Technology Curriculum
Student Workbook
6th Edition
Grade 6
by Ask a Tech Teacher
TECHNOLOGY CURRICULUM
STUDENT WORKBOOK

Sixth Grade

Sixth Edition

By Ask a Tech Teacher©

Part Seven of Nine in the SL Technology Curriculum
Sixth Edition 2016

ALL MATERIAL IN THIS BOOK IS PROTECTED BY THE INTELLECTUAL PROPERTY LAWS OF THE USA.

No part of this work can be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, Web distribution or information storage and retrieval systems—without the prior written permission of the publisher
2016© Structured Learning LLC. All Rights Reserved

For permission to use material from this text or product, contact us by email at:
info@structuredlearning.net
structuredlearning.net

ISBN 978-1-942101-12-3

Printed in the United States of America
Technology in your classroom—what an exciting way to enhance your learning! You won’t be memorizing tools and struggling through new programs. You’ll learn them as you use them—authentically, as part of classroom activities. Your goal: Make school easier, more relevant, and more in tune with how you learn. We’re going to help. All you need to do is follow this workbook.

How much time will that take? Here’s an estimate:

| Grades K-2 | 15-30 min. a week |
| Grades 3-8 | 30-60 min. a week |

Are you surprised you can learn so much in such a short time? Wait till you see how much fun it is! We give you lots of choices. You can even work with a friend, both of you on laptops, Chromebooks, iPads (sometimes) or desktops, Windows or Macs.

Follow the plan. Execute it faithfully. It works.

**PROGRAMS YOU’LL USE**

Programs used in this curriculum focus on those that serve the fullness of your educational journey. Free alternatives are included where possible:

<table>
<thead>
<tr>
<th>General</th>
<th>K-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>Drawing tools</td>
</tr>
<tr>
<td>Google Earth</td>
<td>Keyboard tools</td>
</tr>
<tr>
<td>Web tools</td>
<td></td>
</tr>
</tbody>
</table>

To become the person in Figure 3 means you use technology as a learning tool. We’ll show you how.

**WHAT’S IN THIS WORKBOOK?**

Each lesson includes:

- activities to extend lessons
- class exit ticket
- class warm-up
- essential question
- examples, rubrics, images, printables
- problem solving
- skills—new and scaffolded
- steps to accomplish goals
- suggestions based on digital device
- supporting links
- to-do list
- vocabulary used
Figure 1a-b shows what comes at the beginning of each lesson and the end:

**Figure 1a-b—Detail of each lesson**

**How to Use This Book**

Your teacher(s) (meaning the adults who direct your technology training) will work with you about forty-five minutes a week. You’ll spend an additional fifteen-sixty minutes each week using tech skills—online, with software, teaching friends, for homework, or in class projects. If there is a skill you don’t understand, get help, especially when you see it come up a second or third time. By the end of 8th grade, you’ll have a well-rounded tech education that prepares you for college and career.

The curriculum map in Figure 2 (zoom in if needed) shows what’s covered in which grade. Where units are taught multiple years, teaching reflects increasingly less scaffolding and more independence on your part.
Here’s where you’re headed (Figure 3—zoom in if necessary):

**Figure 3—Tomorrow’s student**

Here are a few hints on how this workbook will get you there:

- This workbook is part of the K-8 curriculum your school selected to guide you through technology skills. Each lesson takes two sessions of 30-45 minutes with equal time devoted to home practice (3rd-8th grade).
At this grade level, you’ll probably have help from a teacher, parent, or another adult as you work. When you see a section for ‘Notes’ at the end of some lessons, this is where you add your thoughts, ideas, comments, and suggestions.

Lessons can be covered in any order that works in your classroom. There may be suggestions for how to arrange them, but these are optional and up to your teacher.

Each lesson starts with a warm-up to get you back into tech.

Each class ends with an Exit Ticket to wrap up learning.

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. Don’t worry if the PDF reader is at 80% or 120%. Set it to fit your learning style.

If you have an idea on how to complete a lesson using a different tool, suggest it. Your teacher will probably be happy to accommodate you.

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.

Check with your teacher on which of these are available with your program license.

Use lesson vocabulary in class and out. You gain authentic understanding by doing so.

This icon means there’s a video to watch. Be aware: Video links change. Your teacher may replace the workbook link with others.

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. Your teacher will explain more.

Focus on problems listed in each lesson, but embrace all that come your way. Be a risk taker.

