

2021-22 Scope and Sequence Technology Applications – Kindergarten

Cycle 1	27 Days	The recommended number of days/lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Aug 23-Oct 1	

Overview

Online Safety & Digital Citizenship: Online Safety and Digital Citizenship curriculum teaches students how to be safe by educating them about online safety, the responsible use of technology and digital fair use rules.

Hardware/Software Fundamentals: Hardware and Software Fundamentals teaches students about computer systems, hardware and software, including the ethical use issues surrounding them.

Houston ISD's digital literacy textbook can be found in the HUB under Learning.com. Learning.com lessons are noted throughout the Scope and Sequence with the notation LCOM prior to the lesson name.

Topic(s)	Suggested Pacing and Lesson(s)	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Online Safety And Digital Citizenship Weeks 1- 5	<p>Week 1: Whole Group Lesson - LCOM (D) Working Online (30 min)</p> <p>Teacher-led practice Logging into Computer</p> <p>Week 2: Whole Group Lesson- LCOM (AE) Following Computer Rules (20 min)</p> <p>Whole Group Lesson- LCOM (AE) Lab Rules Sign (30 min)</p> <p>Week 3: Whole Group Discussion- LCOM (D) Open Communication Basics Discussion (30 min)</p> <p>Practice logging in to LCOM, choosing an Avatar and locating student and teacher name at top left corner.</p> <p>Week 4: Whole Group Lesson-</p>	<p>Online Safety and Digital Citizenship: K-2.5. Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: (A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment; (B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws; and (C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.</p> <p>Hardware/Software Fundamentals: K-2.1. Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to: (A) explore virtual environments, simulations, models, and programming languages to enhance learning; K-2.2. Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to: (A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally; K-2.5. Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: (A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment; comply with acceptable digital safety rules, fair use guidelines, and copyright laws</p>



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	<p>Common Sense Education via LCOM (L) Safety in My Online Neighborhood (30 min)</p> <p>Students practice logging in to LCOM, check top left corner names and understand learning path (stones)</p> <p>Students click on first LCOM lesson/stone: Safety in My Online Neighborhood- Student Video (L) (1 min)</p> <p>Week 5: Whole Group Discussion- LCOM (D) Netiquette and Cyberbullying Discussion (30 min)</p> <p>Students practice logging in to LCOM</p> <p>Students click on LCOM (L) Introduction to Digital Citizenship: Cyberbullying (5 min)</p> <p>Week 6: Students practice logging in to LCOM</p> <p>Students click on LCOM (L) Introduction to Online Safety: Protecting Your Privacy (4 min)</p> <p>Students click on LCOM (L) Introduction to Computer Fundamentals (3 min)</p> <p>Students click on LCOM (L) Computer Fundamentals: Intro to Pointer Devices- New! (5 min) Whole Group- LCOM (L) Symbols of Technology (12 min)</p>	
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Vocabulary					
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
online offline	Pictures Computer Language Arts	complete/ incomplete balance device	online website or app	complete/incomplete online safety kindness digital citizen cyberbully internet	personal information app private log off/ log out pretend lock screen stranger online safety internet laptop trackpad desktop computer mouse tablet arrow button pointer video technology audio symbol CD function



2021-22 Scope and Sequence Technology Applications – Kindergarten

Cycle 2	29 Days	<i>The recommended number of days/lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
	Oct 5 – Nov 12	

Overview

IT Fundamentals (formerly Hardware/Software Fundamentals): Hardware and Software Fundamentals teaches students about computer systems, hardware and software, including the ethical use issues surrounding them.

Multimedia: Multimedia curriculum teaches students the fundamentals of a variety of content forms. Students learn the basics of graphic design, desktop publishing and video editing.

