

LIFETIME LIBRARY SKILLS MATRIX

Emphasized and Integrated Skills for Lifetime Library Lessons:

Math 1
Math 2
Math 3
Pre-algebra
Reading 1
Reading 2
Writing

The skills presented in the Lifetime Library lessons are listed in the following tables. For example: the skill *Add fractions* is emphasized in Math 3, Lesson 1 and is an integrated skill in Lessons 2 – 6. An emphasized skill is one of the main instructional topics of the lesson. An integrated skill is used in the lesson but is not the primary focus.

Math 3	Skill	Lessons									
		1	2	3	4	5	6	7	8	9	10
	Interpret the number line	●	●	●	◆	◆	◆				
	Interpret fractions	●	◆	◆	◆	◆	◆				
	Identify rational numbers	●	◆	◆	◆	◆	◆				
	Add fractions	●	◆	◆	◆	◆	◆				
	Find common denominator	●	◆	◆	◆	◆	◆				

● Emphasized Skill

◆ Integrated Skill

Math 1	Lessons									
	Skill	1	2	3	4	5	6	7	8	9
Select appropriate problem-solving strategies	●	◆	◆	◆	◆	◆	◆	◆	◆	◆
Add whole numbers	◆	●		◆	◆			◆	◆	
Multiply whole numbers	◆		●	◆	◆			◆	◆	
Subtract whole numbers	◆		●	◆	◆			◆	◆	
Divide whole numbers	◆		●	◆	◆			◆	◆	
Solve problems requiring multiple operations				●	◆			◆	◆	
Add and multiply fractions					●	◆				
Subtract and divide fractions					●	◆				
Solve problems with decimal fractions							●			
Express fractions as decimals and vice versa							●			
Estimate to solve real life problems								●		
Use a calculator for basic operations									●	◆
Estimate to check calculator solutions									●	◆
Solve percent problems (tax, tip, and credit)										●

● Emphasized Skill

◆ Integrated Skill

Math 2	Lessons									
	Skill	1	2	3	4	5	6	7	8	9
Select appropriate problem-solving strategies	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Add whole numbers			◆	◆				◆		
Multiply whole numbers				◆				◆		
Subtract whole numbers			◆	◆				◆		
Divide whole numbers				◆				◆		
Solve problems requiring multiple operations					◆	◆			◆	◆
Add and multiply fractions		◆		◆						◆
Subtract and divide fractions		◆		◆						
Solve problems with decimal fractions	◆	◆			◆	◆			◆	◆
Express fractions as decimals and vice versa	◆	◆		◆	◆	◆			◆	◆
Estimate to solve real life problems	◆						◆			
Use a calculator for basic operations	◆						◆			
Estimate to check calculator solutions	◆			◆	◆	◆			◆	◆
Solve monetary estimation problems	●									
Measure and convert quantities using the English System		●								
Measure and convert quantities using the Metric System		●								
Convert English to Metric and vice versa		●								
Add and subtract negative numbers			●							
Interpret points on a coordinate grid system			●				◆			
Solve problems involving time			●							
Calculate perimeters and areas of common plane geometry figures				●	◆					
Calculate volumes of common solid figures					●					
Solve consumer problems by calculating cost per unit							●			
Solve consumer problems involving ratios							●		◆	
Solve consumer problems by recognizing patterns								●	◆	
Solve problems requiring interpretation of graphs								●		
Calculate the mean, median and mode									●	
Draw conclusions about or from sample data									●	
Express probability as a fraction or decimal										●
Calculate probability in games of chance										●