Check off items you finish (on the _____ in front of each task) so you know what you’ve completed. It’s fine if you don’t get everything done. Return to it when you finish a lesson ahead of time. Use an annotator like iAnnotate, Evernote, OneNote, Notability, or Adobe Acrobat. You can also use these tools to add notes to the lessons.
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.

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 tech session, leave your station as you found it—organized and neat.

You’ll find a lot of links in this ebook, but know this: Links die. If a link doesn’t work, try a different one (if there are options). If that doesn’t work, contact your teacher or ask us at Ask a Tech Teacher (with teacher permission). We’ll help.

Copyrights

You have a single-user license on this ebook which means you may reproduce copies of material for your personal use only. You may not reproduce the entire workbook and share it with a friend. Reproduction of any part for others is strictly prohibited. No part of this publication may be transmitted, stored, or recorded in any form without written permission from the publisher.

About the Author

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 website articles help thousands of teachers, homeschoolers, and those serious about finding the best way to maneuver the minefields of technology in education. They have published hundreds of ebooks, workbooks, articles, and have materials shared throughout the world.
# Table of Contents

## Introduction

## What's in This Workbook?

## How to Use This Book

## Table of Images

## Table of Assessments

## Homework

## Lessons

<table>
<thead>
<tr>
<th>Lessons</th>
<th>Lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>17. Slideshows: Presentations</td>
</tr>
<tr>
<td>8. Writing with Comics, Twitter, More</td>
<td>24. Web-based Tools: Presentations</td>
</tr>
<tr>
<td>11. Spreadsheets I</td>
<td>27. Coding I</td>
</tr>
<tr>
<td>12. Spreadsheets II</td>
<td>28. Coding II</td>
</tr>
<tr>
<td>15. Presentation Boards</td>
<td>31. The Debate</td>
</tr>
<tr>
<td>16. Slideshow Summative</td>
<td>32. The Debate: Presentation</td>
</tr>
</tbody>
</table>
TABLE OF IMAGES

