology project contains the following assignments:

- **Assignment 1 Oral Presentations and Public Speaking**
  Recognize the purpose of oral presentations. Rate public speaking readiness.

- **Assignment 2 Study a Presentation**
  Examine a sample presentation to develop an understanding of the content, layout, and design.

- **Assignment 3 Select a Topic and Research a Question**
  Organize ideas using a planning sheet. Select audience and topic. Formulate research question.

- **Assignment 4 Make the Title Slide**
  Construct a title slide. Apply a theme to produce a consistent style. Format text and insert an image.

- **Assignment 5 Create an Information Slide**
  Summarize essential information on a slide using a bulleted list. Elaborate using the notes pane.

- **Assignment 6 Build a Table of Fun Facts**
  Classify facts into categories using a table. Expand upon a key point using the notes pane.

- **Assignment 7 Decorate Slides with Shapes and WordArt**
  Capture audience attention. Enhance slides and emphasize information using graphic objects.

- **Assignment 8 Presentation Checklist**
  Self-evaluate slideshow quality. Revise the presentation to improve appearance and clarity.

- **Assignment 9 Rehearse Presentation with Speaker Notes**
  Practice public speaking by presenting with digital or printed speaker notes.

- **Assignment 10 Give an Oral Presentation**
  Communicate research findings. Engage the audience using a slideshow as a visual aid.

**Extension Activities:**
Work Together as a Group Project*, Use Annotation Tools*, Insert a Video, Create a Graphic Organizer, Animate Information, Group Presentation Rehearsal, Body Language Skits, Ask an Expert*

**Technology Skills:** Presentation

**Technology Integration:** Language Arts, Social Studies, Science, Geography, History, Health

**Software Applications:** PowerPoint, Word | PowerPoint Online, Word Online | Slides, Docs

*Note: Select extension activities are not available for all product versions.
TechnoResearch

In this project, students develop research skills as they create a Fact Card. To start, students brainstorm a topic and plan their research project. Next, they use strategies to retrieve quality information from reliable sources. The facts are then processed using paraphrasing techniques to transform an outline into a one sheet report. The publication is shared with others as part of a Fun Fact Card Collection. Optional activities challenge students to develop skimming and scanning techniques, practice advanced research strategies, arrange facts in a table, and recognize sources of information. The goal of this project is to teach skills that are transferable to any research project.

The technology project contains the following assignments:

- **Assignment 1 Study the Fun Fact Card Collection**
  Assess research skills. Examine fact cards to gain an understanding of the research project.

- **Assignment 2 Broaden then Narrow your Topic**
  Apply techniques to gain ideas for a research topic. Build a word list. Ask questions to narrow focus.

- **Assignment 3 Organize Ideas and Create an Outline**
  Decide on inquiry questions. Form a document outline that include headings.

- **Assignment 4 Find Facts Fast using an Online Encyclopedia**
  Research details using an online encyclopedia. Track the source of information.

- **Assignment 5 Research a Topic using Google Search**
  Investigate a topic using Internet search strategies to find trustworthy information quickly.

- **Assignment 6 Create a Glossary of Terms**
  Choose the vocabulary to include in a glossary. Define meaning using Smart Lookup or a dictionary.

- **Assignment 7 Transform the Outline into a Fun Fact Card**
  Paraphrase facts by rewriting them using simple sentences that are easy to read and comprehend.

- **Assignment 8 Format the Text to Make It Easy to Read**
  Produce a professional publication. Format font, bullet a list, adjust line spacing, and indent lines.

- **Assignment 9 Adjust Page Layout and Format Images**
  Design a unique fact card. Customize page orientation, color, margins, and border. Format images.

- **Assignment 10 Fact Card Checklist**
  Peer review a fact card using a checklist. Based on feedback, modify the publication.

- **Assignment 11 Create a Fun Fact Card Collection**
  Print the fact card or email a link to teacher. Share collection with others.

- **Assignment 12 Research Self-Reflection**
  Reflect upon learning. Make connections to how skills can be applied to future situations.

*Extension Activities:*
Save Time! Skim and Scan, Cite Sources of Information, Explore Google Search, Use Primary and Secondary Sources, Arrange Fact Card with Columns and/or Tables

*Technology Skills:* Digital Citizenship, Word Processing

*Technology Integration:* Language Arts, Social Studies, Science, Geography, History

*Software Applications:* Word | Word Online | Docs
TechnoTimeline

In this project, students create a timeline that summarizes significant events. The graphic organizer will consist of information organized in chronological order. Each event will be analyzed to gain an appreciation of its historical importance on people and future events.

To start, students study sample timelines for inspiration. Next, they research a topic and record findings using an organizer. Once the important moments have been pinpointed, a graphic organizer is used to create a visual display. Upon completion, the sequence of events is shared with others.

The technology project contains the following assignments:

- **Assignment 1 What is a Timeline?**
  Examine timelines to gain an understanding of how a graphic organizer summarizes key events.

- **Assignment 2 Brainstorm a Topic**
  Formulate a plan for building a timeline. Select a timeline type and determine a topic.

- **Assignment 3 Organize Research Findings**
  Investigate significant events. Arrange details by date in a document.

- **Assignment 4 Start to Make the Timeline Slide**
  Customize a slide for a timeline. Set the slide size, layout, and theme. Apply a slide background.

- **Assignment 5 Organize Events using SmartArt or Objects**
  Build a timeline that sequences events in chronological order. Explain the importance of events.

- **Assignment 6 Highlight Events in the Timeline**
  Emphasize a critical moment or turning point using shapes. Illustrate timeline events using pictures.

- **Assignment 7 Use a Checklist to Edit the Timeline**
  Self-evaluate the timeline using a checklist. Revise the content and design.

- **Assignment 8 Share your Timeline to Get Feedback**
  Peer review a friend's timeline. Comment to offer feedback. Use suggestions to improve timeline.

- **Assignment 9 Share Timeline with Others**
  Celebrate a historical period. Print the timeline or present information to an audience.

*Extension Activities:*
- Is it Significant? Zoom to Feature a Special Event*, Drawing Workshop*, Highlight Events Using Saved Images
*Note: Assignment titles and sequence vary slightly between the Microsoft and Google versions. Select extension activities are not available for all product versions.*

**Technology Skills:** Presentation, Word Processing

**Technology Integration:** Geography, History, Social Studies

**Software Applications:** PowerPoint, Word | PowerPoint Online, Word Online | Slides, Docs
TechnoToon

In this project, students create a graphic story in the style of a cartoon or animated comic strip. To start, they learn about writing conventions and watch sample stories as a source of inspiration. Students then apply their creativity to construct their story with text boxes, images, callouts, starbursts, and WordArt. Transitions are inserted between slides to divide the scenes. Animation is applied to objects to sequence the timing of events. Upon completion, the graphic story is set to play automatically. Challenging extension activities support learning with optional assignments such as picture editing, advanced animation techniques, and exporting as a video.

The technology project contains the following assignments:

- **Assignment 1 Digital Storytelling, Cartoons, & Comic Strips**
  Produce silly comic strips by writing text into callouts to describe what is happening.

- **Assignment 2 View Sample Digital Stories**
  Examine digital stories to learn about the structure and ignite interest in animated storytelling.

- **Assignment 3 Organize Story Ideas for the Digital Story**
  Invent a cartoon story. Determine the audience. Sketch events into a storyboard to form a plan.

- **Assignment 4 Make the Title Slide**
  Spark interest in the story with a unique title slide. Format text, text boxes, and slide background.

- **Assignment 5 Set the Scene**
  Convey information about setting, character, and plot by combining images with callouts.

- **Assignment 6 Create the Action Scenes**
  Illustrate the remaining scenes. Exaggerate the story action using starbursts and WordArt.

- **Assignment 7 Add Transitions and Animations**
  Divide the action using transitions. Animate each scene and sequence the timing of events.

- **Assignment 8 Digital Story Checklist**
  Self-evaluate the content, design, and animation applied to each scene. Revise the story.

- **Assignment 9 Share Your Digital Story**
  Prepare the story for an audience. Set the slides to play automatically. Invite peers to view it.