● Emphasized Skill

◆ Integrated Skill

Math 3	Skill	Lessons									
		1	2	3	4	5	6	7	8	9	10
	Interpret the number line	●	●	●	◆	◆	◆				
	Interpret fractions	●	◆	◆	◆	◆	◆				
	Identify rational numbers	●	◆	◆	◆	◆	◆				
	Add fractions	●	◆	◆	◆	◆	◆				
	Find common denominator	●	◆	◆	◆	◆	◆				
	Cross multiply		●	◆	◆	◆	◆				
	Identify missing elements		●	◆	◆	◆	◆				
	Set up general case statement		●	◆	◆	◆	◆				
	Reduce fractions		●	◆	●	◆	◆				
	Find largest factor		●	◆	◆	◆	◆				
	Estimate			●	◆	◆	◆				
	Express improper fractions as mixed numbers		●	◆	◆	◆					
	Add mixed numbers			●	●	◆	◆				
	Subtract mixed numbers			●	●	◆	◆				
	Intrepret Pi				●						
	Multiply fractions					●	◆				
	Perform inverse operations					●	◆				
	Divide fractions					●	◆				
	Divide mixed numbers					●	◆				
	Multiply mixed numbers					●	◆				
	Cancel numbers						●				
	Interpret compound fractions						●				
	Create reciprocals						●				
	Identify decimal fractions							●		◆	◆
	Add decimals							●		◆	◆
	Subtract decimals							●		◆	◆
	Express percents							●		◆	◆
	Multiply decimals							●		◆	◆
	Divide decimals							●		◆	◆
	Identify ratios								●		◆
	Identify proportions								●		◆
	Interpret graphs								●		

● Emphasized Skill

◆ Integrated Skill

Math 3	Lessons										
	Skill	1	2	3	4	5	6	7	8	9	10
Set up general case formula for percent										●	◆
Identify types of percentage problems										●	◆
Interpet tax rates											●
Interpret interest											●
Apply percents in business											●

● Emphasized Skill

◆ Integrated Skill

Pre-algebra Skill	Lessons				
	1	2	3	4	5
Interpret signed numbers	●				
Perform operations with signed numbers	●				
Identify exponents		●			
Calculate square roots		●			
Perform inverse operations		●			
Solve literal equations		●			
Use substitutions to check equations		●			
Identify angle and arcs			●		
Determine line length and polygon area			●		
Use the Pythagorean Theorem			●		
Convert measures with proportion				●	
Determine unit value				●	
Find common measures				●	
Calculate perimeter, area and volume				●	
Use conversion ratios				●	
Utilize the <i>James Plan</i>					●

● Emphasized Skill

◆ Integrated Skill

Lifetime Library Skills Matrix: Reading 1

Skill	Practical Reading Lessons												General Reading Lessons								Literature Lessons							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Locate Information	●	●	◆	◆	◆	◆	●	◆	◆	●	◆	●																
Find information	◆	◆	◆	◆	●	◆	◆	◆	●	◆	◆	◆																
Identify information	◆	◆	◆	◆	◆	◆	●	◆	◆	◆	◆	◆																
Recognize meaning	◆	◆	◆	◆	◆	●	◆	◆	◆	◆	◆	●																
Interpret words	◆	◆	●	●	◆	◆	◆	◆	◆	◆	◆	●																
Interpret statements	◆	◆	●	●	●	●	◆	◆	◆	◆	◆	◆																
Interpret information	●	●		●	◆	◆	●	◆	◆	●	●	●																
Infer information				●																								
Draw inferences							●																					
Determine main point							●																					
Recognize relationships										●																		
Apply information	●	●	●		●	●			●	●	●	●																
Define unfamiliar words													◆	◆	◆	◆	◆	◆	◆	◆	◆							
Interpret statements												●	●	◆	◆	◆	◆	◆	◆	◆	◆							
Interpret information													●	◆	◆	◆	◆	◆	◆	◆	◆							
Compare information													●															
Draw references														●														
Recognize the main idea																												
Recognize points of comparison and contrast																												

● Emphasized Skill ◆ Integrated Skill

Skill	Practical Reading Lessons										General Reading Lessons										Literature Lessons							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Recognize point of view																●												
Rephrase main points																●												
Restate support for the main idea																●												
Restate information																			●									
Apply information													●					●										
Interpret cause-and-effect relationships												●					●											
Interpret relevant or supporting details														●														
Identify details that support interpretation																	●	●										
Distinguish facts from emotional statements																		●										
Define difficult words, terms or symbols																						◆	◆	◆	◆	◆	◆	◆
Identify details about characters																					●		◆			●	◆	◆
Identify details about setting																					●		◆			●	◆	◆
Identify details about plot																					●		◆					
Identify basic characteristics of the narrator																												◆
Identify point of view																						●						◆
Recognize supporting details																							◆	●				◆
Recognize metaphor, simile, and literal comparisons																									●			◆

