

# Penmanship Scope and Sequence

Developed by Penny Gardner

	Kindergarten	1 <sup>ST</sup> Grade	2 <sup>nd</sup> Grade	3 <sup>rd</sup> Grade	4 <sup>th</sup> Grade	5 <sup>th</sup> Grade	6 <sup>th</sup> Grade
GROSS MOTOR	<p><b>Develop strength and stability in core, shoulders, and other areas:</b> wheelbarrow and animal walks; crawl; chin-ups; swing on monkey bars; tug-of-war; push and pull heavy objects; tummy/floor time; superman; curl into a ball; run, climbing, playing ball; seated push-ups—hands placed on sides of chair, push up on arms so bottom is lifted slightly off chair; balance activities—balance board, curb, walk on a rope, stand on one leg with head and eyes still or shut; gallop, skip when ready; bunny hops and kangaroo jumps, jump rope; hop in patterns (ex: left, left, right); bat a balloon with alternating hands; pour from one cup to another; egg and spoon race; sit-n-spin; roll out dough w/rolling pin; push against wall w/elbows close to body; march, dance to music; cross the midline—flagman, clapping games, patterns, mirroring with and without crossing midline; spray bottle target shooting; streamer dancing. [Wii Fit Plus games and exercises; P.E.]</p>						
FINE MOTOR	<p><b>Develop fine motor skills:</b> scoop w/hands; beeswax or modeling clay (balls, snakes in palm; tiny balls w/fingertips); use scissors, tear paper, scrunch up paper in one hand then other; finger plays; finger painting; spring-type clothespins; isometric finger exercises; pinching tug-of-war; tray activity; use chopsticks, tweezers, baster, eye dropper; lacing toys, lacing beads; scoot a pencil or dowel from one end to other in tripod grip; open jars; work nuts and bolts; wind yarn into ball; knit, string art, crafts, color, art; puzzles, dominoes, pattern blocks, Legos, Etch-a-Sketch . Warm-up/break: rub/shake out hands; squeeze racquet or other small ball; rub hands in circle on carpet or against pants.</p>						
CONCEPTS	Left/right; top/bottom; up/down; short/tall; above, between, in; back/front.						
LETTER and NUMERAL FORMATION WITHOUT WRITING TOOL	<p><b>Learn correct letter/numeral formation without complication of writing tool while standing.</b> Draw letter with two fingers in air, on someone’s back; in sand, paint, on velvet or fine sandpaper or other medium. Repeat with eyes closed. Draw letter with wet sponge on chalkboard. Form letter with pipe-cleaners, modeling clay, wax strings.</p>		<p>Use these activities for students who are not forming letters in an acceptable manner. Continue using these activities with students who need further intervention. Use these activities when students are learning cursive. Continue using these activities if student has illegible cursive.</p>				
PENCIL GRIP	<p><b>Use the correct pencil grip.</b> The dynamic tripod is preferred but a dynamic quadrupod (4-finger grip) is also acceptable. Grasp the pencil as lightly as possible--a relaxed grasp. Use a commercial grip to encourage tripod grasp. Continue to refine the pencil grip, often through age 14. Receive intervention if writing with a hooked wrist or other awkward wrist position. Other grips are immature, awkward, and fatiguing; they will require fine-motor development and explicit/direct instruction to correct. Short pencils, like golf pencils, may be easier for younger children. Practice scribbling with a relaxed tripod grip on the writing tool.</p>						
POSTURE and PAPER POSITION	<p><b>Demonstrate and develop habits of good posture when seated, neutral wrist position, and use of shoulder and upper arm to move across the page.</b> Posture when sitting to write: core strength to sit up straight. Shoulders and neck should be relaxed. Both feet should rest on the floor; make accommodations if the correct size chair is not available. The knees should be at a 90-degree angle or a wedge may be placed on the chair for a slight incline from knees to bottom. The desk top should be 1-2 inches higher than the bend at the elbow. Both hands rest on the desk with wrists straight/neutral. The paper lies on the dominant side of the body’s midline; it should be slanted to follow the forearm of the dominant hand. The non-dominant hand rests on the paper to stabilize it.</p>						