Figure 1a-b—Detail of each lesson ................................................................. 5
Figure 2—Curriculum Map—K-8 ................................................................ 6
Figure 3—Tomorrow's student .................................................................. 6
Figure 4a-h—Digital Devices for workbooks ........................................... 7
Figure 5—Tech use plan ............................................................................ 8
Figure 6—Class rules ................................................................................. 16
Figure 7—Track UN and PW ................................................................. .......................... 17
Figure 8—Homework sample (from Appendix) ........................................ 18
Figure 9—Keyboard posture ...................................................................... 18
Figure 10a—Evidence board; 10b—badge .................................................. 19
Figure 11a-d—Digital devices and their parts .............................................. Error! Bookmark not defined.
Figure 12a—iAnnotate; 12b—Notability; 12c—Adobe Acrobat ........................ Error! Bookmark not defined.
Figure 13a-d—Avatars ............................................................................ Error! Bookmark not defined.
Figure 14a-c—Backchannel devices .............................................................. Error! Bookmark not defined.
Figure 15a-c—Student blogs ..................................................................... Error! Bookmark not defined.
Figure 16a—Blogging rules; 16b—blogging rubric ....................................... Error! Bookmark not defined.
Figure 17a—Class calendar in Google; 17b—Padlet; 17c—DTP ........................ Error! Bookmark not defined.
Figure 18—Class Internet start page ...................................................... Error! Bookmark not defined.
Figure 19a—Class start page in Symbaloo; 19b—PortaPortal; 19c—LiveBinders Error! Bookmark not defined.
Figure 20a-b—Note-taking tools ................................................................. Error! Bookmark not defined.
Figure 21—Collaborative notes in Google Spreadsheets .......................... Error! Bookmark not defined.
Figure 22a—Evernote; 22b—Twitter .......................................................... Error! Bookmark not defined.
Figure 23a—Wiki; 23b—Google Drive .......................................................... Error! Bookmark not defined.
Figure 24—Homework dropbox .............................................................. Error! Bookmark not defined.
Figure 25—Email Etiquette ................................................................. Error! Bookmark not defined.
Figure 26a—Evidence Board; 26b—Badge ................................................... Error! Bookmark not defined.
Figure 27—How to log in ....................................................................... Error! Bookmark not defined.
Figure 28—Track UN and PW ................................................................. Error! Bookmark not defined.
Figure 29—Student website rubric ............................................................. Error! Bookmark not defined.
Figure 30a-c—Vocabulary decoding tools ............................................... Error! Bookmark not defined.
Figure 31—True test of a man ................................................................ Error! Bookmark not defined.
Figure 32—Digital Citizenship topics ...................................................... Error! Bookmark not defined.
Figure 33—Digital law—rephrased ............................................................ Error! Bookmark not defined.
Figure 34a—Netiquette Rules; 34b—Digital pyramid ............................... Error! Bookmark not defined.
Figure 35—Why keyboard? ..................................................................... Error! Bookmark not defined.
Figure 36a—Keyboarding posture; 36b—position ...................................... Error! Bookmark not defined.
Figure 37—Keyboarding hand position .................................................... Error! Bookmark not defined.
Figure 38—Shortkeys .............................................................................. Error! Bookmark not defined.
Figure 39a-e—Project-based learning and keyboarding in 6th grade .......... Error! Bookmark not defined.
Figure 40a—iPad shortkeys; 40b—Chromebook shortkeys; 40c—PC shortkeys; 40d—Internet shortkeys ............... Error! Bookmark not defined.
Figure 41a—Blank keyboard quiz for PCs; 41b—for Chromebook ............ Error! Bookmark not defined.
Figure 42—Problem solving quotes .......................................................... Error! Bookmark not defined.
Figure 43—How to solve a problem ......................................................... Error! Bookmark not defined.
Figure 44—Common tech problems .......................................................... Error! Bookmark not defined.
Figure 45a-b—Problem Solving Board sign-ups ....................................... Error! Bookmark not defined.
Figure 46—Sample how-to screenshot ................................................................. 20
Figure 47a—1st grade screenshot; 47b—5th grade screenshot ................................ 65
Figure 48a—Jing; 48b—Snipping Tool ............................................................... 66
Figure 49—Sequencing in a screenshot ............................................................ 66
Figure 50—Sample screencast ........................................................................ 67
Figure 51a—Screencast-o-matic; 51b—ShowMe .................................................. 67
Figure 52a-d—Word processing examples 1st-5th grade ....................................... Error! Bookmark not defined.
Figure 53—Compare/contrast B ....................................................................... Error! Bookmark not defined.
Figure 54—Toolbar, menu bar ........................................................................ Error! Bookmark not defined.
Figure 55—Excel toolbar ................................................................................ Error! Bookmark not defined.
Figure 56a-c—Examples of outlines in word processing programs ....................... Error! Bookmark not defined.
Figure 57a—MS Word; 57b—Google Docs ........................................................ Error! Bookmark not defined.
Figure 58a-c—Comic samples ......................................................................... 75
Figure 59—Decoding a comic strip .................................................................. 75
Figure 60—Blank comic template ................................................................... 76
Figure 61—Twitter novel sample .................................................................... 77
Figure 62—Serialized novel by Conrad ............................................................ 78
Figure 63a-e—DTP project from 2nd-4th ............................................................ Error! Bookmark not defined.
Figure 64—Compare/contrast C ..................................................................... Error! Bookmark not defined.
Figure 65a—Newsletter in Publisher; 65b—in Google Docs ............................... Error! Bookmark not defined.
Figure 66a-b—Newsletter ............................................................................... Error! Bookmark not defined.
Figure 67a—DTP app in Quark Design; 67b—Canva; 67c—LucidPress ................ Error! Bookmark not defined.
Figure 68a-b—Quick newsletter alternatives .................................................... Error! Bookmark not defined.
Figure 69a-b—Magazine in Canva; 69c—in LucidPress; 69d—MS Publisher .......... Error! Bookmark not defined.
Figure 70a-b—Magazine table of contents ...................................................... Error! Bookmark not defined.
Figure 71a-c—Magazine internal pages ............................................................ Error! Bookmark not defined.
Figure 72—Magazine timeline ........................................................................ Error! Bookmark not defined.
Figure 73a-d—Magazine compare-contrast ...................................................... Error! Bookmark not defined.
Figure 74a-b—Magazine graphic organizers .................................................... Error! Bookmark not defined.
Figure 75a—Magazine primary source; 75b—The End ....................................... Error! Bookmark not defined.
Figure 76a-b—Curating articles ....................................................................... Error! Bookmark not defined.
Figure 77a-e—DTP project from 2nd-4th ............................................................ Error! Bookmark not defined.
Figure 78—Compare/contrast D ..................................................................... Error! Bookmark not defined.
Figure 79a-d—DTP flyer examples .................................................................. Error! Bookmark not defined.
Figure 80a-c—Posters in DTP ......................................................................... Error! Bookmark not defined.
Figure 81a-d—Online tools to create flyers ....................................................... Error! Bookmark not defined.
Figure 82a-c—Calendar samples ..................................................................... Error! Bookmark not defined.
Figure 83a-b—Two formulas ........................................................................... Error! Bookmark not defined.
Figure 84a-c—Spreadsheet projects ................................................................. Error! Bookmark not defined.
Figure 85—Compare/contrast E ..................................................................... Error! Bookmark not defined.
Figure 86a-b—Formula unpacked ..................................................................... Error! Bookmark not defined.
Figure 87—Spreadsheet project ...................................................................... Error! Bookmark not defined.
Figure 88—Autograph with spreadsheets ........................................................ Error! Bookmark not defined.
Figure 89—Parts of a formula ......................................................................... Error! Bookmark not defined.
Figure 90—How to print in Excel .................................................................... Error! Bookmark not defined.
Figure 91a-c—Tables, charts, and graphs ......................................................... Error! Bookmark not defined.
Figure 92—Turn data into a graph ................................................................... Error! Bookmark not defined.
Figure 93a-b: Table vs. Graph ........................................................................ Error! Bookmark not defined.
Figure 94a-b: Graph options in Excel and Spreadsheet ..................................... Error! Bookmark not defined.
Figure 95a-b: Two types of graphs .................................................................. Error! Bookmark not defined.
Figure 96—Internet research .......................................................................... Error! Bookmark not defined.
Common problems and solutions