**Extension Activities:**
Generate a Story Idea, Use Images from the Internet, Picture Editing Workshop, Animation Workshop, Peer Edit the Digital Story*, Print a Comic Strip or Comic Book, Make a Video

**Technology Skills:** Presentation

**Technology Integration:** Language Arts

**Software Applications:** PowerPoint | PowerPoint Online | Slides

*Note: Select extension activities are not available for all product versions.
TechnoTrivia

In this project, students design a fun trivia quiz. Using Google Forms, they test their friend's knowledge about a topic. There is no need to keep score, since an automated system calculates points for each person and sends the results. Extension activities have students host a Battle of the Brains, team up to build a Trivia Game, make a Pick your Own Ending story, include a video, and manually mark a short answer question.

The technology project contains the following assignments:

- **Assignment 1 Play the Brain Game**
  Examine the Wacky Animal Quiz to pinpoint the features that make a trivia quiz fun to take.

- **Assignment 2 Create a Quiz About Your Country**
  Explore quiz making tools to learn how to test knowledge and score answers.

- **Assignment 3 Plan Your Trivia Quiz**
  Select a topic. Generate intriguing questions that range from simple to complex.

- **Assignment 4 Design a Trivia Quiz**
  Invent an engaging game that challenges people. Set the answer key to calculate points.

- **Assignment 5 Complete the Trivia Quiz Checklist**
  Detect areas for improvement. Revise the design, questions, answer options, or answer key.

- **Assignment 6 Host a Trivia Time Event**
  Invite people to play. Choose an option such as Game Show Host, Invitation Only, or Get Social.

- **Assignment 7 Be a Know It All**
  Answer peers’ trivia quizzes. Reflect upon features that make them appealing.

- **Assignment 8 Study Trivia Quiz Responses**
  Analyze scores and responses to recommend revisions that would improve the quiz.

**Extension Activities:**
Make the Quiz a Battle of the Brains, Collaborate to Build a Trivia Game, Create a Pick Your Own Ending Story, Ask a Question About a Video Clip, Ask a Short Answer Question

**Technology Skills:** Data Management

**Technology Integration:** Language Arts, Social Studies, Science, History, Geography, Math

**Software Applications:** Google Forms, Sheets
Intermediate Technology Project Descriptions

TechnoBiography

In this project, students become biographers writing about a person's life story. To start, they research a notable figure who has made a difference in the world. Once familiar with events and achievements, students summarize a personal history using heading styles to organize events logically. Contributions are highlighted using a graphic organizer. To help readers connect with the person, artifacts with links to additional information are arranged in a table. Sources of information are cited using a bibliography. Upon completion, the biography is shared with readers.

The technology project contains the following assignments:

- **Assignment 1 What is a Biography?**
  Examine sample biographies to acquire insight into the role of a biographer.

- **Assignment 2 Brainstorm a Topic**
  Generate names of notable people. Select a topic. List inquiry questions.

- **Assignment 3 Research using Tertiary Sources**
  Consult an encyclopedia to locate basic facts. Classify information using an organizer.

- **Assignment 4 Research using Secondary Sources**
  Gain in-depth knowledge of the person's life from quality websites. Track information sources.

- **Assignment 5 Research using Primary Sources**
  Identify significant artifacts associated with the person such as a speech, diary, or medal.

- **Assignment 6 Research Checklist**
  Confirm readiness to write biography by completing a checklist.

- **Assignment 7 Create a Title Page**
  Apply word processing skills to design a title page for the biography.

- **Assignment 8 Set the Document Structure Using Styles**
  Set document structure with heading styles. Customize styles and insert a table of contents.

- **Assignment 9 Write a Personal History**
  Synthesize research to summarize the person’s early life, family, education, and career.

- **Assignment 10 Make a Graphic Organizer of Contributions**
  Showcase the importance of the person's accomplishments using an eye-catching diagram.

- **Assignment 11 Design a Media Gallery using a Table**
  Highlight the contributions of a person using artifacts. Link readers to additional information.

- **Assignment 12 Cite Sources in a Bibliography**
  Document sources of information in a bibliography. Practical tips help to format the list.

- **Assignment 13 Biography Checklist**
  Self-evaluate the biography using a checklist. Revise the content based on the examination.

- **Assignment 14 Share Your Biography with Readers**
  Reflect on the learning experience. Respond to questions about the person’s life or legacy.

*Extension Activities:*
Insert a Video, Customize Page Layout, Connect to Artifacts using a Bookmark*, Make a Bumper Sticker, Create a School Award

*Technology Skills: Word Processing, Graphics*

*Technology Integration: History, Language Arts, Social Studies*

*Software Applications: Word | Word Online | Docs, Drawings*

*Note: Select extension activities are not available for all product versions.
TechnoBlog

In this project, students become bloggers. They use a blogging service to post articles about a topic. Through a series of language arts activities students share an insight, provide advice, and express an opinion, as responsible digital citizens. They form a community of bloggers actively engaging in writing, reading, and commenting on posts.

The technology project contains the following assignments:

- **Assignment 1 Explore the Blogosphere** – Learn about blogs and terminology.
- **Assignment 2 Get Started with Kidblog** – Explore the Kidblog service.
- **Assignment 3 Set your Blogger Profile** – Choose display name and avatar.
- **Assignment 4 Take the Blogger’s Pledge** – Learn about guidelines to blog responsibly.
- **Assignment 5 Plan your Blog** – Form a plan for a blog. Pick a topic and outline writing ideas.
- **Assignment 6 Create a Word Cloud to Generate Ideas** – Illustrate blog topic with words.
- **Assignment 7 Welcome Readers to your Blog** – Write a post that introduces the blog to readers.
- **Assignment 8 Commenting Agreement** – Learn commenting etiquette to express ideas politely.
- **Assignment 9 Practice Writing Comments** – Rewrite and compose effective blog comments.
- **Assignment 10 Offer Encouragement using Comments** – Read posts. Compliment a fellow blogger.
- **Assignment 11 Read and Respond to Comments** – Join the conversation. Reply to comments.
- **Assignment 12 Make a Personal Connection with Readers** - Rephrase a post to maintain privacy.
- **Assignment 13 Write a Personal Connection Post** - Compose a post sharing an insight from experience.
- **Assignment 14 Make a Connection using Comments** – Write a comment that relates to the insight.
- **Assignment 15 Study a Sample Advice Post** – Compare posts to criticize formatting techniques.
- **Assignment 16 Format a Sample Blog Post** – Improve readability to make a post easy to scan.
- **Assignment 17 Plan a Blog Post** – Organize ideas to provide guidance to readers.
- **Assignment 18 Write an Advice Post** – Author a post that offers advice. Apply formatting techniques.
- **Assignment 19 Spark a Conversation using Comments** – Pose a question or offer a suggestion.
- **Assignment 20 Express Yourself** – Learn about writing an opinion post effectively and respectfully.
- **Assignment 21 Tips for Writing an Opinion Post** – Ponder guidelines for expressing a viewpoint.
- **Assignment 22 Plan your Opinion Post** – Select a question. Organize ideas to state an opinion.
- **Assignment 23 Write an Opinion Post** – Publish a post to state your viewpoint appropriately.
- **Assignment 24 Express your Opinion using Comments** – Convey your agreement with a viewpoint.

**Writer’s Workshop:**
Blogger Brainstorming, Find Inspiration with Blog Titles, Share an Insight with Blog Post Starters, Discover Your Inner Expert, Be Opinionated!

**Extension Activities:**
Make a Cartoon Avatar, Blogging, Digital Citizenship, and You

**Tutorials:**
How to Insert Images, How to Insert Videos, How to Add a Hyperlink

**Technology Skills:** Digital Citizenship, Blogging

**Technology Integration:** Language Arts

**Software Applications:** Blogging service (e.g. Kidblog.org)
**TechnoBudget**

In this project, students develop financial literacy using a problem-solving model. The fun begins with a windfall and shopping spree. Students create a budget and spending plan. They use a spreadsheet to organize, calculate, and graph data. A report is written to justify financial choices and share insights about money management. Challenging enrichment activities extend learning. Students can comparison shop, use functions to analyze data, filter and sort, calculate with if-then formulas, manipulate debt repayment, build consumer awareness, and draw money idioms.

