Computers & Mobile Devices

1. Discover the following information: What kinds of computers (both laptops and desktops) and/or mobile devices (phones, tablets) does your community use.

2. Describe the function and point out at least 10 of the following components of a computer (either desktop or laptop). Some parts may require disassembling an old desktop case or laptop for identification.
   - **a.** Case/Chassis
   - **b.** Monitor
   - **c.** Keyboard
   - **d.** Mouse/Trackpad
   - **e.** CPU
   - **f.** Memory/RAM
   - **g.** Motherboard
   - **h.** Hard drive/Internal drive
   - **i.** USB port/HDMI port/Equivalent data port
   - **j.** Network Interface
   - **k.** Power supply and power cable
   - **l.** Speakers, headset, microphone
   - **m.** Webcam

3. Describe the function and point out at least 10 of the following components of a mobile device (smartphone, tablet, etc.). Some parts may require disassembling an old tablet or phone for identification.
   - **a.** Touch screen
   - **b.** Circuit board
   - **c.** Accelerometer
   - **d.** GPS/Location locator
   - **e.** Graphics processor
   - **f.** Flash-based memory
   - **g.** WiFi and/or cellular chip and antenna
   - **h.** USB dock (if applicable)
   - **i.** Storage expansion slot
   - **j.** Battery
   - **k.** Power supply
   - **l.** App icons
   - **m.** Status bar
   - **n.** Volume buttons
   - **o.** Speakers
   - **p.** Camera lens (including selfie lens if applicable)
   - **q.** Flash
   - **r.** Audio inputs
   - **s.** Microphone
   - **t.** Home button or equivalent sensor

4. Describe the proper handling and storage techniques to keep computers, mobile devices, and their input/output devices safe.

5. Complete one of the following:
   - **a.** Determine the following on a computer system:
     - **i.** Operating System name and version
     - **ii.** Processor speed
     - **iii.** Storage capacity of non-volatile storage
     - **iv.** Memory capacity (RAM)
     - **v.** Internet strength/connectivity
     - **vi.** Power source/Battery level
   - **b.** Determine the following on a mobile device (tablet or smartphone):
     - **i.** Operating System name and version
     - **ii.** Storage capacity
     - **iii.** Storage used
     - **iv.** Remaining battery life
     - **v.** Time usage of top five apps in the past week/month

6. In your family/community, discover the following and bring back a report:
   - **a.** What kinds of computers (both laptops and desktops) do they use? What types of mobile devices?
   - **b.** Which Operating Systems do their computers and mobile devices use?

7. Demonstrate the ability to identify and describe how at least five of the following external tools assist the user's experience with their computer or mobile device (or equivalent connected mobile devices):
   a. Digital camera
   b. External drive/Flash drive
   c. External monitor
   d. Audio system
   e. Docking station
   f. Printer (inkjet, laser, 3D)
   g. Scanner
   h. Projector
   i. VR headset
   j. Smart environment device of your choice
   k. Other input or output devices your community uses

8. Do one of the following as you research the history of computers:
   a. Create a presentation (written, visual, poster, timeline) that includes at least 10 prominent events or persons that are significant to the development of the computer, both hardware and software.
   b. Research specific individuals from computer history and create a group visual, poster, or timeline report (Note: Your report should focus on the development of the personal computer and mobile devices, not the internet or other accessory functions).
   c. Visit a computer history exhibit at a museum. Create a slideshow or other report to demonstrate at least 10 things you learned during your visit.

9. Do the following:
   a. Spend one week charting the time you spend on computing devices. List what time was spent on schoolwork, gaming, movies/shows, religious activities, etc. and on which computing devices.
   b. Memorize 1 Corinthians 10:31 and Matthew 6:33.
   c. At the end of the week, evaluate with your counselor, family, or group leader how your management of computer time relates to the Bible's instructions on stewardship of our time and resources (1 Corinthians 10:31; Matthew 6:33). Evaluate how these Bible texts could influence your tech-time and entertainment choices in coming weeks.

10. Interview an adult parent or other relative/community friend who uses a computer in their workplace. Ask them questions such as:
    a. When did you first start using computing devices for work? What type was it?
    b. What kind of computer do you use at work? At home? Why do you use those particular computer systems?
    c. Which computing activities that you do during a typical week are best done on a computer? On a mobile device? Evaluate reasons for each decision.
    d. What are things you do on mobile devices that you used to need a computer for?
    e. How do you balance your screen time with your "real world" interactions with people? What advice would you give about how to choose screen time?
    f. What Bible counsel or stories do you try to remember when balancing your screen time and entertainment choices?