	K	1	2	3	4	5	6
PRE-PRINTING	Apply correct grip, posture, and paper position while experiencing low-stress pre-writing activities: scribble, color, road race, obstacle course, maze, etc. Demonstrate left-to-right progression as write squiggles, mountains, waves, or bumps across paper to music.		Apply correct grip, posture, and paper position while experiencing low-stress pre-writing activities: scribble, color, road race, obstacle course, maze, etc. To prepare for cursive, write a line of mountains, waves, bumps, or loops across paper, in rhythm to music.		If intervention is needed: Apply correct grip, posture, and paper position while experiencing low-stress pre-writing activities: scribble, color, road race, obstacle course, maze, etc. To prepare for cursive, write a line of mountains, waves, bumps, or loops across paper, in rhythm to music.		
WRITING NUMERALS	Write numerals 0 – 9 using acceptable form with no reversals.			Write numerals with increasing fluency while maintaining legibility.			
LOWER-CASE LETTER FORMATION	Print lower case letters (learn in groups of similar letters) using correct form. Improve proportion, spacing, and consistent slant. Evaluate own penmanship, circling pleasing letters.		Increase fluency in printing lower-case letters, exhibit correct form, proportion, spacing, and consistent slant. Evaluate own penmanship and determine how to improve it.		If intervention is needed: Increase fluency in printing lower-case letters, exhibit correct form, proportion, spacing, and consistent slant. Evaluate own penmanship and determine how to improve it.		
NAME IN MANUSCRIPT	Use capital letter that begins name. Print first name using properly formed letters w/ consistent slant.	Print first and last name with increasing fluency and correct form, proportion, spacing, and consistent slant.			Print first and last name in BLOCK letters (all caps) when filling out forms.		
CAPITALS	Print all capital letters using acceptable form.		Use block letters to print first and last name when filling out forms. Use block letters and little or no punctuation when addressing envelopes. Use block letters and pencil for crossword puzzles.				
WRITING WORDS	Correctly space letters to form words, moving upper arm and shoulder as proceed across page. Use larger space between words for visual separation. Apply concepts of proportion, spacing, and consistent slant while demonstrating correct grip, posture, and paper position.		Gain fluency in writing words. Apply concepts of proportion, spacing, and consistent slant while demonstrating correct grip, posture, and paper position.		If intervention is needed: Gain fluency in writing words. Apply concepts of proportion, spacing, and consistent slant while demonstrating correct grip, posture, and paper position.		
COPYWORK FROM MODEL	Produce a legible sentence or passage by copying from a model placed on desk. Apply concepts of proportion, spacing, and consistent slant while demonstrating correct grip, posture, and paper position.			If intervention is needed: Produce a legible sentence or passage by copying from a model placed on desk. Apply concepts of proportion, spacing, and consistent slant while demonstrating correct grip, posture, and paper position.			
COPYWORK FROM TYPESET MATERIAL			Produce a legible passage by converting typeset print to manuscript. Demonstrate correct grip, posture, and paper position; employ proper spacing, proportion, & consistent slant. Proficiency is pre-requisite of learn cursive before 3 <sup>rd</sup> grade.		If intervention is needed: Produce a legible passage by converting typeset print into manuscript. Apply concepts of proportion, spacing, and consistent slant; demonstrate correct grip, posture, and paper position.		