The technology project contains the following assignments:

- **Assignment 1 Money Management and You**
  Realize the importance of budgeting. Rate money management style.

- **Assignment 2 An Unexpected Windfall**
  Invent a practical reason for a financial windfall. Establish budget categories.

- **Assignment 3 Discover Spreadsheets**
  Work with columns, rows, and cells to arrange data in a worksheet.

- **Assignment 4 Calculate Your Budget**
  Divide a budget into categories. Compute totals using AutoSum.

- **Assignment 5 Create a Pie Graph and Edit the Budget**
  Analyze the budget using a chart. Allocate funds to meet criteria set for each category.

- **Assignment 6 Create a Spending Plan Worksheet**
  Build a spending plan table that calculates taxes, track totals, and uses conditional formatting.

- **Assignment 7 Plan a Shopping Spree**
  Determine items to purchase by visiting online stores. Record information in the spending plan.

- **Assignment 8 Use a Bar Graph to Summarize Plan**
  Create a graph. Modify the labels, layout, style, and legend. Scrutinize the distribution of funds.

- **Assignment 9 Spreadsheet Checklist**
  Verify the content of the budget, spending plan, and chart sheets. Print the workbook.

- **Assignment 10 Justify Financial Choices in a Report**
  Prepare a report that explains the budget and spending plan. Support reasoning with graphs.

*Extension Activities:*

Compare Purchasing Options, Use Functions to Analyze Spending Plan, Filter and Sort Data, Category Comparison Table and Graph, Understand Credit and Debt, Build Consumer Awareness, Have Fun with Money Idioms

*Technology Skills:* Spreadsheets, Word Processing, Graphics

*Technology Integration:* Mathematics, Language Arts, Business Studies

*Software Applications:* Excel, Paint, Word | or Excel Online, Word Online | Sheets, Drawings, Docs
**TechnoCode**

In this project, students become coders that design a fun Activity Studio for kids using Scratch. Through discovery and exploration, they learn how to create a series of hands-on activities that children will enjoy playing. The young programmers apply computational thinking to build algorithms that sequence commands, events, loops, and conditions. They learn how to construct scripts to develop animated scenes, mazes, interactive stories, and games. Additional challenges extend coding skills to create artwork, compose music, produce a diorama, and more! After each project, students complete coding journal logs to help them to think like a programmer.

The technology project contains the following assignments:

- **Assignment 1 Computer Programs and You** – Gain an understanding of programming in daily life.
- **Assignment 2 Think Like a Programmer** – Identify the attributes of a programmer and their job duties.
- **Assignment 3 Join the Scratch Community** – Register for a Scratch account if using the online version.
- **Assignment 4 Become a Scratch Programmer** – Label the Scratch interface. Build a simple script.
- **Assignment 5 Create an Animated Scene** – Explore the Scratch Libraries. Animate friends having fun.
- **Assignment 6 Explore Motion Blocks to Make Fish Swim** – Experiment with blocks to move a sprite.
- **Assignment 7 Code an Animated Aquarium** – Program fish to swim non-stop or when touched.
- **Assignment 8 Complete the Aquarium Checklist** – Assess the Scratch project to refine the scripts.
- **Assignment 9 Prepare the Aquarium Project Page** – Add viewing instructions, notes, and tags.
- **Assignment 10 Plan a Maze** – Organize ideas for a puzzle. Determine coding blocks required.
- **Assignment 11 Code a Maze** – Help a character find their way along a path using arrow keys.
- **Assignment 12 Complete the Maze Checklist** – Study the puzzle. Correct coding or design errors.
- **Assignment 13 Prepare the Maze Project Page** – Comment upon fellow Scratchers' mazes.
- **Assignment 14 Explore Looks Blocks to Create a Story** – Discover the blocks that set sprite appearance.
- **Assignment 15 Switch Backdrops to Enhance Story Action** – Animate an object to improve storytelling.
- **Assignment 16 Direct the Timing of Events using Broadcast** – Control when story events occur.
- **Assignment 17 Complete the Story Checklist** – Analyze the characters and plot. Revise the content.
- **Assignment 18 Prepare the Story Project Page** – Share the Scratch project with a peer reviewer.
- **Assignment 19 Develop a Game** – Invent a game that has the player hit targets to score points.
- **Assignment 20 Consultant on Game Design** – Pair up and discuss plans. Offer feedback for improvement.
- **Assignment 21 Build and Test the Game** – Construct a game using loops, conditionals, and variables.
- **Assignment 22 Complete the Game Checklist** – Assess the quality of game play. Edit design or coding.
- **Assignment 23 Prepare the Game Project Page** – Invite others to play game and post comments.
- **Assignment 24 Build an Activity Studio** – Curate Scratch projects to form a collection of activities.
- **Assignment 25 Gain Player Feedback** – Investigate children's reaction to the activities.

**Extension Activities:**
Edit Your Scratch Public Profile, Draw Artwork with the Pen, Invent an Instrument, Record a Sound Clip, Organize Scripts with Broadcast, Chat with a Sprite, Remix a Scratch Project

**Technology Skills:** programming

**Technology Integration:** Computer Science, Mathematics, Language Arts, Science, Social Studies

**Software Applications:** Scratch
TechnoDebate

In this project, students collaborate with a partner to create an animated debate. Using clip art characters and callout bubbles, each side states their resolution, presents a constructive speech, delivers a counter argument in a rebuttal, and summarizes their position. Cross-examination is done at the end of the debate by audience members using the commenting feature. Extension activities are included for participants to cross-examine opponents and for a judge to select a winner.

The technology project contains the following assignments:

- **Assignment 1 What is a Debate?**
  Rate your ability to persuade others. Evaluate the effectiveness of arguments in sample debates.

- **Assignment 2 Brainstorm a Topic for your Debate**
  Partner up. Refer to a list of controversial issues. Negotiate to select a topic and position.

- **Assignment 3 Plan Arguments**
  Apply research skills to compile compelling evidence that supports a viewpoint.

- **Assignment 4 Invite a Partner to Debate**
  Share a file. Collaborate to create a title slide together.

- **Assignment 5 Take a Stand**
  State resolution. Clearly outline a position using a clip art character and callout on a slide.

- **Assignment 6 Present a Persuasive Argument**
  Prepare a constructive speech. Design slides that present three reasons an opinion is correct.

- **Assignment 7 Prepare a Rebuttal**
  Review opponent's argument. Refute their weakest claim in a counter-argument.

- **Assignment 8 Summarize Ideas**
  Restate your arguments to convince an audience to agree with a viewpoint.

- **Assignment 9 Design an Animated Conversation**
  Animate callout bubbles to produce a dynamic conversation. Apply transitions to divide the debate.

- **Assignment 10 Debate Checklist**
  Inspect the debate to confirm it is complete. Revise the structure, content, or design.

- **Assignment 11 Invite Audience Participation**
  Host a public debate. Allow viewers to ask questions about each viewpoint using Comments.

- **Assignment 12 Respond to Audience Questions**
  Defend a position by replying to viewer questions in a cross-examination.

**Extension Activities:**
- Debate Topics, Cite the Source or Research in Google Docs, Insert a Character Workshop, Cross Examine your Opponent, Judge Debate
- **Technology Skills:** Presentation, Word Processing
- **Technology Integration:** History, Language Arts, Science, Social Studies
- **Software Applications:** PowerPoint Online, Word Online | Slides, Docs
TechnoHTML5

In this project, students become web designers, using HTML and CSS. To start, students are introduced to the history of the Internet and HTML language. Next, they manipulate source code to discover the function of common tags and CSS attributes. This knowledge is applied to construct a web page. Throughout the design process instructions explain how to style text, graphics, and hyperlinks to produce an informative web page. For those in need of an extra challenge, extension activities encourage students to create a list, apply a picture background, customize hyperlinks, employ CSS classes, insert animated text or images, and build tables. Upon completion, the files are uploaded to the Internet.