11. Explain how computers and mobile devices make it easier to spread "the Advent Message to all the world in my generation."

Skill Level 1

Computers & Mobile Devices, Advanced

1. Have the Computers & Mobile Devices Honor.

2. Give an example of the type of task you could accomplish with each of the following types of software/app. Give a current branded example of each and determine whether that software is ONLY online or whether it must be installed onto a computer or mobile device in order to be used. If applicable, install the software/apps necessary to run each of them.
   a. Word Processing
   b. Presentation
   c. Graphic design
   d. Forms creation
   e. Spreadsheet
   f. Note-taking/Calendar management
   g. Cloud storage
   h. Conferencing

3. Discuss with your unit, group, and/or family the moral issues surrounding intellectual property piracy and file sharing. Using biblical support, be able to describe what a Christian's stance and practice should be in this arena and explain the reasons for your answer.

4. Complete the following activities:
   a. Create a letter/notice using a word processing program/app. Use the letter for a project to support your Pathfinder club, church, or witnessing activities such as:
      i. AY honor
      ii. Fundraising
      iii. Community service report
      iv. Class level concept
      v. Sermon
      vi. AY/Youth group Bible study or game
      vii. Describing activities in your Pathfinder club that would be of interest to your local newspaper
      viii. Résumé
   b. Use a presentation program to create at least six slides (with text and photos), and demonstrate its function in a full-screen presentation. Use templates, design elements, colors, and transitions as appropriate. Use it in presenting a subject as:
      i. AY honor - either teach the honor (teens/TLT) or items you've learned (many honors have a presentation requirement)
      ii. Fundraising
      iii. Community service report
      iv. Class level concept
      v. Sermon
      vi. AY/Youth group Bible study or game
   c. Using a graphic creation program/app, modify original digital photographs in the following ways (use the images in the presentation required above):
      i. Correct the color or lighting in a photo
      ii. Crop a photo to trim out extra elements
      iii. Turn a color photo into a sepia-tone or black-and-white photo
      iv. Save a photograph as a different file type than the original
      v. Add high-contrast text to a digital photo
      vi. Create an image with a transparent background
      vii. Resize a photo so that the finished photo is no larger than 800 pixels wide and no more than 20% of the disk size of the original digital file.

d. Create a five-question (or more) quiz or survey using a forms or survey program/app. Use a combination of question types (multiple choice, check box, and drop-down menus work best for surveys) to create the form. Have at least 10 people (or the group impacted) take your quiz or survey. Use the response tools connected to the program/app to analyze the results. Use the quiz/survey to do something such as:

    i. Create a quiz for an honor or Adventurer award

    ii. Survey preferred menus for an upcoming club campout

    iii. Survey dates and times that would work best for members for an upcoming group event

    iv. Evaluate the success of a recent event

    v. Collect opinions on which honors to earn in the future

e. Create a spreadsheet using a spreadsheet program/app. Use a combination of calculation and charting features. Use this spreadsheet to do something such as:

    i. Tracking dues and/or donations to your Pathfinder club

    ii. Tracking income and expenses for a campout, mission trip, or other group event

    iii. Tracking unit completion of class level requirements

    iv. Charting measurement data for an AY honor

    v. Tracking fundraising sources and events

f. Do one of the following:

    i. Use a note-taking app to create five or more notes and reminders of activities in your life in the coming week/month. Use the app to track completion of those activities or tasks.

    ii. Use a calendar app to list 20 or more upcoming Pathfinder, AY, youth group, church or family events. Include times and locations for each event (as applicable).

    iii. Use cloud storage to save all of the files created for this requirement. Digitally share the final products with your instructor/leader.

    iv. Look at the items you created. Evaluate whether each demonstrates Christian character, goals, and ideals. How do these pieces communicate a commitment to God and His community? How do these items demonstrate how you spend your time and energy resources?

5. Interview a professional who works in the computer, media, or graphics design industry (or related fields). Your interview should include questions such as:

  a. What education or certificates are necessary for your line of work?

  b. What type of industry do you work in?

  c. What types of computers or mobile devices do you use?

  d. Why does your workplace use that type?

  e. What things do you use computers or mobile devices to do? How would your job be different without computers/technology?

  f. What cool stuff do you accomplish thanks to technology?

  g. (If they are Christian) How do you stay consistent to your Christian ideals as you are producing computer-based products?

Skill Level 2

Original Honor 1991