

# Technology Curriculum



Student  
Workbooks



*High School  
Book 1*

**by Ask a Tech Teacher**

# High School

## Technology Curriculum Student Workbook

***Book 1***

***Grades 9-12***

***By Ask a Tech Teacher®***

2024  
V.3

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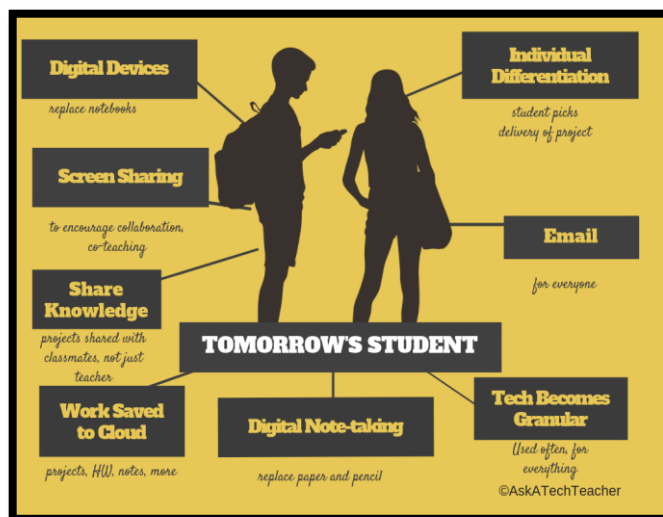
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# Introduction

The educational paradigm has changed. Technology, once optional, is now granular to preparation for college and career. Education standards expect you (as a student) to:

- **evaluate print and digital media**
- **gather information** from print/digital sources
- evaluate **information presented in diverse** formats
- **interpret information** presented visually, orally, or quantitatively [such as interactive Web pages]
- make **strategic use of digital media**
- use **print/digital glossaries/dictionaries**
- use information from **images and words in print/digital** text
- communicate with a **variety of media**
- **use text features and search tools** (e.g., keywords, sidebars, **hyperlinks**) to locate information

Figure 1—Tomorrow's Student



But how do you learn what you need to achieve these goals?

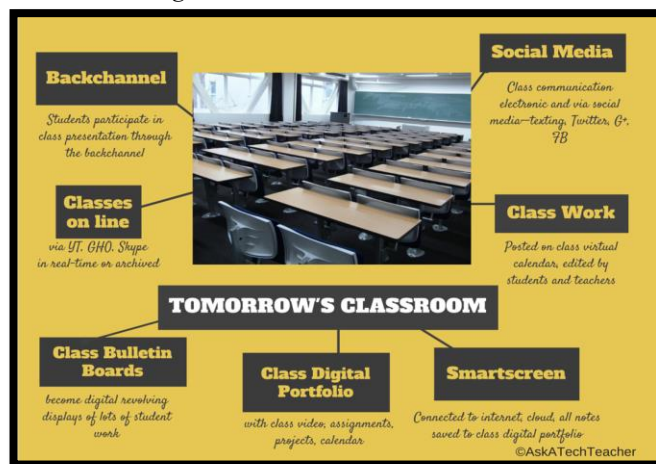
This three-volume **High School Technology Curriculum** is a great start. It provides critical knowledge and skills that make a difference in learning and life. Lessons are self-paced, platform-agnostic, aligned with core subjects, and themed to topics important to high school students. They are project-based with wide-ranging opportunities to show your knowledge in the manner that best fits your communication style.

Each of the three volumes is stand-alone with a particular focus:

**Book 1:** (this book) **Reviews the tech skills required for college and career.**

You review comprehensive tech skills to prepare for college or career. Depending on how well-versed you are in technology, you can move faster or slower through lessons, but with the confidence that you are learning critical skills.

Figure 2—Tomorrow's Classroom



## **Book 2: Applies learned skills to popular tech projects.**

*This is a perfect choice if you have a solid background in tech skills and are interested in using it in projects like coding, robotics, and writing ebooks, those that apply to classes and interests. The overarching goal of Book 2 and 3 is to teach you to be a problem solver and independent thinker prepared for whatever you face in life.*

## **Book 3: Applies learned skills to more advanced projects.**

*This is a perfect choice if you have a solid background in applying tech skills to projects and are looking for advanced opportunities in Word certification, SketchUp, Engineering, Alice, and other tech-intensive topics. The overarching goal of Book 2 and 3 is to teach you to be a problem solver and independent thinker so you are prepared for whatever your future holds.*

Your teacher has selected the one that is suited to your needs at this point in your education.

## **Programs Used**

Webtools and programs required in these lessons vary by skill taught but we try to use what you normally would in your classes and/or what is freely available on the Internet.

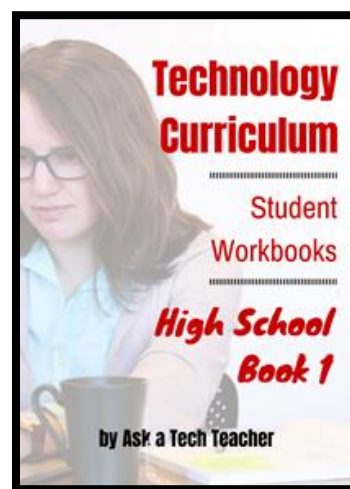
## **What's in this Workbook?**

Lessons in these three volumes (this is the first of the three—Book 2 and 3 are sold separately) may focus on coding, debate, engineering, financial literacy, Genius Hour, Google Earth, image editing, infographics, Internet searches, math, presentations, Photoshop, robotics, SketchUp, spreadsheets, visual learning, webtools, word processing, writing ebooks, and more. All books include three foundational topics considered critical to technology success:

- *keyboarding*
- *digital citizenship*
- *problem-solving*

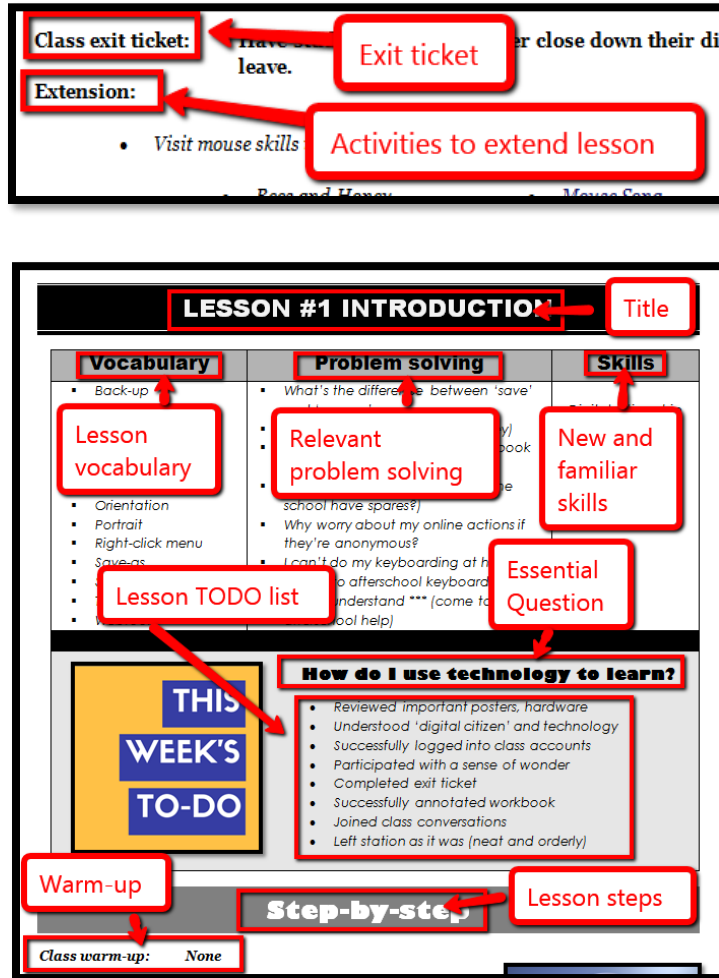
Each weekly lesson includes:

- *assessment strategies*
- *class warm-up and exit ticket*
- *Common Core and ISTE alignment*
- *differentiation strategies*
- *educational applications*
- *essential question and big idea*
- *examples, rubrics, images, printables*
- *problem solving for the project*
- *steps to goals; time required*
- *vocabulary used*



All except the 'steps to accomplish goals' can quickly be viewed on the first and last page of each lesson, providing a snapshot of what will be happening without digging through lots of pages. Figures 3a-b are screenshots showing where these are in a sample lesson (zoom in if needed):

Figure 3a-b—Parts of each lesson



## How to Use This Book

Use this student workbook by itself to guide learning or in conjunction with teacher direction. We don't explain exactly how to do skills. Those are learned in earlier tech classes. If you don't know how to perform a skill, ask for help. If you do, transfer that knowledge to this class.

Here are hints on how this workbook:

- This workbook is part of the High School technology curriculum your school selected to guide you through technology skills. Each lesson takes two-three sessions of 30-45 minutes.






- When you see a section for 'Notes' at the end of some lessons, add your thoughts, ideas, comments, and suggestions.
- A lesson requires one week—two-to-three classes.
- Many lessons start with a *warm-up* and end with an *Exit Ticket*.
- Many lessons include *Extensions*, in case you get done early.
- Zoom in or out of workbook pages to get exactly the size that works for your needs.
- If you want to complete a lesson using a different tool, suggest it. Your teacher will probably be happy to accommodate you if your method answers the Essential Questions.
- You can work at your own pace, try skills, and ask for help when you need it. There's a lot of detail in the book to explain how to complete projects and lessons.
- You can use this workbook on PCs, Macs, Chromebooks, or iPads. You can use a desktop, laptop, or a netbook.
- Use lesson vocabulary in class and out. You gain authentic understanding by doing so.
- This icon  means there's a video to watch.
- This icon  means you'll work with a partner. Collaboration and working in groups is an important part of learning.
- This icon  means there is an activity that requires you to write something in the workbook. Use your favorite annotation tool to do that. If you turn this workbook in at the end of class, erase your annotations so it is clean for the next student.
- Focus on problems listed in each lesson, but embrace all that come your way. Be a risktaker.
- Your teacher will assess your work based on the weekly 'To Do' list. Be sure you've completed items and submitted in the manner required.
- Check off completed items on the line preceding the step so you know what's finished. Use an annotation tool that works on your device.
- Remember: It takes five times with a skill to get it—
  - *First:*            *you hope it'll go away*
  - *Second:*        *you try it*
  - *Third:*           *you remember it*
  - *Fourth:*        *you use it outside of class*
  - *Fifth:*            *you teach a friend*
- When you finish each lesson, transfer knowledge to projects at school, home, the library—wherever you use digital devices.
- At the end of each session, leave your station as you found it—organized and neat.
- Some lessons offer several activities that meet goals outlined in the Essential Questions. Pick what works for you.

Figure 4—It takes 5 times



- Lessons expect you to develop 'habits of mind'. In a sentence: Habits of Mind ask you to engage in learning, not simply memorize.
- Back up your work. This can be to a flash drive, by emailing the document to themselves, or saving to a secondary location.
- Expect to direct your own learning.
- Learning is accomplished by success and failure. Be a risk taker. Don't expect the teacher to rush to solve your problems. Think how it was done in the past. Focus on problem-solving listed in the lesson but embrace all. This trains critical thinking and troubleshooting when a teacher isn't there to help.

Figure 5—Habits of Mind



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## About the Authors

**Ask a Tech Teacher** is a group of technology teachers who run an award-winning resource blog. Here they provide free materials, advice, lesson plans, pedagogical conversation, website reviews, and more to all who drop by. The free newsletters and articles help thousands of teachers, homeschoolers, and those serious about finding the best way to maneuver the minefields of technology in education.