The technology project contains the following assignments:

- **Assignment 1 Internet Basics** – Learn basic terminology. Consider Internet use in daily life.
- **Assignment 2 History of the Internet** – Raise awareness of inventions that shaped the Internet.
- **Assignment 3 About the World Wide Web** – Investigate parts of a web browser.
- **Assignment 4 What is HTML?** – Gain an understanding of HTML and its importance.
- **Assignment 5 Seeking the Source** – Inspect source code of a web page. Decode the meaning of tags.
- **Assignment 6 Edit an HTML Document** – Modify tags using an HTML Text Editor.
- **Assignment 7 Edit the Style of an HTML Document** – Explore how CSS creates a consistent design.
- **Assignment 8 Plan a Web Page** – Organize ideas. Gather information, pictures, and URLs.
- **Assignment 9 Start Building a Web Page** – Code tags to add a title, heading, body, and horizontal rule.
- **Assignment 10 Format the Web Page Using CSS** – Assign attributes to each element to set the style.
- **Assignment 11 Prepare Your Images** – Adjust the file name, file type, and size of images.
- **Assignment 12 Add Images and Format the Style** – Format the style, float, and margins with CSS.
- **Assignment 13 Create Hyperlinks** – Link to additional information using text and image hyperlinks.
- **Assignment 14 Explore Meta Tags** – Scan search engine results. View meta tags in source code.
- **Assignment 15 Add Meta Tags to a Web Page** – Code meta tags to describe the web page.
- **Assignment 16 Are You Ready to Upload?** – Review the web page using a checklist. Revise the code.
- **Assignment 17 Upload Your Web Page (Optional)** – Publish the web page onto the Internet.
- **Assignment 18 HTML Developers Conference** – View web pages. Offer positive feedback to peers.

**Extension Activities:**
Analyzing Websites, Format Lists, Add a Background Image, Format the Hyperlink Style, Create a Class, Add Animated Text and Images, Create a Table, Submit Your Site to a Search Engine

**Technology Skills:** Programming

**Technology Integration:** Computer Science

**Software Applications:** Text Editor
### TechnoMap

In this project, students create an interactive map that demonstrates how human and physical geography intersect. The topic can be global, national, provincial, state, regional, or local. The map will have markers that, when clicked, provide facts about a location. This is a great way to explore and learn about an area or issue. To start, students study maps. Next, using an inquiry-based approach they select a question to investigate. Students are guided through creating slides and adjusting the flow of information to make a clickable map. Upon completion, their interactive map is shared with others.

The technology project contains the following assignments:

- **Assignment 1 What is an Interactive Map?**  
  Examine interactive maps. Contemplate how they connect geography to human activity.

- **Assignment 2 Brainstorm a Topic for Your Interactive Map**  
  Study research suggestions. Specify a question for investigation using an inquiry-based approach.

- **Assignment 3 Organize Research Findings**  
  Investigate the topic. Document the information and location of facts using an organizer.

- **Assignment 4 Create the Map Slide**  
  Design a map slide with a WordArt title and a suitable map of the area.

- **Assignment 5 Create Information Slides**  
  Produce information slides that contain interesting facts about a location.

- **Assignment 6 Connect Slides in Interactive Map**  
  Connect markers on the map to information slides. Control slide advancement.

- **Assignment 7 Interactive Map Checklist**  
  Assess the navigation, content, and design of the interactive map using a checklist. Solve any issues.

- **Assignment 8 Share the Map with Others**  
  Display the interactive map as a digital trip, map exhibit, or string map.

**Extension Activities:**  
Research Using Google Docs*, Screen Capture a Road Map, Working with Pictures, Organize Facts using a Table, Add Hotspots, Add a Video*, Insert a Link*

**Technology Skills:** Presentation, Word Processing

**Technology Integration:** Geography, History, Social Studies

**Software Applications:** PowerPoint, Word | PowerPoint Online, Word Online | Slides, Docs

*Note: Select extension activities are not available for all product versions. Assignment 6 differs between versions. To connect slides, hyperlinks are used by Google users and the Zoom feature is used by Microsoft PowerPoint users.
TechnoNewsletter

In this project, students create a fan club newsletter. They design a professional-looking publication. Students learn valuable word processing skills such as formatting text, arranging objects, adjusting page layout, working with tables, referencing information sources, and inserting headers or footers. Challenging enrichment activities support learning with optional assignments that include how to create a collage, co-author an article, or engage in an online discussion.

The technology project contains the following assignments:

- **Assignment 1 FANtastic Newsletter**
  Study sample newsletters to learn about the content. Brainstorm topics for a fan club.

- **Assignment 2 Start a Fan Club**
  Propose ideas for a fan club newsletter. Formulate a plan using guiding questions.

- **Assignment 3 Create the Front Cover Phase 1**
  Begin a newsletter cover. Format the title and arrange article names in a bulleted list.

- **Assignment 4 Create the Front Cover Phase 2**
  Enhance the cover by inserting a picture and hyperlink. Lay out the content to fit on one page.

- **Assignment 5 Top 5 List**
  Share insights in an article that will grab fan’s attention. Arrange text using a numbered list.

- **Assignment 6 Design a Word Search**
  Construct a word search of topic-related terminology using a table to position content.

- **Assignment 7 Make a Word Search Answer Key**
  Reconstruct content by copying a table and filling cells to form a word search answer key.

- **Assignment 8 Organize Ideas for Opinion Article**
  Defend a viewpoint. Establish arguments with evidence for an article that will sway opinion.

- **Assignment 9 Share Your Opinion**
  Express a point of view using supporting quotes. Reference quotes using footnotes.

- **Assignment 10 Complete the Newsletter**
  Prepare the newsletter for publication by inserting page numbers, headers, and footers.

- **Assignment 11 Share Newsletter with Readers**
  Publish the newsletter in print or digital form. Distribute to fans.

**Extension Activities:**
How to Save Pictures*, Explore to Insert Quotes*, Create a Collage, Keep Writing, Guest Writer*, Digital Citizenship and Commenting

**Technology Skills:** Word Processing

**Technology Integration:** Language Arts, History, Social Studies, Science

**Software Applications:** Word | Word Online | Docs

*Note: Select extension activities are not available for all product versions.
TechnoQuestionnaire

In this project, students become researchers. They conduct a questionnaire to research an important issue. To begin, students gain an understanding about the purpose of surveys by completing a Reading Habits questionnaire. Next, they design their own School Spirit survey to learn how to use Google Forms. Once familiar with this method of data collection, they develop their own research question, select a sample, and design a questionnaire. A pre-test is used to improve the design. The questionnaire is then administered to the sample group. Once the data is collected it is analyzed. Research findings are shared with a jury of peers in an oral presentation.

The technology project contains the following assignments:

- **Assignment 1 What is a Survey Questionnaire?**
  Understand the purpose of a survey. Introduce terminology (e.g. population, sample, bias).

- **Assignment 2 Compare a Poll and a Survey**
  Participate in a Reading Habits poll and survey. Compare these two methods of gathering data.

- **Assignment 3 Study Survey Results**
  Analyze data from Reading Habits survey.

- **Assignment 4 Create a School Spirit Survey**
  Build a survey to learn how to create questions, specify properties, and invite responses.

- **Assignment 5 Organize Ideas for a Survey Questionnaire**
  Determine the purpose, sample, data collection method, and questions for questionnaire.

- **Assignment 6 Build a Survey**
  Construct a questionnaire that effectively sequences the questions and controls data entry.

- **Assignment 7 Conduct a Pre-Test**
  Consult a peer about the design and content of the questionnaire. Implement recommendations.

- **Assignment 8 Collect Survey Results**
  Administer the questionnaire to a sample group of respondents.

- **Assignment 9 View Survey Results**
  Summarize the results in a report. Manipulate the data using a spreadsheet.

- **Assignment 10 Analyze Survey Results**
  Interpret the findings. Draw conclusions about the application of results. Critique research design.

- **Assignment 11 Present Findings to a Jury of your Peers**
  Convey results and their importance to an audience. Provide evidence of conclusions.