Topic(s)	Suggested Pacing and Lesson(s)	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
IT Fundamentals Week 1-3	<p style="text-align: center;">Week 1:</p> <p style="text-align: center;">Students click on LCOM (L): Symbols of Technology (12 min)</p> <p style="text-align: center;">LCOM (L) Computer Fundamentals: Pointers and Making Choices- New! (5 min)</p> <p style="text-align: center;">LCOM (L) Computer Fundamentals: Selecting Multiple Objects- New! (10 min)</p> <p style="text-align: center;">LCOM (L) Computer Fundamentals: Mouse, Select, Drag, and Double-click (8 min)</p> <p style="text-align: center;">LCOM (G) Critter Catch (2 min) - multiple levels available so that students can repeat game often</p> <p style="text-align: center;">Week 2:</p> <p style="text-align: center;">LCOM (G) Critter Catch (2 min+)</p> <p style="text-align: center;">LCOM (L) Computer Fundamentals: Processors, Input and Output Devices (9 min)</p> <p style="text-align: center;">Apply Learning with LCOM(L) Computer Fundamentals:</p>	<p>IT Fundamentals (formerly Hardware/Software Fundamentals):</p> <p>(A) explore virtual environments, simulations, models, and programming languages to enhance learning; K-2.2. Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to: (A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally; K-2.5. Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: (A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment; (B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws; and</p> <p>Multimedia:</p> <p>K-2.1. Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to: (A) apply prior knowledge to develop new ideas, products, and processes; (C) explore virtual environments, simulations, models, and programming languages to enhance learning; K-2.2. Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to: (A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally; K-2.4. Critical thinking, problem solving, and decision making. The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:</p>



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<p>Multimedia Weeks 4-6</p>	<p>Processors, Input and Output Devices (see Extension Ideas in Teacher Lesson)</p> <p>Week 3: LCOM (L) Computer Fundamentals: Data Storage (7 min)</p> <p>LCOM (A) Data Storage Bingo Unplugged (45 min)</p> <p>Week 4: LCOM (D) Basic Design (30 min)</p> <p>Week 5: LCOM (L) Drawing Lines and Shapes to Tell a Story (9 min)</p> <p>LCOM (AE) Portrait of Myself w/ Google Drawings tool (30 min)</p> <p>Week 6: LCOM (L) Drawing & Filling Shapes Using Graphic Tools (12 min)</p> <p>LCOM (AE) Drawing a Plant ** use Google Drawings tool (20 min)</p>	<p>(A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem;</p> <p>K-2.6. Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:</p> <p>(C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files;</p>
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Vocabulary

Week 1		Week 2		Week 3	Week 4	Week 5	Week 6
video	mouse	click	keyboard	drive	document	graphics	drag and drop
technology	drag and drop	trackpad	computer	DVD	font	drag and drop	fill color
audio	double click	hand-eye	monitor	disk	color	drawing software	color palette
symbol	cursor	coordination	printer	data storage	white space	color palette	shape tool
CD	select	n	processor	device	graphics	mouse	drawing software
function	trackpad	tap	output	flash drive		graphics software	mouse
radio button	hand-eye	mouse	device	write		drawing area	tool box
pointer devices	coordination	button	speakers	optical drive		tool box	drawing area
check boxes	tap	touchscreen	mouse	USB		Language Arts	graphics
click	button	n		CD		pictures	Science
drag	touchscreen	game		read		graphics software	plants
hold	gam	input device		hard drive			graphics software





2021-22 Scope and Sequence Technology Applications – Kindergarten

Cycle 3	30 Days	<i>The recommended number of days/lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
	Nov 15 – Jan 14	

Overview

Computer Science (formerly Computational Thinking and Coding Basics): This unit contains items that help students develop computational thinking skills in preparation for learning to write code and solve other problems. It also includes some introductory coding instruction with the initial lessons from Learning.com’s EasyCode Foundations (powered by CodeMonkey).

Topic(s)	Suggested Pacing and Lesson(s)	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Computer Science Weeks 1-6	<p>Week 1: LCOM (L) Computational Thinking: Directions (15 min)</p> <p>LCOM (AE) A New Student in Class (60 min)</p> <p>Week 2: LCOM (L) Computational Thinking: Patterns (15 min)</p> <p>LCOM (AE) A New Student in Class (60 min)</p> <p>Week 3: Finish AEs from above</p> <p>LCOM (Q) Patterns & Directions Quiz (10 min)</p> <p>Week 4: LCOM (D) Intro to Coding (35 min)</p> <p>Week 5: LCOM (L) Let’s Be Friends (35 min)</p>	<p>Computer Science (formerly Computational Thinking and Coding Basics):</p> <p>K-2.1. Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to: (C) explore virtual environments, simulations, models, and programming languages to enhance learning;</p> <p>K-2.2. Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to: (A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally;</p> <p>K-2.4. Critical thinking, problem solving, and decision making. The student applies critical- thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to: (A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem;</p> <p>K-2.6. Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to: (A) use appropriate terminology regarding basic hardware, software applications, programs, networking, virtual environments, and emerging technologies; (C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files;</p>



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	Week 6: LCOM (L) Finding Treasure (35 min)				
Vocabulary					
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
directions problem solving order	order poster information directions digital drawing tool steps computational thinking school data test design	direction/orientati on logic sequencing algorithms counting	coding sequencing programming	subproblems	advanced sequencing



2021-22 Scope and Sequence Technology Applications – Kindergarten

Cycle 4	27 Days	<i>The recommended number of days/lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
	Jan 19 - Feb 25	

Overview

Keyboarding: Teach students typing basics in early grades and progressively increase their accuracy and speed in later grades with the below keyboarding lessons and drills. Adaptive Keyboarding will assess student's typing strengths and prescribe custom typing activities to meet their individual needs.