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## Arranged by theme

### **Integrated into all**

- |    |                                |
|----|--------------------------------|
| #2 | Digital Tools in the Classroom |
| #3 | Digital Citizenship            |
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### **Productivity**

- |        |                                    |
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# LESSON #1 INTRODUCTION

Vocabulary	Problem solving	Skills
<ul style="list-style-type: none"> <li>▪ Backup</li> <li>▪ Digital citizen</li> <li>▪ Hardware</li> <li>▪ Landscape</li> <li>▪ Orientation</li> <li>▪ Portrait</li> <li>▪ Right-click menu</li> <li>▪ Select-do</li> <li>▪ Technology</li> </ul>	<ul style="list-style-type: none"> <li>▪ What's a quick way to ** (shortcut)</li> <li>▪ How do I annotate student workbook (addressed in Digital Tools lesson)</li> <li>▪ I don't have a flash drive (does the school have spares?)</li> <li>▪ Why worry about my online actions if they're anonymous?</li> <li>▪ I don't understand *** (come to afterschool help)</li> </ul>	<p>Digital citizenship Digital devices Hardware Keyboarding Online grades Problem solving</p>



## How do I use technology to learn?

- Reviewed important posters, hardware
- Understood 'digital citizen' and technology
- Successfully logged into class accounts
- Participated with a sense of wonder
- Completed exit ticket
- Successfully annotated workbook
- Joined class conversations
- Left station as it was (neat and orderly)

## Step-by-step

**Class warm-up:** None

\_\_\_\_\_ **Required skill level: Enthusiasm and passion for technology.**

\_\_\_\_\_ Tour classroom to familiarize yourself with your learning environment. Your teacher will show you where the tech devices are. Also know where to find class announcements, the Evidence Board and Presentation sign-up sheets (if you're doing these activities).

\_\_\_\_\_ What does 'technology' mean at your school? Do you understand the meaning of 'technology in education'? How have you used it?

\_\_\_\_\_ Discuss the focus of high school technology: You will use tech to support educational goals. For example:

- How do you decide what program works best for what inquiry?
- How do you learn to use tools you have never seen?
- How do you self-assess knowledge, ensuring you got what you need?



\_\_\_\_\_ Success in high school technology is predicated on your enthusiasm for learning, transfer of knowledge from earlier learning, and evidence of problem-solving skills. You will often ‘pick which program works best’ or ‘devise a plan to accomplish goals’ or ‘teach yourself’.

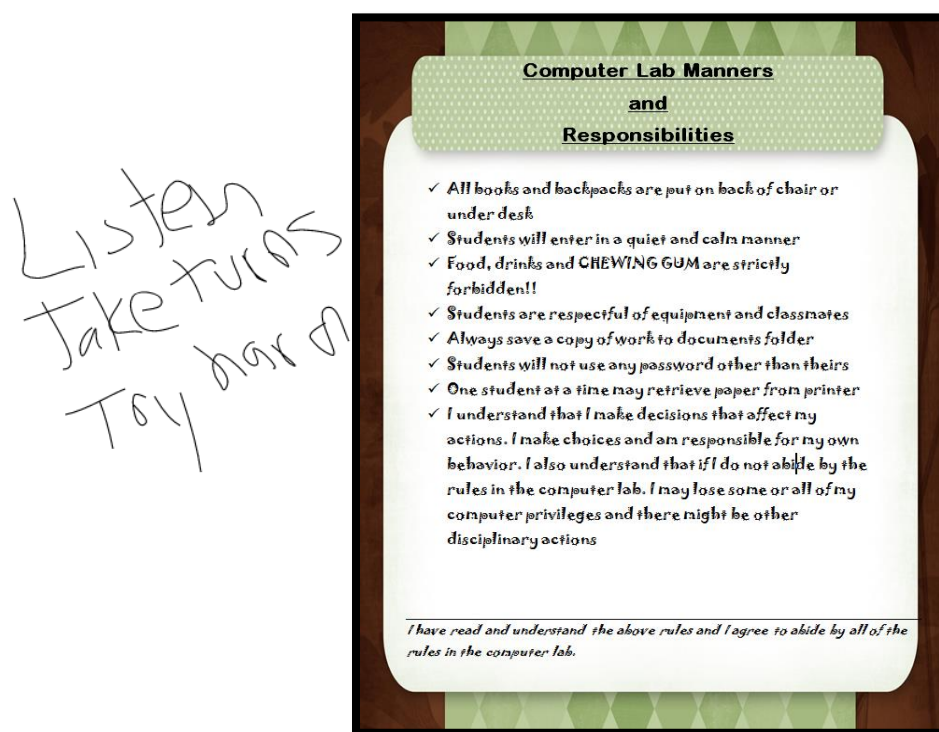
\_\_\_\_\_ Share your tech background with classmates, what you know and want to know, difficulties you see taking this class. Discuss your expectations.

\_\_\_\_\_ Understand domain-specific technology language pursued two ways:

- *You use correct ‘geek speak’ words during class, as does your teacher. Tech words you don’t know are added to a virtual wall or a similar collection spot. These words will be included in Speak Like a Geek (if following this activity).*
- *Every time you find a word you don’t understand, decode it—using the class dictionary tool, friends, or teacher. Don’t skip over it.*

\_\_\_\_\_ Review class syllabus, goals, and rules (zoom in if necessary):