**Extension Activities:**
What is Sample Bias? What is Question Bias? Brainstorm Survey Ideas, Compare Results with a Pivot Table or Chart

**Technology Skills:** Spreadsheet, Data Management

**Technology Integration:** Math

**Software Applications:** Google Forms, Sheets
**TechnoRestaurateur**

In this project, students launch a successful restaurant venture. They apply critical and creative thinking to develop a unique business concept. To start, students conduct a survey and interpret the results to make decisions about their restaurant. Next, they create a company logo and write a professional letter to raise seed money. With the funding secured, students design a floor plan. Once the restaurant had operated for a year, financial earnings are analyzed. The business is then advertised using a newsletter to potential investors as a franchise opportunity.

The technology project contains the following assignments:

- **Assignment 1 Become a Restaurateur**
  Consider how technology can help launch a restaurant venture.

- **Assignment 2 Learn Basic Spreadsheet Skills**
  Explore spreadsheets to understand terminology and acquire basic skills.

- **Assignment 3 Conduct a Survey of Food Preferences**
  Investigate cuisine favorites by administering a survey to respondents.

- **Assignment 4 Record Survey Results in a Spreadsheet**
  Arrange survey results in a worksheet. Format the data to make it easy to read.

- **Assignment 5 Graph Survey Results as a Pie Chart**
  Convert survey results into a pie chart. Customize the legend, labels, and chart style.

- **Assignment 6 Develop Restaurant Idea from Survey Results**
  Interpret the meaning of the survey findings to develop a business concept based on evidence.

- **Assignment 7 Create a Company Logo**
  Draw a logo that symbolizes the company. Combine shapes and text to illustrate an original image.

- **Assignment 8 Write a Professional Letter**
  Request seed money for the restaurant. Convince investors that the concept will succeed.

- **Assignment 9 Draft a Floor Plan**
  Sketch a floor plan for the restaurant that meets the needs of staff and patrons.

- **Assignment 10 Calculate Monthly Restaurant Earnings**
  Total monthly profits. Analyze earnings to devise a business strategy.

- **Assignment 11 Calculate Quarterly Restaurant Earnings**
  Measure the financial health of the business. Calculate quarterly and average earnings.

- **Assignment 12 Graph Quarterly Earnings as a Line Chart**
  Plot quarterly earnings using a line graph. Predict future profits using a trend line.

- **Assignment 13 Design a Business Opportunity Newsletter**
  Advertise the restaurant as an investment opportunity. Inform entrepreneurs about the benefits.

**Extension Activities:**
Apply Advanced Drawing Techniques, Use Functions to Analyze Earnings, Share your Files with Investors*, Advertise a Deal, Create an Opinion Survey

**Technology Skills:** Spreadsheet, Word Processing, Graphics, Presentation, Data Management

**Technology Integration:** Math, Language Arts, Visual Arts

**Software Applications:** Excel, PowerPoint, Word, | Excel Online, Forms for Excel, PowerPoint Online, Word Online | Sheets, Slides, Docs, Drawings, Forms

*Note: Select extension activities are not available for all product versions.
TechnoTravel

In this project, students become travel agents. They create a travel advertisement for a weekend getaway. To start, students use the Internet to research the destination. Afterwards, they personalize a slide master to create a unique marketing tool that persuades visitors to take the trip. The vacation is then promoted to customers in the form of a slideshow and brochure.

The technology project contains the following assignments:

- **Assignment 1 About Travel and Tourism** – Consider the reasons people travel and the role of tourism.
- **Assignment 2 Become a Travel Agent** – Invent a travel agency. Spark ideas for a weekend getaway.
- **Assignment 3 Pick a Travel Destination** – Decide upon a location for a trip using suggestions as a guide.
- **Assignment 4 Research a Travel Destination** – Investigate and organize information on a fact sheet.
- **Assignment 5 Gather Images for the Travel Advertisement** – Respect copyright when saving files.
- **Assignment 6 Learn About Microsoft PowerPoint** – Explore the window, ribbon, and commands.
- **Assignment 7 Customize the Slide Master** – Design a unique theme for slides in a presentation.
- **Assignment 8 Test the Layout and Design of the Slide Master** – Troubleshoot and resolve design issues.
- **Assignment 9 Complete the Introduction Slide** – Entice visitors with interesting facts on a slide.
- **Assignment 10 Plan a Travel Itinerary** – Schedule activities to form a realistic timetable.
- **Assignment 11 Design a Travel Itinerary** – Outline the activities using a table. Format the style.
- **Assignment 12 Create an Activity Slide in Normal View** – Crop an image to decorate the slide.
- **Assignment 13 Create an Activity Slide in Outline View** – Enrich phrasing using the thesaurus.
- **Assignment 14 Complete the Itinerary Slides** – Capture tourist interest by showcasing activities.
- **Assignment 15 Mark a Map to Show Travel Destination** – Pinpoint a location with symbols.
- **Assignment 16 Link to Travel Guides using Hyperlinks** – Connect objects to online information.
- **Assignment 17 Edit the Travel Advertisement** – Spell check the text. Rearrange slide order.
- **Assignment 18 PowerPoint - Set Up the Advertisement in Kiosk Mode** – Add transitions. Adjust to loop.
- **Assignment 18 Slides - Host an Information Session** – Lead a Q&A session. Answer viewers’ questions.
- **Assignment 19 Print the Advertisement** – Advertise the trip using a flyer or a multi-page brochure.
- **Assignment 20 PowerPoint - Export the Advertisement as a Video** – Promote the trip using a video clip.
- **Assignment 20 Slides - Promote the Advertisement Using a Link** – Advance slides automatically. Share.
- **Assignment 21 PowerPoint - Advertise the Weekend Getaway** – Share advertisement. Invite comments.
- **Assignment 21 Slides - Comment on Weekend Getaways** – Invite peers to view ad. Reply to comments.

**Extension Activities:**
Create a Fancy WordArt Style*, Import a Theme to Make a Poster*, Make a Video Clip, Design an Interactive Street Map, Animate the Travel Advertisement, Calculate Travel Costs, Book Flight or Accommodations

**Technology Skills:** Presentation, Word Processing

**Technology Integration:** Social Studies, Geography, Language Arts, Travel and Tourism

**Software Applications:** PowerPoint, Word, Excel | Slides, Docs, Sheets

*Note: Select extension activities are not available for all product versions.
Senior Technology Project Descriptions

TechnoAdvertise

In this project, students design advertisements using Microsoft Word. To start, students create a cover letter and résumé to apply for a job at TechnoAd Agency. Once hired, students receive their first assignment to design a flyer using graphic techniques. Next, students develop a product catalog that includes styles, table of contents, and an index. Afterwards, they learn how to complete a mail merge to produce a personalized form letter to promote an upcoming event. Finally, students combine their skills to publish a newsletter. Interwoven throughout the project are activities that involve business-related tasks.

The technology project contains the following assignments:

- **Assignment 1 Discover Qualifications** – View job posting. Plan content of cover letter and résumé.
- **Assignment 2 Introduction to Microsoft Word** – Explore the program window and ribbon.
- **Assignment 3 Write a Cover Letter** – Highlight your talents and accomplishments.
- **Assignment 4 Write a Résumé** – Summarize education, work experience, and relevant skills.
- **Assignment 5 Apply for the Job** – Submit the cover letter and résumé by mail or digitally.
- **Assignment 6 About the Insert Tab** – Explore commands to insert pages, graphics, links, and more.
- **Assignment 7 Create a Flyer Phase 1** – Begin to design a publication using text, images, and shapes.
- **Assignment 8 Create a Flyer Phase 2** – Enhance the ad using SmartArt, headers, and symbols.
- **Assignment 9 About Design and Page Layout** – Discover commands to format pages in a document.
- **Assignment 10 Catalog Organizer** – View catalogs. Determine products to include in publication.
- **Assignment 11 Create the Parts of the Catalog** – Divide a document into sections and add content.
- **Assignment 12 Design an Order Form** – Build a form using tables that includes order information.
- **Assignment 13 Add Products to Catalog Pages** – Organize information using tables.
- **Assignment 14 About the References Tab** – Practice adding references to a sample document.
- **Assignment 15 Insert References into Catalog** – Add table of contents, cross-reference, and index.
- **Assignment 16 Invite Customers to an Event** – Personalize a form letter using mail merge.
- **Assignment 17 Generate Mailing Labels for the Letters** – Address envelopes using mail merge.
- **Assignment 18 Newsletter Planning Sheet** – Plan content of a newsletter for an organization.
- **Assignment 19 Create the Newsletter** – Apply formatting techniques to design a publication.
- **Assignment 20 Edit the Newsletter** – Improve the content, design, and layout of the publication.