● Emphasized Skill ◆ Integrated Skill

Skill	Practical Reading Lessons										General Reading Lessons										Literature Lessons																																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38																								
Recognize repetition of words, sounds, and rhyme																																																														
Distinguish between literal and figurative language																																																														
Restate figurative comparisons																																																														
State the main idea of a statement containing figurative language																																																														
Draw inferences from details																																																														
Draw inferences from tone and style																																																														
Infer information about characters																																																														
Infer information about situations																																																														
Infer meaning from figurative comparisons																																																														
Infer relationships among characters																																																														
Infer relationships among situations																																																														
Identify tone, style, and voice																																																														
Compare and contrast characters																																																														
Compare and contrast scenes																																																														
Restate ideas in a scene																																																														
Restate a story																																																														

● Emphasized Skill ◆ Integrated Skill

Reading 2 Skill	Literature					Science					Social Studies					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Identify main idea	●	●	◆	◆	◆	●	●	●	●	●	◆	●	●	●	◆	●
Identify detail	●	◆	◆	◆	◆	◆	●	●	●	●	●	●	◆	◆	◆	◆
Use context clues	●	◆	◆	◆	◆	●	◆	●	●	◆	◆	●	●	◆	●	◆
Interpret figurative language	●	◆	◆					●						●		
Distinguish abstract and concrete	●	◆	◆						●							
Draw inference / conclusion		●	◆	◆		●	●	●	●	●	●	◆	◆	◆	◆	◆
Identify emphasis		●	◆	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Summarize meaning		●				◆	◆	◆	●	●	◆	◆	●	●	●	●
Analyze writer's motive		●	◆													●
Analyze use of humor		●														
Analyze fact / opinion		●														
Analyze cause / effect		●				●		●		●	●					
Analyze compare / contrast		●					●								●	
Analyze writer's purpose				●												
Analyze use of characterization				●												
Analyze style and tone				●												●
Identify rhythm and rhyme				●												
Identify alliteration, repetition				●												
Interpret globes					●											
Interpret maps					●											
Interpret graphs					●											
Interpret charts					●											
Interpet tables					●											
Interpet visual materials					●	◆	◆	●	◆	◆	◆					

● Emphasized Skill

◆ Integrated Skill

Writing Skill	Lessons									
	1	2	3	4	5	6	7	8	9	10
Write plural word forms	●									
Add suffixes	●									
Add prefixes	●									
Use the dictionary for spelling	●									
Capitalize nouns		●								
Capitalize sentences and passages		●								
Capitalize relationship words, days, and months		●								
Capitalize books, films, plays, and art		●								
Capitalize special places, events, and objects		●								
Punctuate sentences		●								
Place commas in dates and addresses		●								
Place commas after greetings and introductions		●								
Place commas to separate independent and compound sentences		●								
Identify the roles of nouns and verbs		●								
Recognize proper collective and compound nouns			●							
Select verbs appropriate for past, present, and future events			●							
Use helpers with verbs			●							
Avoid misuses of words mistaken for verbs			●							
Use irregular verbs appropriately			●							
Use helper verbs			●							
Avoid misuse of confusing verbs			●							●
Use correct verb agreement				●						
Identify subjects in sentences with special words				●						
Use correct subject-verb agreement				●						●
Use subject and object pronouns correctly				●						
Use who, which, and that correctly					●					
Use singular and plural pronouns correctly					●					
Use pronouns and contractions correctly					●					
Use modifiers correctly						●				
Use adverbs and adjectives correctly						●				

● Emphasized Skill

◆ Integrated Skill

Writing Skill	Lessons									
	1	2	3	4	5	6	7	8	9	10
Use confusing modifiers correctly					●					
Use comparative modifiers correctly						●				
Use possessives correctly						●				
Avoid run-on sentences							●			●
Correct sentence fragments							●			●
Avoid common sentence construction problems							●			
Create logical sentences							●			●
Write topic sentences								●		●
Organize sentences								●		●
Avoid wordiness and irrelevance								●		
Link sentences in a paragraph								●		
Reduce redundancy									●	●
Select correct homonyms									●	
Write forceful sentences									●	
Avoid common word errors										●

● Emphasized Skill

◆ Integrated Skill