Figure 6—Class rules

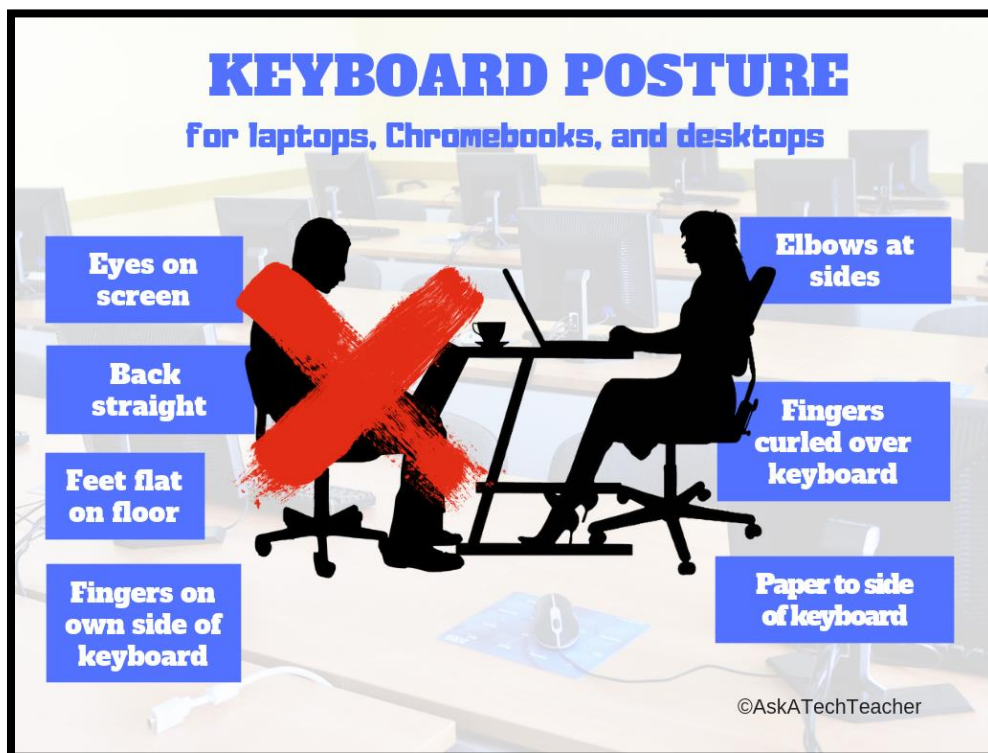


\_\_\_\_\_ Make suggestions on what else should be on this list with the goal that class be productive, efficient, and fair for all students. The list may include:

- *No food or drink around digital devices.*
- *Respect the work of others and yourself.*
- *Keep your body to yourself—don’t touch neighbor’s digital device.*
- *No excuses; don’t blame people or computer.*
- *Help your neighbor with words, not by doing.*
- *When collaborating, build on others’ ideas as you clearly express your own.*
- *Try to solve your own problems before asking for help.*

- \_\_\_\_\_ Add suggestions for a list of guidelines into this PDF as shown in *Figure 6*. Use your annotation tool for this.
- \_\_\_\_\_ Discuss passwords and privacy. Do not share log-ins with anyone. Record your log-ins in a convenient place where you will be able to find them. More on this later.
- \_\_\_\_\_ Your teacher will let you know that s/he is open to alternative suggestions on tools to use for a class project. For example, if s/he suggests Wordle, you may prefer Tagxedo. S/he will approve the change if the tool fulfills class guidelines and the lesson Big Idea or Essential Question. Expect to provide **evidence** to build your case, **compare-contrast** your tool to teacher suggestions, and **draw logical conclusions**.
- \_\_\_\_\_ Review posture at the computer based on *Figure 7*—zoom in if needed:

*Figure 7—Keyboard posture*



- \_\_\_\_\_ Posture is different on iPads than laptops, Chromebooks, and desktops. Discuss these differences as a group and add notes to *Figure 7* with your annotation tool.
- \_\_\_\_\_ Check the posture of your neighbor. Remember to sit this way everywhere you use a computer—home, school, the library, everywhere.
- \_\_\_\_\_ More on this in the lesson on *Keyboarding*.
- \_\_\_\_\_ Your teacher may offer a **Keyboarding Club** after school two days a week to accommodate students who can't do their homework at home or want practice keyboarding.
- \_\_\_\_\_ S/he may also offer **after-school help** on Keyboarding Club days for students who need assistance with a tech skill or a project involving tech. Volunteer to participate as an assistant, to help classmates.
- \_\_\_\_\_ You will learn a wide range of web tools (more on this in another Lesson) and use





many in class. Additionally, you will be expected to come up with those that suit your particular needs.

\_\_\_\_\_ You will try to solve tech problems before requesting assistance (more on this in the lesson on *Problem Solving*).

\_\_\_\_\_ Your teacher will show you how to check grades online and access the class website (if there is one).

\_\_\_\_\_ Discuss your responsibility to make up missed classes. Your teacher will show you where s/he posts lesson plans.

\_\_\_\_\_ Discuss backing up your work. How does that happen at your school? If you use flash drives, review how to use them.

**Class exit ticket:**      **Tack a post-it on Problem Solving Board with a tech problem you faced last week. These may be used for the upcoming Problem Solving Board.**

**Extension:**              **Volunteer to add homework due date to class online calendar this month.**



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## LESSON #5 PROBLEM SOLVING

Vocabulary	Problem solving	Skills
<ul style="list-style-type: none"> <li>• Backchannel</li> <li>• Cerebral</li> <li>• Context</li> <li>• Delineate</li> <li>• Mulligan</li> <li>• Sequence</li> <li>• Shortkeys</li> <li>• Strategic</li> </ul>	<ul style="list-style-type: none"> <li>• I can't solve problem (what strategies have you tried?)</li> <li>• I don't like the reflection method I picked. (why?)</li> <li>• Sign-up website doesn't work (use your problem-solving strategies)</li> <li>• Did poorly on assessment (Mulligan Rule)</li> </ul>	<ul style="list-style-type: none"> <li>• Digital citizenship</li> <li>• Keyboarding</li> <li>• Problem solving</li> <li>• Speaking and listening</li> </ul>



### How does tech help problem solving?

- Completed required project(s)
- Signed up for Board
- Worked independently
- Completed warm-up, exit ticket
- Successfully annotated workbook
- Joined class conversations
- Left station as it was (neat and orderly)

## Step-by-step

**Class warm-up:** Keyboard on class typing program, paying attention to posture.

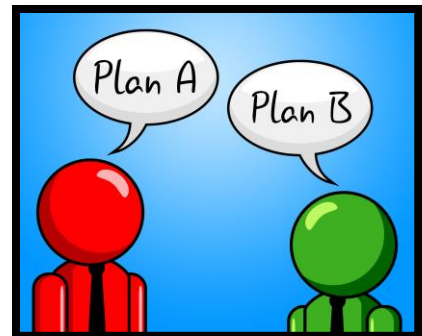
This lesson is part of many lessons. You learn to consider yourself a 'problem solvers'.