- Background layers
- Filters in SumoPaint; 144b
- Filters in Google Earth placemark; 122
- Filters in Linoit; 101b
- Filters in Big Huge Labs; 101c
- Filters in Haiku Deck (110b); 101b

Real or hoax pictures?
- Student drawing used without permission
- Cloning within a picture
- Coning between two pictures
- Adding or removing pieces from a photo

Measure distances in GE
- Canva
- Kizoa
- Piktochart
- Linoit
- Padlet virtual wall;
- Row graphic for image editing
- Paperclip for image editing

Sample geek words
- Speak Like a Geek notes
- Speak Like a Geek
- Padlet virtual wall;
- Student drawing used without permission
- Filters in SumoPaint; 144b
- Filters in Big Huge Labs; 144c
- Filters in Lunapic; 144d
- Filters in PicMonkey; e

Real or hoax pictures?
- Real or hoax pictures?
- Add or remove pieces from a photo
- Student drawing used without permission

Error! Bookmark not defined.
Figure 146a is the original; 146b is desaturated; 146c is painted back to original...

Figure 147a is desaturated; 147b has part painted back to original picture...

Figure 148a—b—Car color changed with hue-saturation...

Figure 149a—H&S in Pixlr; b—Lunapic; c—PicMonkey; d—SumoPaint...

Figure 150a—Original; 150b—Quadrant colors; 150c—sepia toned...

Figure 151a—Actions in SumoPaint; b—Big Huge Labs; c—PicMonkey; d—Lunapic...

Figure 152—Paint dialogue box...

Figure 153a—Image editing brushes; 153b—c—drawings completed in image editor...

Figure 154a—b—Sample collages...

Figure 155a—b—Sample collages...

Figure 156a—Alice; b—QR code; c—GTWW; d—Glogster; e—Mindmap...

Figure 157a—Jing; b—Poll; c—Scratch; d—Voki; e—Wolfram...

Figure 158—Find your passion...

Figure 159—Symbolism...

Figure 160a—b—What programming feels like vs. what it is...

Figure 161a—e—Coding from previous years...

Figure 162—Write an ebook...