	K	1	2	3	4	5	6
APPLICATION	Apply concepts learned during penmanship in all areas of school and life to produce legible documents in manuscript handwriting.						
LOWER-CASE CURSIVE ALPHABET			Evaluate readiness for cursive by demonstrating proficiency in converting typeset print to manuscript. If proficient and fluent, follow 3 <sup>rd</sup> grade scope, if desired.	Write individual lower-case letters in cursive using correct form and consistent slant; demonstrate correct grip, posture, and paper position. Increase fluency. Evaluate own penmanship and determine how to improve it.	Review individual lower-case letters in cursive using correct form and consistent slant, while demonstrating correct grip, posture, and paper position. Increase fluency. Evaluate own penmanship and determine how to improve it.	If intervention is needed, individual lower-case letters in cursive using correct form. Apply concepts of proportion, spacing, and consistent slant, while demonstrating correct grip, posture, and paper position. Increase fluency in writing cursive. Evaluate own penmanship and determine how to improve it.	
UPPER-CASE CURSIVE ALPHABET				Write upper-case cursive letters using correct form and consistent slant, while demonstrating correct grip, posture, and paper position. Increase fluency.	If intervention is needed: Increase fluency in writing cursive upper-case letters, exhibit correct form, proportion, spacing, and consistent slant. Evaluate own penmanship and determine how to improve it.		
CONNECT/JOIN LETTERS				Correctly join or connect letters in an approved manner. Write legibly and begin to acquire fluency.	Review joins, if intervention is needed. Practice for fluency.		
SIGNATURE				Experiment and gradually develop own unique signature, including given/legal name and last name. (No nicknames.) Increase fluency.			
COPYWORK FROM MODEL IN CURSIVE				Produce a legible sentence or passage by copying from a model in cursive placed on desk. Apply concepts of proportion, spacing, and consistent slant while demonstrating correct grip, posture, and paper position. Increase fluency with cursive handwriting.			
COPYWORK FROM TYPE-SET MATERIAL				Produce a legible sentence or passage by converting typeset material into cursive. Apply concepts of proportion, spacing, and consistent slant while demonstrating correct grip, posture, and paper position. Increase fluency with cursive handwriting.			
APPLICATION				Apply concepts learned during penmanship in all areas of school and life to produce legible documents in cursive handwriting.			

Date \_\_\_\_\_

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Date \_\_\_\_\_

Handwriting practice lines consisting of ten sets of horizontal lines. Each set includes a solid top line, a dashed midline, and a solid bottom line, providing a guide for letter height and placement.

Date \_\_\_\_\_

Handwriting practice lines consisting of 10 rows. Each row features a solid top line, a dashed midline, and a solid bottom line.

Date \_\_\_\_\_

Handwriting practice lines consisting of 18 rows. Each row features a solid top line, a dashed midline, and a solid bottom line.

a b c d e f g h i

j k l m n o p q r

s t u v w x y z

a b c d e f g h i j

k l m n o p q r

s t u v w x y z

## CAPITAL LETTERS

Capital letters are formed in much the same way as in other types of manuscript. Here are more detailed instructions to follow as you write the capital letters (see page 33 of *Italics, Beautiful Handwriting for Children*).

A -- 3 strokes: 1-top to bottom left; 2-top to bottom right; 3-across from left to right to form the cross bar. If child prefers, step 2 and 3 may be reversed, forming the crossbar after the 1st stroke.

B -- 2 strokes: 1-start at top and pull down; 2-starting at top

C -- 1 stroke starting at top right

D -- 2 strokes: 1-start at top and pull down; 2-starting at top

E -- 3 or 4 strokes. 1-starting at top make an L; 2-across top L-R; 3-across middle L-R. Or 4 strokes: 1-start at top and pull down; 2-across top L-R; 3-across middle L-R; 4-across bottom

F -- 3 strokes: 1-start at top and pull down; 2-across top L-R; 3-across middle L-R

G -- 2 strokes: 1-form a cap C; 2-start in middle of the C and go straight across to the right then down to connect to the end of the 1st stroke

H -- 3 strokes. Much like A and has the same acceptable variation in order of the strokes.

I -- 3 strokes: 1-start at top and pull down; 2-across top L-R; 3-across middle L-R

J -- 1 stroke starting at top. Optional: Tiny line across the top as with previous letter.

K -- 2 strokes: 1-start at top and pull down; 2-start at top and to the right, come in to touch the downstroke then slant back out. Try to line up the two end points of the 2nd stroke.

L -- 1 stroke starting at the top.

M -- 2 strokes: 1-start at top and pull down; 2-start at same beginning point and slant down, up, down.

N -- 2 strokes: 1-start at top and pull down; 2-start at same beginning point and slant down, up.

O -- 1 stroke starting at top and moving counterclockwise.

P -- 2 strokes: 1-start at top and pull down; 2-start at same beginning point to finish the letter.