Topic(s)	Suggested Pacing and Lesson(s)	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Keyboarding Week 1-6	<p>Week 1: LCOM (G) Spelling Star (5 min+)</p> <p>LCOM (G) Critter Catch (2 min+)</p> <p>LCOM (L) Locate and Type ABCDE (7 min)</p> <p>Week 2: LCOM (L) ABCDE (7 min)</p> <p>LCOM (L) FGHIJ (7 min)</p> <p>Week 3: LCOM (L) ABCDE (7 min) LCOM (L) FGHIJ (7 min)</p> <p>LCOM (L) KLMNO (6 min)</p> <p>Week 4: LCOM (L) ABCDE (7 min) LCOM (L) FGHIJ (7 min)</p> <p>LCOM (L) KLMNO (6 min)</p> <p>LCOM (L) PQRST (6 min)</p> <p>Week 5: LCOM (L) ABCDE (7 min)</p>	<p>Keyboarding: K-2.1. Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to: (C) explore virtual environments, simulations, models, and programming languages to enhance learning; K-2.6. Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to: (C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files; (D) use a variety of input, output, and storage devices; (E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten-Grade 2 learning; (F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning</p>



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	<p>LCOM (L) FGHIJ (7 min)</p> <p>LCOM (L) KLMNO (6 min)</p> <p>LCOM (L) PQRST (6 min)</p> <p>LCOM (L) UVWXYZ (10 min)</p> <p>Week 6: LCOM (L) Locate & Type Numbers (10 min)</p> <p>LCOM (L) Shift Key for Capitals & Symbols (10 min)</p> <p>LCOM (L) Cursor, Spacebar, Backspace, Enter & Words (10 min)</p>	
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Vocabulary

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
hand-eye coordination tap mouse trackpad drop touchscreen game click drag button trackpad hand-eye coordination key A, B, C, D, E keyboard phonics letters alphabet keyboarding	key A, B, C, D, E keyboard phonics letters alphabet keyboarding F, G, H, I, J	key A, B, C, D, E keyboard phonics letters alphabet keyboarding F, G, H, I, J K, L, M, N, O	key A, B, C, D, E keyboard phonics letters alphabet keyboarding F, G, H, I, J K, L, M, N, O P, Q, R, S, T	key A, B, C, D, E keyboard phonics letters alphabet keyboarding F, G, H, I, J K, L, M, N, O P, Q, R, S, T U, V, W, X, Y, Z	key keyboarding shape recognition keyboard 1–9 counting numbers capital letters shift key plus symbol exclamation point keyboard equal sign	phonics mathematical expressions question mark exclamatory sentences minus return spacebar letters backspace delete word enter space letters delete



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Technology Applications – Kindergarten

Cycle 5	33 Days	<i>The recommended number of days/lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
	Feb 28 – Apr 22	

Overview

Keyboarding: Teach students typing basics in early grades and progressively increase their accuracy and speed in later grades with the below keyboarding lessons and drills. Adaptive Keyboarding will assess student’s typing strengths and prescribe custom typing activities to meet their individual needs.

Online Safety & Digital Citizenship: Online Safety and Digital Citizenship curriculum teaches students how to be safe by educating them about online safety, the responsible use of technology and digital fair use rules.

Multimedia (formerly Visual Mapping): This unit includes the EasyTech Visual Mapping curriculum items that align to the First Grade pacing guide and is designed to teach students essential grade-appropriate digital literacy skills to help meet the First Grade portion of national K-2 technology standards. Students learn to create visual maps, idea webs, diagrams, and groups of information based on classification.