Figure 163—Book trailer in Animoto...
# TABLE OF ASSESSMENTS

1—Parts of the computer ........................................................................................................... Error! Bookmark not defined.
2—Parts of the smartphone ........................................................................................................ Error! Bookmark not defined.
3—Parts of an iPad ...................................................................................................................... Error! Bookmark not defined.
4—Chromebook parts ................................................................................................................. Error! Bookmark not defined.
5—Student blogging agreement ............................................................................................... Error! Bookmark not defined.
6—Blog grading rubric ................................................................................................................. Error! Bookmark not defined.
7—Website grading rubric ......................................................................................................... Error! Bookmark not defined.
8—Digital portfolio rubric ......................................................................................................... Error! Bookmark not defined.
9—Keyboarding technique quiz ................................................................................................. Error! Bookmark not defined.
10—Important Keys ................................................................................................................... Error! Bookmark not defined.
11—Blank keyboard quiz ............................................................................................................ Error! Bookmark not defined.
12—Chromebook blank keyboard quiz ..................................................................................... Error! Bookmark not defined.
13—Keyboarding Challenge ....................................................................................................... Error! Bookmark not defined.
14—Problem solving authentic data ......................................................................................... Error! Bookmark not defined.
15—Problem Solving Presentation Assessment ....................................................................... Error! Bookmark not defined.
16—Compare-contrast tools I ................................................................................................... Error! Bookmark not defined.
17—Compare-contrast tools II ................................................................................................. Error! Bookmark not defined.
18—Newsletter rubric ................................................................................................................ Error! Bookmark not defined.
19—Magazine rubric ................................................................................................................ Error! Bookmark not defined.
20—Compare-contrast tools ..................................................................................................... Error! Bookmark not defined.
21—Flier grading rubric .............................................................................................................. Error! Bookmark not defined.
22—Calendar grading rubric ..................................................................................................... Error! Bookmark not defined.
23—Compare-contrast tools III ................................................................................................ Error! Bookmark not defined.
24—Spreadsheet summative ..................................................................................................... Error! Bookmark not defined.
25—Summative spreadsheet rubric ............................................................................................ Error! Bookmark not defined.
26—Problem Board notes ......................................................................................................... Error! Bookmark not defined.
27—Problem solving board grading ......................................................................................... Error! Bookmark not defined.
28—Speak Like a Geek presentation rubric ............................................................................. Error! Bookmark not defined.
29—Presentation vs. word processing ....................................................................................... Error! Bookmark not defined.
30—Slideshow storyboard ......................................................................................................... Error! Bookmark not defined.
31—Slideshow presentation rubric ............................................................................................ Error! Bookmark not defined.
32—Slideshow presentation ........................................................................................................ Error! Bookmark not defined.
33—GE Lil Tour rubric ................................................................................................................ Error! Bookmark not defined.
34—Photoshop Tennis I ............................................................................................................. Error! Bookmark not defined.
35—Photoshop Tennis II ............................................................................................................ Error! Bookmark not defined.
36—Webtool presentation tips .................................................................................................... Error! Bookmark not defined.
37—Webtool presentation ............................................................................................................ Error! Bookmark not defined.
38—Genius Hour steps .............................................................................................................. Error! Bookmark not defined.
39—Genius Hour rubric ............................................................................................................. Error! Bookmark not defined.
40—Debate evaluation ................................................................................................................ Error! Bookmark not defined.
Lesson #1 Introduction

Vocabulary
- Back-up
- Digital
- Digital citizen
- Flash drive
- Hardware
- Landscape
- Orientation
- Portrait
- Right-click menu
- Save-as
- Save early save often
- Select-do
- Technology
- Webtool

Problem solving
- What’s the difference between ‘save’ and ‘save-as’
- What’s a quick way to ** (shortkey)
- I have lots of problems (PS board)
- How do I annotate this workbook (addressed in Digital Tools lesson)
- I don’t have a flash drive (does the school have any spares?)
- Why worry about my online actions if they’re anonymous?
- I can’t do my keyboarding homework at home (come to afterschool club)
- I don’t understand *** (come to afterschool help)

Skills
- New
  - Problem solving strategies
  - Input, output
- Scaffolded
  - Keyboarding
  - Digital citizenship
  - Problem solving
  - Hardware
  - Digital devices
  - Understand ‘tech’
  - Online grades

How do I use technology to learn?
- Reviewed important posters, hardware
- Understood ‘digital citizen’ and tech in my life
- 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 that will assist you. Where’s the printer? Class announcements? Evidence Board and Presentation sign-up sheets (if you’re doing this activity)? What else?
What does ‘technology’ mean at your school? Do you understand ‘tech in education’? How have you used it?
Discuss the focus of 6th-grade tech: 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 6th-grade tech is predicated on your enthusiasm for learning, transfer of knowledge, 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

[Image of computer lab manners and responsibilities]
Your teacher will ask for suggestions with the goal that class be productive, efficient, and fair for all students. The list will include:

- Save early, save often, about every ten minutes.
- 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 neighbor with words, not by doing.
- When collaborating, build on others' ideas as you clearly express your own.

Handwrite classmate suggestions into this PDF as shown in Figure 6.

Continue to be a good digital citizen (more on this in the lesson on Digital Citizenship).

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—or use Figure 7. 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. Expect to provide evidence to build your case, compare-contrast your tool to teacher suggestions, and draw logical conclusions.