Q -- 2 strokes: 1-start at top and move counterclockwise as in O; 2-small, straight line (or slightly curved) starting at bottom of the O and going down and right (just below the baseline).

R -- 3 strokes: 1-start at top and pull down; 2-start at same beginning point and continue as in P; 3-place pencil on a point near the bottom right of stroke 2 and pull down at a slant.

S -- 1 stroke starting at the top.

T -- 2 strokes: 1-start at top and pull down; 2-start to the left of the downstroke and pull straight across to the right.

U -- 1 stroke; form in the same way as lower case.

V -- 1 stroke starting at top left side.

## CAPITAL LETTERS (cont.)

W -- 1 stroke starting at top left side.

X -- 2 strokes; form in the same way as lower case. 1-top left to bottom right; start 2nd stroke at the bottom and go up toward the right.

Y -- 1 stroke, form in the same way as lower case.

Z -- 1 stroke starting at top left.

It is acceptable to use basic capitals when writing in cursive. Or you can learn the cursive caps (see page 63 of Italics workbook). The same number and order of strokes are used unless noted otherwise in the list below.

G -- This is now a one-stroke letter.

I -- This is now a one-stroke letter.

J -- This is now a one-stroke letter.

N -- This is a 3-stroke letter: 1-go down; 2-start at same beginning point and go down to the right; 3-start to the right, curve then go straight down to meet end of stroke 2.

Q -- Tail is longer and has a curve near the end.

There are several pages of quotes for copy work in [Italics, Beautiful Handwriting for Children](#). But here are some that I've come across since that was published. First here is my own quote:

To write is to crystallize thought. --Penny Gardner

Education is experience, and the essence of experience is self-reliance.  
--Merlyn in *The Once and Future King* by T. H. White, p. 41

Taking charge of your own learning is a part of taking charge of your life, which is the sine qua non in becoming an integrated person. --Warren Bennis

Learning is its own exceeding great reward. --William Hazlitt

One's mind, once stretched by a new idea, never regains its original dimensions.  
--Oliver Wendell Holmes, Sr.

In order to learn, one must change one's mind. --Orson Scott Card

Try to learn something about everything and everything about something.  
--Thomas Henry Huxley

What we have to learn to do, we learn by doing. --Aristotle

One learns by doing the thing; for though you think you know it, you have no certainty until you try. --Sophocles

They know enough who know how to learn. --Henry Brooks Adams

The wisest mind has something yet to learn. --George Santayana

What lies behind us and what lies ahead of us are small matters compared to what lies within us. --Henry David Thoreau

No act of kindness, no matter how small, is ever wasted --Aesop

Kindness is the golden chain by which society is bound together. --Goethe

A day of traveling will bring a basketful of learning. --Vietnamese Proverb

Smooth seas do not make good sailors. --African Proverb

If there is no wind, row. --Roman Proverb

To place yourself under an obligation is to sell your liberty --Roman Proverb

He who restrains his anger overcomes his greatest enemy. --Roman Proverb

Words fly away, the written letters remain. --Roman Proverb

Books are the legacies that a great genius leaves to mankind, which are delivered down from generation to generation, as presents to the posterity of those who are yet unborn.  
--Joseph Addison

If a man's wit be wandering, let him study the mathematics. --Francis Bacon

Do not worry about your difficulties in mathematics, I assure you that mine are greater.  
--Einstein

Pure mathematics is, in its way, the poetry of logical ideas. --Albert Einstein

Mathematics possesses not only truth, but also supreme beauty.  
--Bertrand A. W. Russell

The object of art is to give life a shape. --Jean Anouilh

Every artist dips his brush in his own soul, and paints his own nature into his pictures.  
--Henry Ward Beecher

Earth and sky, woods and fields, lakes and rivers, the mountain and the sea, are excellent schoolmasters, and teach some of us more than we can ever learn from books.  
--Sir John Lubbock

If we succeed in giving the love of learning, the learning itself is sure to follow.  
--Sir John Lubbock

It is better that a crime is left unpunished than that an innocent man is punished.  
--Roman Proverb

Let us endeavor so to live that when we come to die even the undertaker will be sorry.  
--Mark Twain

If you are what you should be, you will set the whole world ablaze. --St. Catherine of Siena