**Extension Activities:**
The Interview, Prepare a Summary Report, Create a Catalog Organizer, Edit a Document to Cite the Source, Mail Merge Using Excel, Commands on the Review Tab

**Technology Skills:** Word Processing, Desktop Publishing, Graphics

**Technology Integration:** Language Arts, Business Studies, Marketing

**Software Applications:** Word
TechnoAnimate

In this project, students become animators. They learn animation techniques by creating scenes for a graphic story in Animate CC. By completing a series of activities, they discover how to produce realistic movement using frame by frame, motion tweens, shape tweens, Bone Tool, motion paths, and classic tweens. Once they have mastered the basics of animation, they apply their skills to design a unique project such as a graphic novel, electronic greeting card, or advertisement.

The technology project contains the following assignments:

- **Assignment 1 An Introduction to Animation** – Gain an understanding of the history of animation.
- **Assignment 2 View an Animated Story** – Differentiate between the types of animation used in a video.
- **Assignment 3 Explore Animate CC** – Set the workspace, view tools, and adjust panels.
- **Assignment 4 Create Lines and Shapes** – Distinguish between object drawing modes.
- **Assignment 5 Draw with the Pencil and Brush** – Sketch freehand, erase content, and add text.
- **Assignment 6 Explore Drawing Tools on the Tools Panel** – Discover tools by creating a garden.
- **Assignment 7 Use Editing Pane to Make a Car** – Stack, group, and alter objects.
- **Assignment 8 Take the Drawing Challenge** – Apply skills to illustrate a bear or chick.
- **Assignment 9 About the Timeline** – Explore frames, frame rate, keyframes, layers, and scenes.
- **Assignment 10 Create Scene 1 In a Land Far, Far Away** – Sequence images to begin the story.
- **Assignment 11 What is Frame by Frame Animation?** – Learn about keyframes and animation.
- **Assignment 12 Create Scene 2 The Planet** – Introduce the character by animating the planet surface.
- **Assignment 13 Create Scene 3 The Hover Craft** – Animate the character driving a spaceship.
- **Assignment 14 Frame by Frame Animation Challenge** – Make a sign or a waving alien rock creature.
- **Assignment 15 What is a Motion Tween?** – Discover how to move objects across the stage.
- **Assignment 16 Create Scene 4 Blast Off** – Design a spaceship and launch it into outer space.
- **Assignment 17 Create Scene 5 In Outer Space** – Animate a spaceship to gradually increase in size.
- **Assignment 18 Motion Tween Animation Challenge** – Spin a star or fly a comet.
- **Assignment 19 What is a Shape Tween?** – Learn about morphing objects.
- **Assignment 20 Create Scene 6 A Strange Moon** – Morph an object from one shape into another.
- **Assignment 21 Create Scene 7 Alien Friend** – Animate an alien’s mouth to look like it is talking.
- **Assignment 22 Shape Tween Animation Challenge** – Transform the shape of a sun or body part.
- **Assignment 23 What is the Bone Tool?** – Learn about animating poses using a skeleton frame.
- **Assignment 24 Create Scene 8 Dance Party** – Sequence poses to animate an alien stick man.
- **Assignment 25 Edit Scene 8 More Dancing** – Assemble a robot using symbols. Animate the body parts.
Senior Project Descriptions

- **Assignment 26 What is a Motion Path?** – Learn how to lock an object to a guideline.
- **Assignment 27 Create Scene 9 Blast Off from Planet** – Fly a spaceship along a motion path.
- **Assignment 28 Create Scene 10 Land Back Home** – Orient a spaceship to the path. Adjust speed.
- **Assignment 29 Motion Path Animation Challenge** – Roll a rock creature or have alien leave ship.
- **Assignment 30 Add Music or Effects to Scenes** – Enhance action by placing sound clips on Timeline.
- **Assignment 31 Edit the Document and Export as a Movie** – Use a checklist to improve animation.
- **Assignment 32 Select an Idea** – Study animation suggestions. Outline a plan for an animation project.
- **Assignment 33 Create the Document** – Apply drawing and animation techniques.
- **Assignment 34 Share the Movie with Others** – Explain artistic choices used in animation project.

**Extension Activities:**
- Flip and Align Objects, Using Layers, Create a Movie Clip, Working with Scenes, Keyboard Shortcuts, Export as a Video

**Technology Skills:** Animation, Graphics

**Technology Integration:** Visual Arts, Media Arts

**Software Applications:** Adobe Animate CC
TechnoInvestor

In this project, students play the role of a stockbroker working at the investment firm TechnoInvest. They learn how the stock market functions by purchasing shares in companies listed on the TechnoStock Exchange (TSE). Students keep track of their investment portfolio using Excel. The spreadsheet program allows them to organize their purchases and calculate their current value. Students then manipulate this information to create graphs that summarize stock values, display trendlines, and report earnings. Upon completion, students produce an investor's report explaining the client's financial status.

The technology project contains the following assignments:

- **Assignment 1 Introduction to Spreadsheets** – Explore the Excel window to learn basics skills.
- **Assignment 2 Introduction to Stock Market Terminology** – Read about the stock market.
- **Assignment 3 Playing the Stock Market** – Form teams. Study company profiles to pick investments.
- **Assignment 4 Investment Record Trade 1** – Track the investment portfolio using a planning sheet.
- **Assignment 5 Organize Investment Information using Excel** – Format a worksheet. Record data.
- **Assignment 6 Stock Index** – Read to learn about the rise or fall of stock values.
- **Assignment 7 Money and Markets Issue 1** – Examine current events to buy and sell stocks.
- **Assignment 8 Format Cell Appearance and Enter Transactions** – Customize cells. Record data.
- **Assignment 9 Calculate Financial Information Using Formulas** – Determine portfolio value.
- **Assignment 10 Money and Markets Issue 2** – Examine current events to buy and sell stocks.
- **Assignment 11 Add Conditional Formatting** – Set a rule to highlight portfolio gains.
- **Assignment 12 Record Trade 3 in Spreadsheet** – Apply skills to record trading data.
- **Assignment 13 Money and Markets Issue 3** – Examine current events to buy and sell stocks.
- **Assignment 14 Record Trade 4 in Spreadsheet** – Apply skills to record trading data.
- **Assignment 15 Graph the Rise and Fall of Stock** – Produce a line chart with a trendline.
- **Assignment 16 Money and Markets Issue 4** – Examine current events to buy and sell stocks.
- **Assignment 17 Record Trade 5 in Spreadsheet** – Apply skills to record trading data.
- **Assignment 18 Graph Earning History** – Illustrate history of earnings using a bar graph.
- **Assignment 19 Print Setup** – Format the worksheet to display portfolio information.
- **Assignment 20 Write the Investor Report** – Summarize status of investment portfolio.
- **Assignment 21 Add a Graph to the Investor Report** – Prepare the document for the client.

Extension Activities:
Track the Stock Market on the Internet, Closing Market Summary, Data Bars and Icon Sets, Bearish or Bullish? Are the Risks Worth It? Gross Profit Margin

Technology Skills: Spreadsheet, Word Processing, Desktop Publishing

Technology Integration: Math, Business Studies, Financial Literacy

Software Applications: Excel, Word
TechnoMission

In this project, students learn database skills. To start, they work on an existing database to view and filter records. Next, students edit photographs of themselves to place their head into space suit. This image and their personal information are entered into a database form. Once students learn the basics, they begin construction of a database. They design a table, data entry form, and generate a report using Access.