Review homework policy (homework is in the back of this text): due at the end of each month. You'll submit homework in the manner suggested by your teacher (email, Google Apps, or another). Homework is keyboard practice:
• **months 1-3:** practice only one row per month
  - 1st month: homerow
  - 2nd month: QWERTY row
  - 3rd month: lower row

• **months 4-9:** practice all rows

• When it gets easy, type with hands covered by a cloth or a dish towel so you can’t see the keys.

*Figure 8—Homework sample (from Appendix)*

<table>
<thead>
<tr>
<th>MONTHS</th>
<th>HOMESTAY</th>
<th>WEEKS</th>
<th>DANCEMAT</th>
<th>TYPING</th>
<th>OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>15 min</td>
<td>4</td>
<td>DanceMat</td>
<td>Typing</td>
<td>Others</td>
</tr>
</tbody>
</table>

Spend 15 minutes, four times a week, on DanceMat Typing or another online keyboard program that teaches one row at a time—homerow keys only. Repeat the exercise over and over. The goal: to memorize key placement. Once you can type home row without looking at your fingers, cover keys with a light cloth so you cannot see your hands. Do the rest of the month with hands covered.

On last day of the month, submit homework as requested by teacher: Write 3-5 sentences that:

- Verify you typed 15 minutes 4 times a week (one hour a week) for four weeks
- Share what was easy/difficult.
- Reflect on how keyboarding affects other classes, homework assignments, life in general.

More on this in the lesson on Keyboarding.

Review posture at the computer based on *Figure 9*—zoom in if needed:

*Figure 9—Keyboard posture*
Check the posture of your neighbor. Remember to sit this way everywhere you use a computer—home, school, the library, everywhere.

Discuss the evidence board (Figures 10a and 10b):

Figure 10a—Evidence board; 10b—badge

This bulletin board celebrates your transfer of knowledge from tech class to home, friends, or other educational endeavors. About once a month, you will have an opportunity to share your experiences. You will fill out a badge (like Figure 10b) and post it on the Evidence Board. By the end of the year, this collection will encircle the classroom.

Your teacher may offer a Keyboarding Club after school two days a week to accommodate students who can’t do their homework at home.

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 your 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.

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.
Lesson #6 Screenshots, Screencasts, Videos

Vocabulary
- Add-on tool
- Annotation
- Embed
- PDF
- Screencast
- Screenshot
- Storyboard
- Voice-over
- Webtool

Problem solving
- I can’t find the screencast tool (use search function on digital device)
- I can’t figure it out (breathe deeply, check screen; you can do it)
- How do I edit a video (either start over or use native video editing tools)
- I can’t download tool (use web-based or add-on)
- My partner isn’t helping

Skills
- New
  - Screencasting
  - Videos
- Scaffolded
  - Digital citizenship
  - Keyboarding
  - Screenshots
  - Speaking/listening

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)

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

- This lesson should follow Problem Solving as it expects familiarity with the concepts in that discussion.
- 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 46 is an example—zoom in if needed)
  - screencasts
  - video recording
  - summative activity
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 1st-5th grade, you’ll remember Figures 47a-b:

Figure 12a—1st-grade screenshot; 47b—5th-grade screenshot

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

- **Windows**: Snipping Tool (Figure 48b)
- **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 Home button and power button at the same time

Options for iPads:

- **PicSay**
- **ScreenChomp**

Other options:

- **Jing** – downloaded software; Figure 48a
- **Snagit** – Chromebook add-on, software, takes screencasts too
- **Nimbus** – Chromebook add-on, screencasts too (Fig. 47a)
- **Screencast-o-matic** – web-based or download

Depending upon the tool, it may include annotation tools like:

- arrows
- blur tool
- boxes
- freehand drawing
- highlighting
- shapes
- stickies
- 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 49 illustrates a screenshot of what is actually a 30-second video on how to join a Twitter Chat.

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 50)
- ability to edit, upload to YouTube, the Cloud, or another file sharing location
- ability to pause the video and restart seamlessly
Popular screencasting tools include:

- **Snagit** – downloaded software
- **Screencast-o-matic** – software or online

If you’re a Chromebook class, try:

- **Snagit** – free browser add-on

For iPads, try:

- **Educreations**
- **ScreenChomp**
- **Explain Everything**
- **Show Me**

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, and 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 used 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.