**Required skill level: Enthusiasm for thinking and problem solving.**

Discuss Problem Solving. This is a life skill that transcends a subject.

Discuss what it means to be a 'problem solver'. Who do you go to when you need help? Do you believe that person always gets it right? Would you believe most people are wrong half the time?

Problem solving is closely aligned with logical thinking, critical thinking, reasoning, and thought habits. Discuss why you should become a problem solver (hint: refer to the prior point—most people you go to for assistance are wrong half the time). Discuss the following characteristics of a 'problem solver'. Which describe you? Do you have friends who always seem to know which approach to use to solve problems?



- *demonstrate independence*
- *attend to precision*
- *value evidence*
- *understand other perspectives*
- *comprehend as well as critique*
- *use appropriate tools strategically*
- *make sense of problems and persevere in solving them*

\_\_\_\_\_ Is problem solving ‘cerebrally-stimulating? Is it fun? Why or why not? Discuss great quotes in *Figure 37*—zoom in if needed.

*Figure 8—Problem-solving quotes*

**Great Quotes About Problem Solving**

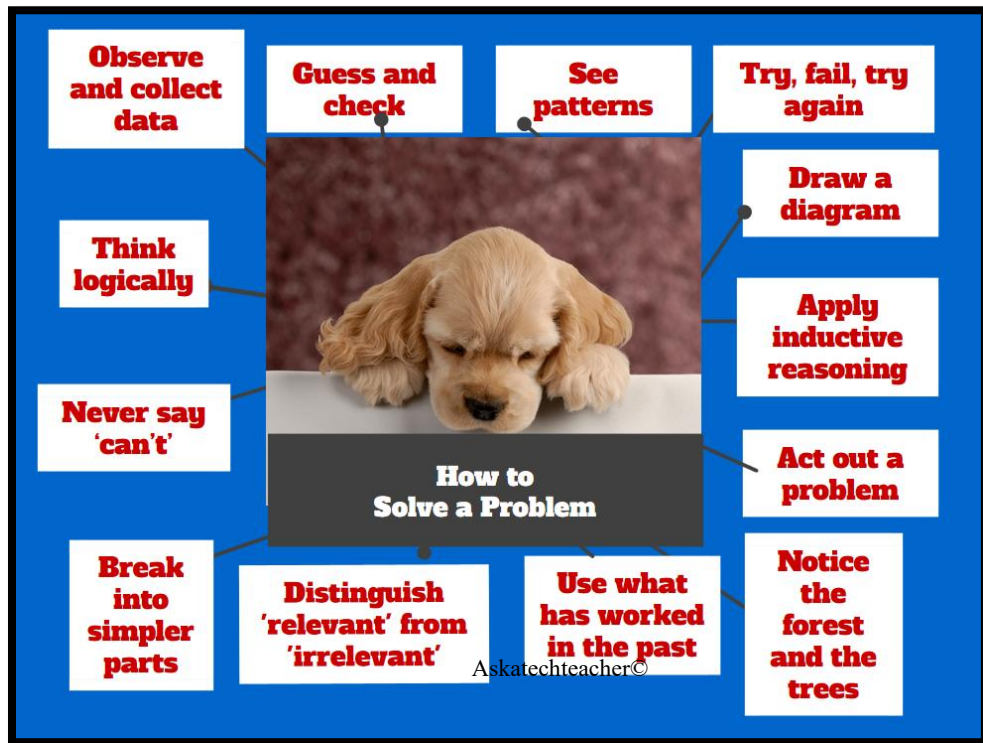
<p>"In times like these it is good to remember that there have always been times like these." — Paul Harvey <i>Broadcaster</i></p> <p>"Never try to solve all the problems at once — make them line up for you one-by-one." — Richard Sloma</p> <p>"Some problems are so complex that you have to be highly intelligent and well-informed just to be undecided about them." — Laurence J. Peter</p> <p>"Life is a crisis - so what!" — Malcolm Bradbury</p> <p>"You don't drown by falling in the water; you drown by staying there." — Edwin Louis Cole</p> <p>"The significant problems we face cannot be solved at the same level of thinking we were at when we created them." — Albert Einstein</p> <p>"It is not stress that kills us. It is effective adaptation to stress that allows us to live." — George Vaillant</p>	<p>"The most serious mistakes are not being made as a result of wrong answers. The truly dangerous thing is asking the wrong questions." — Peter Drucker <i>Men, Ideas &amp; Politics</i></p> <p>"The problem is not that there are problems. The problem is expecting otherwise and thinking that having problems is a problem." — Theodore Rubin</p> <p>It's not that I'm so <u>smart</u>, it's just that I stay with problems longer. — Albert Einstein</p> <p>No problem can stand the assault of sustained thinking. —Voltaire</p> <p>The problem is not that there are problems. The problem is expecting otherwise and thinking that having problems is a problem. —Theodore Rubin</p> <p>Problems are only opportunities with thorns on them. —Hugh Miller</p>
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\_\_\_\_\_ Discuss shortcuts. How are they problem solving? Demonstrate this by sharing how you use a shortcut to perform a skill. Is it easier than finding a tool on a toolbar?

\_\_\_\_\_ Discuss problem-solving strategies (from *Figure 38*—zoom in if needed). When you face a problem, use *Figure 38* strategies to solve it before asking for assistance.