When you can do the common things of life in an uncommon way, you will command the attention of the world. --George Washington Carver

Courage is resistance to fear, mastery of fear--not absence of fear. --Mark Twain

Good fortune is what happens when opportunity meets with planning. --Thomas Edison

The shallower the brook, the more it babbles. --Indonesian Proverb

Dost thou love life? Do not squander time, for that is the stuff life is made of. -  
-Ben Franklin

The best way to cheer yourself up is to try to cheer somebody else up. --Mark Twain

Forgetting trouble is the way to cure it. --Latin Proverb

Well done is better than well said. --Ben Franklin

However long the night, the dawn will break. --African Proverb

The rain falls on every roof. --African Proverb

Wherever man goes to dwell his character goes with him. --African Proverb

Ashes fly back into the face of him who throws them. --African Proverb

His books were the closest things he had to furniture, and he lived in them the way other men live in easy chairs. --author Laura Hillenbrand (said of jockey Red Pollard in *Seabiscuit*)

Some books are to be tasted, others to be swallowed, and some few to be chewed and digested. --Francis Bacon

Keep away from small people who try to belittle your ambitions. Small people always do that, but the really great ones make you feel that you, too, can become great.  
--Mark Twain

Whatever you have spend less. --Samuel Johnson

The marvelous richness of human experience would lose something of rewarding joy if there were no limitations to overcome. The hilltop hour would not be half so wonderful if there were no dark valleys to traverse. --Helen Keller

Be the living expression of God's kindness; kindness in your face, kindness in your eyes, kindness in your smile, kindness in your warm greeting. --Mother Teresa

Science's tools will never prove or disprove God's existence. --Francis Collins, scientist

Always do right. This will gratify some people and astonish the rest. --Mark Twain

Morality comes from a commitment to treat other as we wish to be treated, which follows from the realization that none of us is the sole occupant of the universe.  
--Steven Pinker, Harvard

PROVERBS in English then in Latin:

Learning is a kind of natural food for the mind. *Doctrina est ingenii naturale quoddam pabulum.* --Cicero

Men learn while they teach. *Homines, dum docent, discunt.*

All wish to be learned, but no one is willing to pay the price. *Nosse velint omnes, mercedem solvere nemo.* --Juvenal

The dice have been cast. *Alea iacta est.* --Julius Caesar

I will either find a way or I will make one. *Aut inveniam viam aut faciam.*

One who has lived well has lived unnoticed. *Bene qui latuit, bene vixit.* --Ovid

Seize the day. *Carpe Diem.* --Horace

I think, therefore I am. *Cogito, ergo sum.* --Descartes

By endurance we conquer. *Fortitudine vincimus.*

Resolutely in deed, gentle in manner. *Fortiter in re, suaviter in modo.*

History is the tutor of life. *Historia est vitae magistra.*

Love conquers all. *Omnia vincit amor.* --Vergil

Truth never perishes. *Veritas numquam perit.* --Seneca

I came, I saw, I conquered. *Veni, vidi, vici!* --Julius Caesar

As long as I breath, I hope. *Dum spiro, spero.* --Ovid

If anyone lacks virtue, he lacks nobility. *Nobilitate caret si quis virtute caret.* --Werner

A man of one book. *Homo unius libri.* --St. Thomas Aquinas

The good life is one inspired by love and guided by knowledge. --Bertrand Russell

Anytime you see a turtle up on top of a fence post, you know he had some help.  
--Alex Haley

Slow and steady wins the race. --Aesop, The Hare and the Tortoise

We think too small, like the frog at the bottom of the well. He thinks the sky is only as big as the top of the well. If he surfaced, he would have an entirely different view.”  
--Mao Tse-Tung

It's never the wrong time to call on Toad. Early or late he's always the same fellow. Always good-tempered, always glad to see you, always sorry when you go!  
--Kenneth Graham

A Nation is not conquered until the hearts of its women are on the ground.  
--Cheyenne Proverb

I like to see a man proud of the place in which he lives. I like to see a man live so that his place will be proud of him. ~Abraham Lincoln