Options for iPads:

- [Mixbit.com](http://mixbit.com) – create up to a one-hour video and share from iPad
- [Tellagami](http://tellagami.com) – create short video avatars
- [Videolicious](http://videolicious.com) – include images from iPad, with your voice

Other options:

- [Animoto](http://animoto.com) – mix screenshots with music, text
- [Wideo](http://wideo.com)
- [YouTube](http://youtube.com) – tape directly using camera on laptop, iPad, desktop, Chromebook

Activity

Whichever option you select, 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, wiki).

By the end of this Lesson, you will have a library of how-to videos for solving tech problems.

Class exit ticket: Watch a neighbor’s screencast, screenshot, or video and comment.

Extension:

- Make an audio how-to. Here are programs that work well:
  
  - [QuickVoice Recorder](http://quickvoice.com)
  - [VoiceThread (both apps)](http://voicethread.com)
  - [Audioboo](http://audioboo.com)
  - [Sonic Pics](http://sonicpics.com)
  
- Volunteer to add homework due date to class online calendar.
**Lesson #8  Writing with Comics, Twitter, More**

**Vocabulary**
- Avatar
- Bubbles
- Captions
- Comic strip
- Installments
- Panel
- Serialized novel
- Twitter novel
- Vignette

**Problem solving**
- How can I follow best writing practices in 140 characters? (check lesson examples)
- Can I string together a group of tweets to cover a topic (maybe—each must stand alone)
- I don’t read comics (try creating one—they are a different style of writing)
- Comics communicate with pictures. How about Twitter (add images there, too)

**Skills**
- New
  - Writing with comics/cartoons
  - Writing a Twitter novel
  - Writing a serialized novel
- Scaffolded
  - Word processing tools

### How Do I Write in Creative Styles?
- Worked independently and in a group
- Completed project
- Used good keyboarding habits
- Completed exit ticket
- Successfully annotated workbook
- Joined class conversations
- Left station as it was (neat and orderly)

### Step-by-Step

**Class warm-up:** None

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

______ In this lesson, you’ll use unconventional word processing tools to write fiction or non-fiction (whatever works best for your group). These include:

- Comics/Cartoons
- Twitter novel
- Serialized novel

**Comics/Cartoons**

______ You have used comics in the past to explore a topic, develop a story, and/or share empathy and perspective. Figures 58a-c are examples of comics you created 1st-5th grade (if using this curriculum). Zoom in if needed:
Figure 17a-c—Comic samples

Writing with comics is appropriate for both fiction and nonfiction. Discuss how comics relay a topic differently from other methods. Why focus on drawings? Do they make a serious theme light-hearted? What do you like about comics?

Writing with comics includes the same elements as a story:

- Each panel includes detail to support the plot, characters, and setting.
- Each panel flows into the next, just as story paragraphs and scenes flow.
- Images, text, bubbles, and captions communicate ideas, story, and empathy.

Figure 18—Decoding a comic strip

1. Speech bubble
2. Thought bubble
3. Sound effects
4. Captions
5. Student as avatar
6. Panels
Comics include these parts (see Figure 59):

- 3-4 panels—as fits your group
- dialogue—delivered via speech bubbles (#1 in Figure 59)
- thoughts—delivered via thought bubbles (#2 in Figure 59)
- captions—to summarize the action in the panel (#4 in Figure 59)
- sound effects—delivered via bubbles like ‘Blam!’ or ‘And then’ (#3 in Figure 59)
- avatar—a character that represents you (#5 in Figure 59)

Before starting, chat about the topic you’ll cover in your comic strip. How does it fit into class discussions?

Open an online comic creator like:

- Powtoons Figure 59
- Storyboard That Figure 58c

If you’re an iPad school, try:

- Pixton – Figure 58a

Note: Any time you use the Internet, remember to do that safely and privately.

You can work in pairs, small groups, or as a large class group to write narratives that recount a sequenced event. Include opening, plot, details, temporal words to signal event order, and a sense of closure.

You can use Figure 60 to sketch out your comic.

Done? Open the comic tool you’ve chosen and select the desired number of panels. Use available tools to select any or all of:

- background
- captions
- characters
- props
- sound effects
- speech bubbles
- text
- thought bubbles
Follow classroom writing conventions including good grammar and spelling. Exception may be in speech bubbles. Why.

When done, read your comic with a partner before publishing. Revise and edit as needed, and then save as a PDF, print/publish/share as is the custom in your classroom. You may find it easier to save it as a screenshot using the appropriate tool in your digital device.