- *Act out a problem*
- *Be aware of surroundings*
- *Break a problem into parts*
- *Distinguish between relevant and irrelevant information*
- *Draw a diagram*
- *Guess and check*
- *Never say ‘can’t’*
- *Notice the forest and the trees*
- *Observe and collect data*
- *See patterns*
- *Think logically*
- *Try to solve before asking for help*
- *Try, fail, try again*
- *Use Help files*
- *Use tools available*
- *Use what has worked in past*
- *Work backwards*

Figure 9—How to solve a problem



\_\_\_\_\_ This lesson includes two projects to reinforce problem solving in everyday life:

- *Problem-solving Board*
- *Analysis of authentic problem-solving skills*

## Problem-solving Board

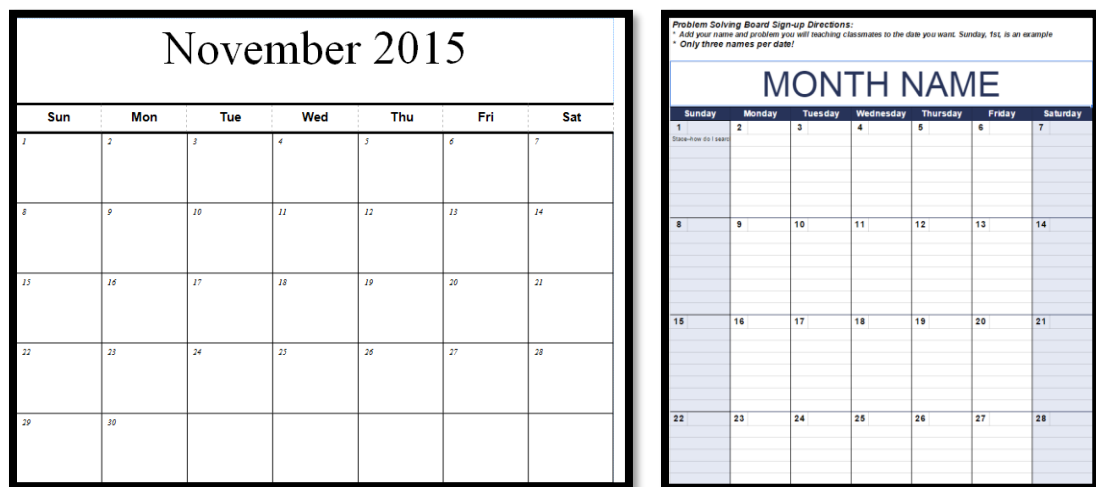
\_\_\_\_\_ Sign up to teach classmates common problems faced when using technology. Ideally, you and classmates have collected these throughout the year—the types of problems that stopped you as you tried to use tech. *Figure 39* shows what the list might include (zoom in if necessary):

Figure 10—Common tech problems

Problem	
My browser doesn't work	I can't find a tool
Browser toolbar missing	My screen is frozen
The website doesn't work	I'm worried about security
The document is read-only	Can't find Bold, Italic
Double click doesn't work	Can't find the program
I can't find XXX on page	Internet toolbar's gone
Program disappeared	My computer doesn't work
Erased my document	My programs are gone

Sign up via a Padlet wall embedded into the class start page (*Figure 40a*), SignUp Genius, a shared spreadsheet (*Figure 40b*) or another method suggested by your teacher.

*Figure 11a-b—Problem-solving Board sign-ups*



Here's how it works:

- *Select presentation date.*
- *Select problem to teach classmates.*
- *Find solution.*
- *Teach classmates how to solve the problem.*
- *Take questions. The audience is responsible for making sure speaker makes sense.*

Here's where you can get answers:

- *Help files*
- *Google Searches*
- *family and friends*
- *online resources like age-appropriate videos*
- *other resources*

You must come prepared, having researched material. You may use visual displays to clarify information, such as screenshots, screencasts, and graphics.

Entire presentation takes about three minutes. The *Assessment* at the end of the lesson is a sample rubric.

You should own these tech problems by end of class.

## **Analysis of authentic problem-solving skills**

During the grading period, you must identify five-ten problems faced in any part of your life—home, school, or personal—and what strategy you used to solve it (from the strategies listed in *Figure 38* or others provided by your teacher).

Here's how this works:



- You record 5-10 problems faced during the grading period in a Google Spreadsheet created by your teacher and shared with the class.
- You answer a Google Forms poll (like Assessment 14). It tracks common solutions used. You must have 5-10 of these during the grading period:

*Assessment 1—Problem-solving authentic data*

The screenshot shows a Google Form titled "How Students Solve Problems". At the top, it says "\* Required". The first question is "What is your name?" with a subtext "This is to track how many problems you have entered" and a text input field. The second question is "Specify your class period" with a subtext "This is to sort answers by class" and a text input field. The third question is "What strategy did I use to solve my class problem \*" with a subtext "Each student will have ten entries". It lists 15 radio button options: "Use digital Help files", "Observe and collect data", "Be aware of surroundings", "Notice the forest and the trees", "Think logically", "Act out a problem situation", "Break a problem into simpler parts", "Distinguish between relevant and irrelevant information", "Draw a diagram", "Guess and check", "See patterns", "Try, fail, try again", "Use what has worked in the past", "Work backwards", and "Other:" followed by a text input field.

\_\_\_\_\_ At the end of the class, your teacher will share the collected data with the class.

**Class exit ticket:** Enter one problem already encountered into the Google Form.

**Extension:**

- Volunteer to create the Google Form for the Problem Solving activity, to be used to track results.
- Volunteer to add homework due date to class online calendar.

Assessment 2—Problem Solving Presentation Assessment

Problem Solving Presentation Assessment						
Project: Problem Solving			Student/Team:			
Pts	Investigate	Design	Plan	Create	Evaluate	Group
0	<i>Team does not complete investigation to standard discussed in class</i>	<i>Team does not complete design to standard discussed in class</i>	<i>Team does not complete plan to standard discussed in class</i>	<i>Team does not complete work to standard discussed in class</i>	<i>Team does not complete evaluation to standard discussed in class</i>	<i>Team does not work together to standard discussed in class</i>
1-2	<i>Team states problem but not clearly, vaguely, understanding skills required. Students have difficulty verbalizing steps required to complete</i>	<i>Team addresses some detail about how project will be presented with selected tool, but leaves critical elements out</i>	<i>Team project plan contains some goals for completing project; timeline is not sustainable</i>	<i>Team creates at least part of storyboard, timeline, product/solution</i>	<i>Team evaluates product/solution as they work, but does not adapt plan or project to problems that arise</i>	<i>Team occasionally works well as a group, but has difficulty allocating work and arriving at consensus</i>
3-4	<i>Team states problem clearly with a strong understanding of skills required. Team shows evidence of researching and describes solution in detail</i>	<i>Team addresses all specifics required to create a how-to and present to class</i>	<i>Team produces a plan that contains a clear and achievable goal for using time wisely during class</i>	<i>Team uses appropriate techniques and equipment, storyboard is effective. Team follows plan, and modifies when required, resulting in good quality project</i>	<i>Team evaluates how-to project and their performance; suggests ways to improve, and tests solution before presenting to class</i>	<i>Team frequently incorporates group member input into project, showing respect for the value of all members</i>
Sub total						
<b>Total</b>						<b>/20</b>