The technology project contains the following assignments:

- **Assignment 1 Space Exploration** – Preview a timeline about the history of space exploration.
- **Assignment 2 What is a Database?** – Define the meaning of terminology (e.g. table, form, record, field).
- **Assignment 3 About Microsoft Access** – Identify parts of a database window.
- **Assignment 4 Look at a Table and a Form in a Database** – Compare viewing options in a database.
- **Assignment 5 Filter Records in a Database** – Apply techniques to find information in a database.
- **Assignment 6 Take Digital Photos** – Capture a portrait of a person using a digital camera.
- **Assignment 7 Suit Up** – Superimpose a person’s head into a space suit image to make an astronaut.
- **Assignment 8 Add a Record to the Space Exploration Database** – Use a form to add an astronaut.
- **Assignment 9 View Astronaut Records** – Display records in a database to locate specific astronauts.
- **Assignment 10 Cyberspace Mission Planning Sheet** – Select a topic. Plan the content of a database.
- **Assignment 11 Blast Off on a Cyberspace Mission** – Research information about a topic.
- **Assignment 12 Build a Table** – Construct a table in datasheet view. Set field properties.
- **Assignment 13 Create a Form** – Build a data entry form. Use Design View to edit the appearance.
- **Assignment 14 Add Records using the Form** – Organize research information into database fields.
- **Assignment 15 Create a Report** – Generate a summary of the records in a database.

*Extension Activities:*
Sort and Find Records, Make a Mission Patch, Alien Life, Format a Datasheet, Customize a Form, Customize a Report

*Technology Skills:*
Database, Photo Editing, Graphics

*Technology Integration:*
Language Arts, Math, Visual Arts, Science

*Software Applications:*
Microsoft Access, Paint
**TechnoPhotoshop**

In this project, students create a digital scrapbook. To start, students learn how to use a camera to take high-quality photographs. Once a library of images has been established, the program Photoshop is used to transform the pictures into scrapbook pages. Ranging from whimsical to wacky, each page is a creative expression of the artist.

The technology project contains the following assignments:

- **Assignment 1 Learn About Cameras and Artists** – Recognize moments in the history of photography.
- **Assignment 2 Study the Digital Camera** – Label camera parts. Identify benefits to digital photos.
- **Assignment 3 Explore Elements of Design** – Learn about form, color, texture, shape, space, and line.
- **Assignment 4 View Digital Scrapbooks** – Study a contact sheet, presentation, and photo gallery.
- **Assignment 5 Prepare a Photography Collection** – Capture a series of photographs.
- **Assignment 6 Introduction to Photoshop** – Examine uses of photo editing software.
- **Assignment 7 Explore Photoshop** – Set the workspace, view tools, edit settings, and adjust panels.
- **Assignment 8 Have Fun with Filters** – Experiment with filter effects to create four unique images.
- **Assignment 9 Create a Scrapbook Page** – Scale, rotate, warp, and arrange images on a page.
- **Assignment 10 Practice Retouching Techniques** – Crop, fix red eye, remove spots, and adjust color.
- **Assignment 11 Retouch a Photo of Your Choice** – Repair imperfections to enhance photo quality.
- **Assignment 12 Create a Scrapbook Page with Layer Styles** – Apply a style to images on a page.
- **Assignment 13 Adjust the Color** – Modify color, contrast, brightness, shadows, and highlights.
- **Assignment 14 Recolor a Photo of Your Choice** – Turn an image into colorful artwork.
- **Assignment 15 Create a Scrapbook Page with Brush Strokes** – Apply a decorative pattern to a page.
- **Assignment 16 Explore Techniques to Superimpose Images** – Produce an unbelievable scene.
- **Assignment 17 Superimpose Images of Your Choice** – Make a fake picture look real.
- **Assignment 18 Create a Scrapbook Page with Shapes** – Frame a photo or add symbols onto a page.
- **Assignment 19 Transform a Photo of Your Choice** – Apply learned photo editing techniques.
- **Assignment 20 Create a Scrapbook Page with Bending Text** – Wrap text around a shape on a page.
- **Assignment 21 Create a Digital Scrapbook** – Combine pages to form a scrapbook.

**Extension Activities:**
- Types of Photography, Blurring the Background, Advanced Cropping Techniques, Color Part of a Grayscale Picture, Discover the Lost City of Atlantis, Wrap Text into a Custom Shape

**Technology Skills:** Photo Editing, Graphics

**Technology Integration:** Visual Arts, Media Arts

**Software Applications:** Adobe Photoshop CC
TechnoPlanner

In this project, students become event planners. They own a company that plans special occasions such as weddings, birthday parties, reunions, or proms. They must create a database to help them organize client and event information. This database will ensure that they can offer top quality service as no detail will be forgotten.

The technology project contains the following assignments:

- **Assignment 1 What is a Database?** – Recognize the purpose of a database.
- **Assignment 2 About Microsoft Access** – Label the parts of the program window.
- **Assignment 3 Examine Tables in a Database** – Study fields in a table. Add a record in datasheet view.
- **Assignment 4 Examine Forms in a Database** – Study fields on a form. Add a record in form view.
- **Assignment 5 Examine a Query in a Database** – Identify the fields and source table used in a query.
- **Assignment 6 Examine a Report in a Database** – Consider benefits to generating reports.
- **Assignment 7 The Event Planning Industry** – Read about event planning to learn about services.
- **Assignment 8 Become an Event Planner** – Launch a business. Plan a database for customer data.
- **Assignment 9 Build the Customers Table** – Construct a table in datasheet view. Set field properties.
- **Assignment 10 Build the Events Table** – Construct a table in design view. Include an input mask.
- **Assignment 11 Create a Relationship Between the Tables** – Join customer and event information.
- **Assignment 12 Create a Customers Form using the Form Wizard** – Design a form. Customize layout.
- **Assignment 13 Create the Events Form in Design View** – Arrange controls on a form. Adjust tab order.
- **Assignment 14 Add the Events Form to the Customers Form** – Use a subform to view customer events.
- **Assignment 15 Enter Records** – Add customer information and book events.
- **Assignment 16 Sort Records** – Order records numerically, alphabetically, or chronologically.
- **Assignment 17 Search, Find, and Filter Records** – Locate records that match criteria.
- **Assignment 18 Which Customers Need to Confirm their Plans?** – Use the Query Wizard to filter records.
- **Assignment 19 Create a Calling List** – Generate a report from a query in design view. Sort the data.
- **Assignment 20 What Events are Upcoming?** – Create a query in design view to filter records.
- **Assignment 21 Create a Report of Upcoming Events** – Produce a report from a query in design view.

**Extension Activities:**
- Database Designer, Format a Datasheet, Create a Form Using AutoForm, Spell Check, Mailing Labels, Mail Merge

**Technology Skills:** Database, Word Processing

**Technology Integration:** Business Studies

**Software Applications:** Word, Access
TechnoSpecialist

In this project, become IT specialists who work for a company that manufactures and sells computers. The business has launched an initiative called “Your Computer, Your Way!” that has consumers choose components. To help the customer pick the hardware to suit their needs, students create an information package using Microsoft PowerPoint. The package explains the aspects to consider when selecting devices using bulleted lists, tables, graphic organizers, clip art, picture files, video, and sound clips. The information package is transformed into a presentation, interactive tutorial, video, and handout.