We can't all be Washingtons, but we can all be patriots. ~Charles F. Browne

Where liberty dwells, there is my country. ~Benjamin Franklin

This country will not be a good place for any of us to live in unless we make it a good place for all of us to live in. ~Theodore Roosevelt

America's future will be determined by the home and the school. The child becomes largely what he is taught; hence we must watch what we teach, and how we live.  
--Jane Addams

As we express our gratitude, we must never forget that the highest appreciation is not to utter words, but to live by them. John F. Kennedy

Keep your fears to yourself, but share your courage with others. --Robert Lewis Stevenson

The stars are the jewels of the night and perchance surpass anything which day has to show. --Henry David Thoreau

The stars hang bright above, silent, as if they watched the sleeping earth.  
--Samuel Taylor Coleridge

The Sun, with all those planets revolving around it and dependent upon it, can still ripen a bunch of grapes as if it had nothing else in the Universe to do. --Galileo Galilei

There is no easy way to the stars from the earth. Non est ad astra mollis e terris via.  
--Seneca

We came all this way to explore the moon, and the most important thing is that we discovered the earth. --William Anders, Apollo 8

As we got further and further away, it [the Earth] diminished in size. Finally it shrank to the size of a marble, the most beautiful you can imagine. That beautiful, warm, living object looked so fragile, so delicate, that if you touched it with a finger it would crumble and fall apart. Seeing this has to change a man. --James B. Irwin, Apollo 15

The world itself looks cleaner and so much more beautiful. Maybe we can make it that way...by giving everybody that new perspective from out in space. --Roger B. Chaffee

To see the earth as it truly is, small and blue and beautiful in that eternal silence where it floats, is to see ourselves as riders on the earth together, brothers on that bright loveliness in the eternal cold--brothers who know now they are truly brother.  
--Archibald Mac Leish

The sky is the ultimate art gallery just above us. --Ralph Waldo Emerson

No pessimist ever discovered the secret of the stars, or sailed to an uncharted land, or opened a new doorway for the human spirit. --Helen Keller

Space, says the introduction to the guide, is big. Really big. You just won't believe how vastly, hugely, mind bogglingly big it is. And so on.  
--from The Hitchhiker's Guide to the Galaxy

Let us remember that, as much has been given us, much will be expected from us, and that true homage comes from the heart as well as from the lips, and shows itself in deeds. --Theodore Roosevelt

We can only be said to be alive in those moments when our hearts are conscious of our treasures. --Thornton Wilder

A thankful heart is not only the greatest virtue, but the parent of all the other virtues.  
--Cicero

Nothing is more honorable than a grateful heart. --Seneca

Gratitude is the sign of noble souls. --Aesop

It is better to light a candle than to curse the darkness. --Chinese Proverb

A lovely thing about Christmas is that it's compulsory, like a thunderstorm, and we all go through it together. --Garrison Keillor

"Maybe Christmas," he thought, "doesn't come from a store. Maybe Christmas... perhaps ...means a little bit more." --Dr. Seuss, from *How the Grinch Stole Christmas*

It isn't where you came from, it's where you're going that counts. --Ella Fitzgerald

If you want to lift yourself up, lift up someone else. --Booker T. Washington

When buying a used car, punch the buttons on the radio. If all the stations are rock and roll, there's a good chance the transmission is shot. --Larry Lujack

I find humming is very useful. --Elvis Costello

Problems cannot be solved by the same level of thinking that created them.  
--Albert Einstein

Now I look beyond what I can't do and focus on what I CAN. --Robert M. Hensel

A happy life consists not in the absence, but in the mastery of hardships. --Helen Keller

When we do the best that we can, we never know what miracle is wrought in our life, or in the life of another. --Helen Keller

Be of good cheer. Do not think of today's failures, but of the success that may come tomorrow. You have set yourself a difficult task, but you will succeed if you persevere; and you will find joy in overcoming obstacles. --Helen Keller

Although the world is full of suffering, it is also full of the overcoming of it.  
--Helen Keller

It is a terrible thing to see and have no vision. --Helen Keller

It is our choices...that show what we truly are, far more than our abilities.  
--J. K. Rowling in *Harry Potter and the Chamber of Secrets*