**Twitter Novel**

Twitter brings much to education:

- it's non-intimidating; anyone can get through 140 characters
- it forces writing to be concise and pithy
- wasted, fluff words aren’t an option

In this activity, you write a novel in Twitter. Just to be clear: We’re talking about squeezing all those novel parts required for a manuscript—

- plot/pacing
- character development
- theme
- story arc
- scene

...into 140 characters.

Here’s a sampling of Twitter novels you can find on the Internet:

*He said he was leaving her. “But I love you,” she said. “I know,” he said. “Thanks. It’s what gave me the strength to love somebody else.”* James Meek

I opened the door to our flat and you were standing there, cleaver raised. Somehow you’d found out about the photos. My jaw hit the floor. Ian Rankin

Rose went to Eve’s house but she wasn’t there. But Eve’s father was. Alone. One thing led to another. He got 10 years. Rachel Johnson

Clyde stole a lychee and ate it in the shower. Then his brother took a bottle of pills believing character is just a luxury. God. The twins. Andrew O’Hagan

“It’s a miracle he survived,” said the doctor. “It was God’s will,” said Mrs. Schicklgruber. “What will you call him?” “Adolf,” she replied. Jeffrey Archer

Or, you might decide to follow the example of David Mitchell’s Twitter novel—288+ tweets of only 140 characters (Figure 61).
Here are tips on Twitter novels:

- **Think token action**, dialogue and description. Not this: *He sat and looked at the computer for a full ten minutes before he grasped it and experienced the icy weight of his first laptop.* Rather: *Laptop in hand, he wrote.*
- **Think installments.** Releasing the novel over time increases suspense.
- **Think multimedia** and add links to images, video, articles or anything else that will add meaning to the story. A Twitter novel allows you to combine text with other media.
- **Think movement.** Every tweet should advance the plot. You don’t want readers ignoring tweets out of boredom.

**Serialized novel—one author**

Discuss the meaning of a serialized novel—a normal length novel published by chapter—smaller bites for people with little time to read. Many early writers were published this way including Leo Tolstoy, Joseph Conrad, and Charles Dickens.

Your teacher will show you examples of serialized novels from authors you are reading (say, Charles Dickens).

Why are serialized novels resurging? Consider these statistics:

- The average person’s attention span is 8.8 seconds.
- The average goldfish attention span is 9 seconds.

Here’s how this will work:

- Write an outline of the planned story.
- Write a character study of each character.
- Develop a plot line of what is happening when.
- Research every setting characters will visit.
- Every class, write one installment of your serialized novel and publish it to your blog. You can use a word processing tool, a comic creator, or even an audio tool, but it must be embeddable into your blog (there are many tools in each category that will work). Select the best tool for your communication style.

When done, visit and comment on three of the stories written by classmates.
Serialized novel—multiple authors

Discuss the meaning of ‘vignettes’. It is a verbal sketch, a brief essay, or carefully crafted short work of fiction or nonfiction. Well-known authors include:

- Dickens’ *Sketches by Boz*
- Cisneros’ *The House on Mango Street*

In this option, you work in groups to write vignettes around a cast of characters and a central atmosphere. Discuss what atmosphere means. Why is it important to a vignette—so important that it sets it apart from other forms of writing?

Here are basics of writing vignettes:

- Each vignette abides by the collection’s atmosphere.
- Each vignette is approximately 800 words. They can be shorter, but not usually longer.
- The vignette must evoke emotion.
- The vignette shares a moment (including its power and emotion) rather than a plot line.
- The vignette collection is tied together by a common mood.

There are lots more rules, but these will vary depending upon your curriculum. Your teacher will share what is necessary to fit your group.

Here’s how this works:

- Work in groups based on the medium you’ll use to write your vignette. For example, those who wish to use a comic creator would join the same group.
- As a group, write a character study of each character.
- As a group, decide on setting and atmosphere.
- Develop a schedule of who will publish when. Alternatively, you have three-five weeks to write your vignette, and then use the balance of the time to meld all the pieces into one book.
- These will be published in a collaborative blog or another location selected to curate the stories.

When done, visit and comment on three stories written by classmates.

Class exit ticket: Tweet a comic or a link to a blog of a novel you created.

Extension: Volunteer to add homework and classwork due dates to the class calendar.
If you’re looking for other student workbooks that accompany the K-8 technology curriculum, try these:

Ask your teacher how you can use this ebook on:

- iPads
- PCs
- iMacs
- Laptops
- Macbooks
- Netbooks
- Chromebooks
- Smartphones

At home