The technology project contains the following assignments:

- **Assignment 1 Become an IT Specialist** – Understand IT Specialist job duties. Select an employer.
- **Assignment 2 What is a Computer?** – Read about computer types. Identify the best device for the task.
- **Assignment 3 Input Devices** – Learn about devices such as the keyboard, scanner, or microphone.
- **Assignment 4 Output Devices** – Learn about devices such as a projector, printer, or headphones.
- **Assignment 5 Introduction to Microsoft PowerPoint** – Explore the parts of the program window.
- **Assignment 6 Slide Master Design** – Customize the template for slides in the information package.
- **Assignment 7 Understanding Data Storage** – Study bits, bytes, binary code, and file sizes.
- **Assignment 8 About Storage Devices** – Learn about a CD, DVD, flash drive, or hard disk.
- **Assignment 9 Information Package and Storage Devices** – Create slides that explain the purpose of storage devices and offer recommendations about purchasing.
- **Assignment 10 Comparison of Storage Devices** – Explore storage capacity of devices.
- **Assignment 11 Information Package and Comparison Chart** – Design a slide that summarizes information in a table to compare the storage capacity of CD, DVD, flash drive, or hard disk.
- **Assignment 12 About Memory** – Distinguish the difference between ROM and RAM.
- **Assignment 13 Information Package and Memory** – Organize information about ROM and RAM onto a slide using SmartArt to illustrate the features.
- **Assignment 14 About the Microprocessor** – Examine how the CPU executes commands.
- **Assignment 15 Produce a Video Clip about the CPU** – Capture a video that describes the CPU.
- **Assignment 16 Information Package and the CPU** – Import a video onto a slide to explain the CPU’s importance upon computer performance.
- **Assignment 17 About the Monitor and Graphics Card** – Discover attributes that affect picture quality.
- **Assignment 18 Information Package, the Monitor and Graphics Card** – Create slides that summarize monitor attributes and explain the function of the graphics card. Format picture styles.
- **Assignment 19 The Sound Card** – Determine how the sound card functions.
- **Assignment 20 Information Package and the Sound Card** – Record an audio clip to describe the purpose of the sound card. Insert the clip onto a slide.
- **Assignment 21 Spell Check and Speaker Notes** – Proofread slides. Add information in the Notes pane.
Senior Project Descriptions

- **Assignment 22 Present Information about the Computer** – Deliver a presentation. Use the pen.
- **Assignment 23 Create an Interactive Tutorial** – Set the presentation to run as a kiosk.
- **Assignment 24 Produce a Video** – Export the presentation as a video.
- **Assignment 25 View as a Handout** – Print the presentation with a custom header and footer.

**Extension Activities:**
More About Computers, More About Data Storage, More About Memory, More About the CPU, Move, Hide, and Delete Slides, Apply Animations and Transitions

**Technology Skills:** Presentation

**Technology Integration:** Business Studies, Computer Studies

**Software Applications:** PowerPoint
TechnoWonderland

In this project, students become marketing executives for an amusement park. This challenging job has them use Office to complete a wide range of job duties. To start, they create a poster in Microsoft Word advertising the thrilling rides and spectacular shows guests can experience. The fun continues when Internet research is conducted for an animal exhibit to develop placards for the enclosure. Their next task has students become involved in selecting a new attraction by graphing survey data using Microsoft Excel. This exciting new addition is promoted by creating a video using Microsoft PowerPoint. To generate a buzz about the attraction, season ticket holders are rewarded for their loyalty with an invitation created using Microsoft Publisher to an exclusive event. With the year ending, amusement park data is analyzed using a Microsoft Access database with the goal to improve customer satisfaction in the future.

The technology project contains the following assignments:

- **Assignment 1 Become an Executive for an Amusement Park** – Invent a theme park.
- **Assignment 2 Design a Poster Phase 1** – Advertise the theme park. Format text to attract attention.
- **Assignment 3 Design a Poster Phase 2** – Complete the advertisement using graphic elements.
- **Assignment 4 Practice Search Strategies** – Develop techniques to find reliable information fast.
- **Assignment 5 Conduct Internet Research** – Apply search strategies to locate facts and images.
- **Assignment 6 Create Animal Fact Placards** – Adjust page layout options to produce exhibit signs.
- **Assignment 7 Conduct a Survey** – Collect data to discover visitors’ preferred attractions.
- **Assignment 8 Organize Survey Data** – Arrange findings in a spreadsheet. Format the cells.
- **Assignment 9 Graph Survey Data** – Analyze results to recommend a new attraction.
- **Assignment 10 Select an Attraction to Promote** – Invent an innovative attraction. Determine features.
- **Assignment 11 Create Slides About the Attraction Phase 1** – Showcase the thrilling new attraction.
- **Assignment 12 Create Slides About the Attraction Phase 2** – Persuade others to visit the park.
- **Assignment 13 Apply Animations** – Animate slide objects to produce a unique advertisement.
- **Assignment 14 Apply Transitions** – Divide the action and set the timing of the advertisement.
- **Assignment 15 Edit the File and then Export as a Video** – Print advertisement. Convert to video.
- **Assignment 16 Plan the Exclusive Event** – Propose a party for season ticket holders. Organize ideas.
- **Assignment 17 Design the Front Cover of the Invitation** – Invite season ticket holders to an event.
- **Assignment 18 Design the Inside and Back Cover of the Invitation** – Decorate the publication.
- **Assignment 19 Introduction to Databases** – Determine the purpose and parts of a database.
- **Assignment 20 Examine Database Tables and Forms** – View park records using different views.
- **Assignment 21 Find Records to Learn About Visitor Traffic** – Discover the popularity of attractions.
- **Assignment 22 Filter Records to Improve Customer Satisfaction** – Resolve issues in the park.
• **Assignment 23 Sort Attractions to Find Information Fast** – Change record order in a database.

• **Assignment 24 Add a Database Record** – Insert a record about the latest park attraction.

*Extension Activities:*
Amusement Park Map, View the Animal Exhibit, Calculate Monthly Food Vendor Earnings, Park Attractions Photo Album, Generate a Calendar, Use a Query to Report Height Restrictions

*Technology Skills:*
Word Processing, Spreadsheet, Presentation, Desktop Publishing, Graphics, Databases

*Technology Integration:*
Business Studies, Language Arts, Science, Math

*Software Applications:*
Word, Excel, PowerPoint, Publisher, Access
Getting Started Tips

View PDF Files Using Adobe Reader or a Chrome Extension

The TechnoKids teacher guide and workbook files can be viewed using the latest version of Adobe Acrobat Reader on most devices. Adobe Acrobat Reader will allow you and your students to add comments and type answers into the files when using the desktop version. Other PDF viewers may not open the files or will generate a password-protect error. If the TechnoKids files are stored on a secure Google Drive folder, a Chrome Extension can be used. Click the links to read the blog articles and watch the videos to learn more.

- Adobe Acrobat Reader (visit https://get.adobe.com/reader)

- PDF Reader Chrome Extension:

Share Files with Students

Each project has resource files. They are in the TechnoProject Resources folder. Most of the files in this folder are for the teacher. However, one folder is for the students. It contains the worksheets, templates and samples that are required to complete the activities. This folder must be shared with students.

The folder that contains the student files is the name of the project. For example, if teaching TechnoCandy, the Candy folder is inside the TechnoCandy Resources folder; if teaching TechnoStories, the Stories folder is inside the TechnoStories Resources folder; and if teaching TechnoBudget the Budget folder is inside the TechnoBudget Resources folder.

The worksheets for the students are in a folder called Workbook. The Workbook folder is like the Student Workbook. However, instead of one PDF file, the assignments and extension activities are separate PDF files. This format is ideal for a paperless classroom. Using the latest version of Adobe Reader or a Chrome Extension, students can add comments, type answers, and save their edited files.

The folder with the student files can be placed on a local computer, memory stick, school server, Google Classroom, or private web-based folder. If the location is web-based, it must be password protected and require students to log in to gain access.

Read Out Loud Using Adobe Acrobat Reader

Adobe Acrobat Reader has a text-to-speech feature that allows students to listen to the text in the Student Workbook or any assignment file in the Workbook folder.

1. Open the file in Adobe Acrobat Reader.
2. Click the View menu and select Read Out Loud and pick Activate Read Out Loud.
3. Click the View menu again, select Read Out Loud and pick a choice, such as Read This Page Only. Select Pause, Resume, or Stop from the Read Out Loud sub-menu to interrupt the reading.
Contact Information
TechnoKids Inc. offers free curriculum support.
Contact our support staff by email at support@technokids.com or by telephone 1-800-221-7921.

We want to be your partner in computer education. If you have any comments or questions regarding our instructional materials, please contact our Head Office.

TechnoKids Inc.
2097 Bates Common
Burlington, ON
L7R 0A5

information@technokids.com

Toll Free: 1-800-221-7921 (Canada and the US only)
Phone: 905-631-9112
Fax: 905-631-9113