Topic(s)	Suggested Pacing and Lesson(s)	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
<p>Keyboarding: Weeks 1-3</p> <p>Online Safety and Digital Citizenship: Week 4</p> <p>Multimedia (formerly Visual Mapping): Weeks 5-6</p>	<p>Week 1: LCOM (AE) Clapping Syllables (30 min)</p> <p>Week 2: LCOM (L) Cursor, Arrows and Tab (9 min)</p> <p>Week 3: Typing Activity (teacher choice) using a Word Processor (30 min)</p> <p>Week 4: Whole Group Lesson- Common Sense Education via LCOM (L) Pause for People (30 min)</p> <p>Week 5: LCOM (L) Visual Mapping: Groups and Labels (12 min)</p> <p>LCOM (AE) Living Things (15 min)</p>	<p>Keyboarding: K-2.1. Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to: (C) explore virtual environments, simulations, models, and programming languages to enhance learning; K-2.6. Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to: (C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files; (D) use a variety of input, output, and storage devices; (E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten-Grade 2 learning; (F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning</p> <p>Online Safety and Digital Citizenship: K-2.5. Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: (A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment; (B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws; and (C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.</p> <p>Multimedia (formerly Visual Mapping): K-2.6.2 Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to: (A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally.</p>

GLOBAL GRADUATE



Click this [link](#) to view Learning.com’s curriculum item descriptions

2021-22 Scope and Sequence

Technology Applications – Kindergarten

	<p>Week 6: LCOM (L) Visual Mapping: Attributes and Linking (12 min)</p> <p>LCOM (AE) Our Community (30 min)</p>	<p>(C) format digital information, including font attributes, color, white space, graphics, and animation for a defined audience and communication medium.</p> <p>K-2.6.4 Critical thinking, problem solving, and decision making. The student applies critical thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:</p> <p>(A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem.</p> <p>(B) evaluate the appropriateness of a digital tool to achieve the desired product.</p> <p>K-2.6.6 Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:</p> <p>(D) use a variety of input, output and storage devices.</p>
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Vocabulary

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Computer Keyboard Word Division Syllables Language Arts	space keyboarding left key enter right tab backspace cursor up letters down phonics delete arrow keyboard	(teacher generated)	pause device frustrated	toolbar label linking mouse workspace file click and drag visual mapping diagram focus symbol text box clipart Visual Mapping Software Science Living and Non-living Things	focus font clipart text elements diagram text box toolbar attribute linking workspace visual mapping background effect Visual Mapping Software Social Studies Critical Thinking Mapping Community



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2021-22 Scope and Sequence

Technology Applications – Kindergarten

Cycle 6	31 Days	<i>The recommended number of days/lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
	Apr 25 – June 7	

Overview

Online Safety and Digital Citizenship: Online Safety and Digital Citizenship curriculum teaches students how to be safe by educating them about online safety, the responsible use of technology and digital fair use rules.

Keyboarding: Teach students typing basics in early grades and progressively increase their accuracy and speed in later grades with the below keyboarding lessons and drills. Adaptive Keyboarding will assess student's typing strengths and prescribe custom typing activities to meet their individual needs.

Topic(s)	Suggested Pacing and Lesson(s)	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Online Safety and Digital Citizenship Weeks 1-3	<p>Week 1: Whole Group Lesson- Common Sense Education via LCOM (L) Media Balance is Important (25 min)</p> <p>Week 2: LCOM (D) Safe Site Strategies (30 min)</p> <p>LCOM (AE) Safe Site Strategies Reflection (5 min)</p> <p>Week 3: LCOM (D) Open Communication Basics Discussion (30 min)</p> <p>LCOM (AE) Open Communication Reflection (5 min)</p>	<p>Online Safety and Digital Citizenship: K-2.5. Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: (A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment; (B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws; and (C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.</p>
Keyboarding Weeks 4-6	<p>Week 4: LCOM (AE) Animal Story (45 min)</p> <p>Week 5: Using teacher-selected applications, students create visual map of their favorite things from Kindergarten</p>	<p>Keyboarding: K-2.1. Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to: (C) explore virtual environments, simulations, models, and programming languages to enhance learning; K-2.6. Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to: (C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files; (D) use a variety of input, output, and storage devices; (E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten-Grade 2 learning; (F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning; and</p>



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2021-22 Scope and Sequence Technology Applications – Kindergarten

	<p>Week 6: Using teacher-selected applications, students create visual map of Summer Adventures</p>				
Vocabulary					
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
balance device	Internet safety website online Home button computer computer lab	communication illegal secrets	Illustrating Computer Keyboard Reading	(teacher generated)	(teacher generated)