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## LESSON #6 SCREENSHOTS, SCREENCASTS, VIDEOS

Vocabulary	Problem solving	Skills
<ul style="list-style-type: none"> <li>Embed</li> <li>PDF</li> <li>Screencast</li> <li>Screenshot</li> <li>Storyboard</li> <li>Voice-over</li> </ul>	<ul style="list-style-type: none"> <li>I can't find the screencast tool (use search)</li> <li>Can't figure it out (breathe deeply, check screen, you can do it)</li> <li>How do I edit a video (either start over or use native video editing tools)</li> <li>My partner isn't helping</li> </ul>	<ul style="list-style-type: none"> <li>Digital citizenship</li> <li>Keyboarding</li> <li>Screencasting</li> <li>Screenshots</li> <li>Speaking/listening</li> </ul>



### How do I help classmates problem solve?

- Completed project
- Worked well in a group
- Used good keyboarding habits
- Completed warm-up, exit ticket
- Successfully annotated workbook
- Joined class conversations
- Left station as it was (neat and orderly)

## Step-by-step

**Class warm-up:** *Keyboard on the class typing program, paying attention to correct posture.*

\_\_\_\_\_ This lesson should follow the one on *Problem Solving* as it expects familiarity with concepts about strategies to use when faced with problems.

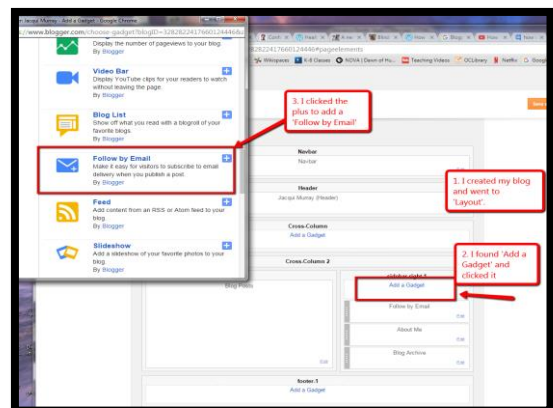
\_\_\_\_\_ Make sure your backchannel is open (if you use this) so you can fully participate.

\_\_\_\_\_ What are screenshots and screencasts? They are digital recordings of what appears on your screen, with or without audio, video, and notes. This is similar to videos, but with differences we'll discuss.

\_\_\_\_\_ This lesson includes these activities:

- screenshots (Figure 41 is an example—zoom in if needed)
- screencasts
- video recording
- summative activity

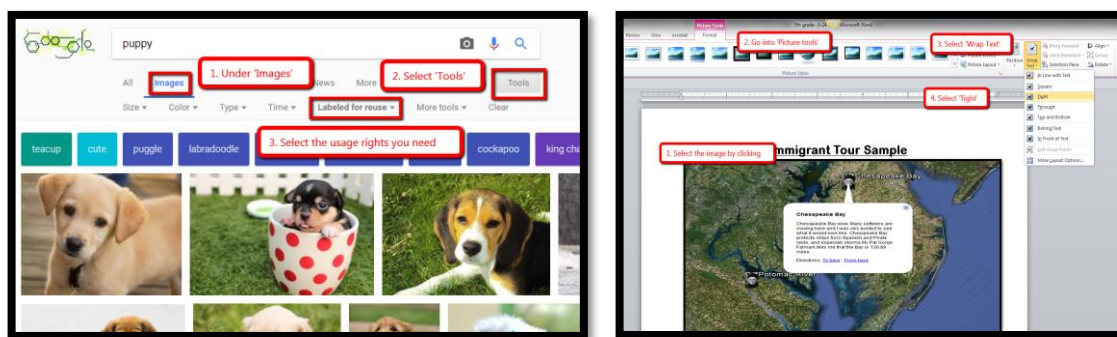
Figure 12—Sample how-to screenshot



## Screenshot

\_\_\_\_\_ A screenshot is a still photo of your screen, likely annotated. You already use this process to send annotations from this workbook (such as a rubric or quiz you've filled in) to your teacher. Additionally, if you followed this curriculum in earlier grades, you'll remember *Figures 42a-b*:

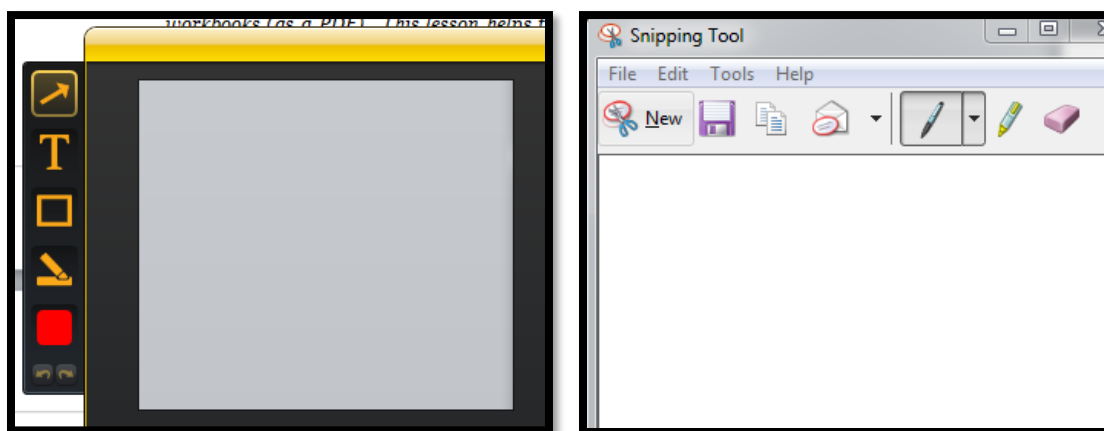
*Figure 13a-b—Screenshots*



\_\_\_\_\_ Most digital devices come with a built-in screenshot tool:

- **Windows:** Snipping Tool (*Figure 43b*)
- **Chromebook:** hold down the control key and press the window switcher key
- **Mac:** Command Shift 3 to do a full screenshot and Command Shift 4 for a partial
- **Surface tablet:** hold down volume and Windows button at the same time
- **iPad:** hold the Home button and power button at the same time

*Figure 14a-b—Screenshot apps*



\_\_\_\_\_ Depending on the tool, it may include annotation tools like:

- |                    |                |
|--------------------|----------------|
| • arrows           | • highlighting |
| • blur tool        | • shapes       |
| • boxes            | • stickies     |
| • freehand drawing | • text         |

Screenshot tips:

- *pick a clear image*
- *make annotations easy to read*
- *check grammar and spelling*
- *use color to make your notes stand out*

## Screencast

A screencast is a quick video of how to complete a task. It can be simple or sophisticated. For example, *Figure 44* illustrates a screenshot of what is actually a 30-second video on how to join a Twitter Chat.

*Figure 15—Sequencing in a screenshot*



Screencasts may include any of the following:

- *a spotlight for the mouse*
- *the presenter picture (like you'll see in the lower right corner of Figure 45)*
- *ability to edit, upload to YouTube, the Cloud, or another file sharing location*
- *ability to pause the video and restart seamlessly*

*Figure 16—Sample screencast*

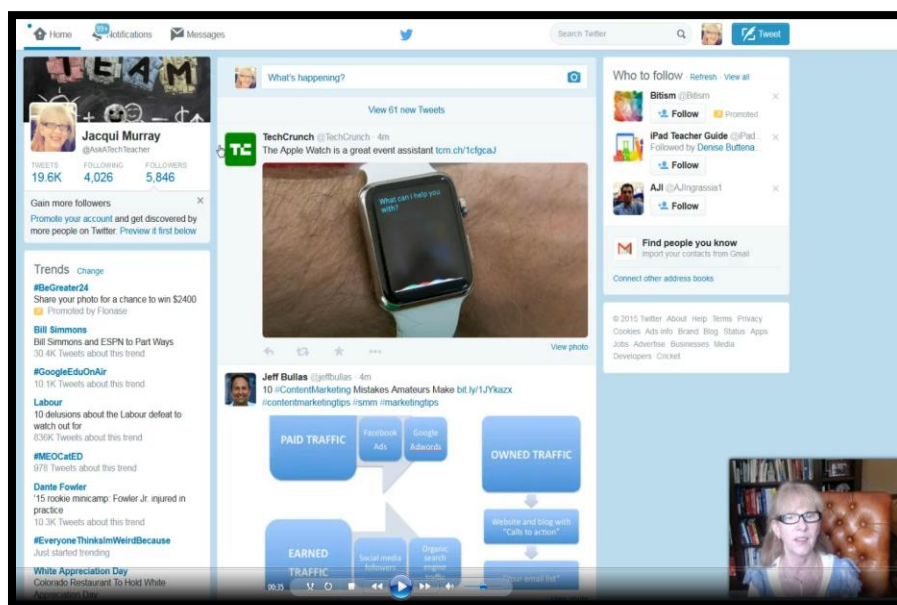
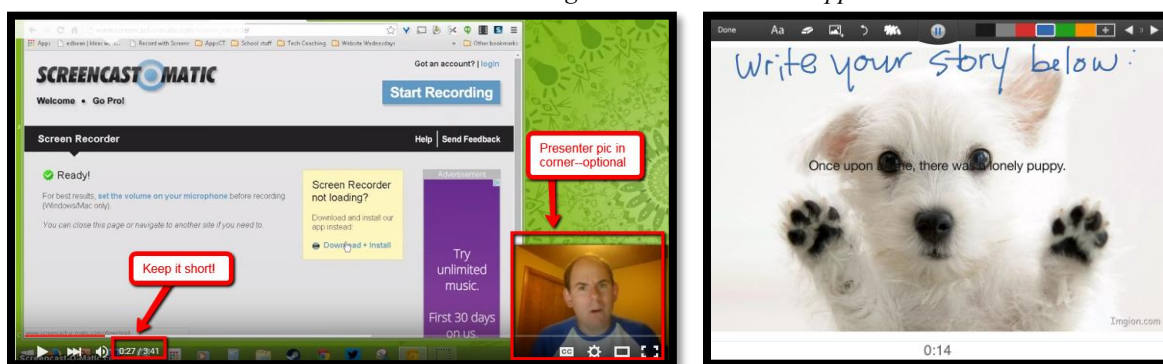




Figure 17a-b-Screencast apps



\_\_\_\_\_ Screencasting tips:

- *keep screencasts short—a couple of minutes*
- *speak conversationally, but avoid slang, umm, and giggles*
- *don't worry about mistakes—you can re-record*
- *use diverse materials—you can pause the video, find a resource, start again*
- *keep on topic; don't get distracted*
- *use a simple background that doesn't distract*

## Video

\_\_\_\_\_ A video can use the native recorder in the school's digital device or a traditional camcorder. It may be a video of you (or the presenter) talking and holding up items for the audience to see. These are not as easily edited as Screencasts and don't show digital device screens—rather show a broader setting.

## Activity

\_\_\_\_\_ Whichever of the two options you select (screenshot, screencast, or video), your goal is the same: to show how to solve one of the problems discussed in the *Problem Solving* lesson. You will be expected to:

- *sequence ideas logically*
- *make the process clear*
- *include all steps required to complete a task*

\_\_\_\_\_ You can work in small groups. Select problems group members solved during the problem-solving lesson.

\_\_\_\_\_ You can write a storyboard to ensure you cover all topics or simply use notes.

\_\_\_\_\_ You should expect to practice several times before recording.

\_\_\_\_\_ You will share your screencast, screenshot, or video with classmates by publishing or embedding them to the class common areas (blog, website).

\_\_\_\_\_ By the end of this Lesson, you will have a library of how-to videos to solve tech problems.







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