The happiest people don't necessarily have the best of everything; they just make the best of everything they have. --John C. Maxwell

A community that excludes even one of its members is no community at all. –Dan Wilkins

Use what talent you possess: the woods would be very silent if no birds sang except those that sang best. –Henry Van Dyke

Fall seven times; stand up eight. –Japanese proverb

If there is no struggle, there is no progress. –Frederick Douglass

Treat people as though they are what they ought to be and you help them become what they are capable of being. –Goethe

Nonviolence is a powerful and just weapon. It is a weapon unique in history, which cuts without wounding and ennobles the man who wields it. It is a sword that heals.  
–Martin Luther King, Jr.

Never look down on anybody unless you're helping him up. –Jesse Jackson

Math is like love—a simple idea but it can get complicated. --unknown

I never did very well in math—I could never seem to persuade the teacher that I hadn't meant my answers literally. –Calvin Trillin

Pure mathematics is, in its way, the poetry of logical ideas. –Albert Einstein

Arithmetic is where numbers fly like pigeons in and out of your head. –Carl Sandburg

The essence of mathematics is not to make simple things complicated, but to make complicated things simple. –S. Gudder

Go down deep enough into anything and you will find mathematics. –Dean Schlicter

Arithmetic is being able to count up to twenty without taking off your shoes.  
–Mickey Mouse

Either you decide to stay in the shallow end of the pool or you go out in the ocean.  
–Christopher Reeve

Be sure you put your feet in the right place, then stand firm. --Abe Lincoln

A person's a person, no matter how small.--Dr. Suess

## Quotes from artists:

Ansel Adams: "We were in the shadow of the mountains, the light was cool and quiet and no wind was stirring. The aspen trunks were slightly greenish and the leaves were a vibrant yellow."

John Audubon: "A true conservationist is a man who knows that the world is not given by his fathers, but borrowed from his children."  
"Almost every day, instead of going to school, I made for the fields, where I spent my day."  
"As I grew up I was fervently desirous of becoming acquainted with Nature."

Eric Carle: "The hardest part is developing the idea, and that can take years."

Mary Cassatt:  
"I think that if you shake the tree, you ought to be around when the fruit falls to pick it up."  
"I am independent! I can live alone and I love to work." "Americans have a way of thinking work is nothing. Come out and play they say."

Paul Cezanne: "A work of art which did not begin in emotion is not art."  
"Art is a harmony parallel with nature."  
"Genius is the ability to renew one's emotions in daily experience."  
"I could paint for a hundred years, a thousand years without stopping and I would still feel as though I knew nothing."  
"It's so fine and yet so terrible to stand in front of a blank canvas."  
"The painter must enclose himself within his work; he must respond not with words, but with paintings."

Joseph Cornell: "Shadow boxes become poetic theaters or settings wherein are metamorphosed the element of a childhood pastime."

Leonardo da Vinci:  
"A well-spent day brings happy sleep."  
"Art is never finished, only abandoned."  
"I have been impressed with the urgency of doing. Knowing is not enough; we must apply. Being willing is not enough; we must do."  
"...People of accomplishment rarely sat back and let things happen to them. They went out and happened to things."

Jim Davis: "Way down deep, we're all motivated by the same urges. Cats have the courage to live by them."

Tamara de Lempicka: "I live life in the margins of society, and the rules of normal society don't apply to those who live on the fringe."

Edgar Degas: "Art is not what you see, but what you make others see."  
"Only when he no longer knows what he is doing does the painter do good things."

Andre Derain: "I do not innovate. I transmit."  
"The substance of painting is light."

M. C. Escher: "Are you really sure that a floor can't also be a ceiling?"  
"My work is a game, a very serious game."  
"Only those who attempt the absurd will achieve the impossible. I think it's in my basement...let me go upstairs and check."  
"I don't grow up. In me is the small child of my early days."

Antoni Gaudi: "Color in certain places has the great value of making the outlines and structural planes seem more energetic."

Paul Gauguin: "I shut my eyes in order to see."  
"It is the eye of ignorance that assigns a fixed and unchangeable color to every object; beware of this stumbling block."

Grandma Moses: "A primitive artist is an amateur whose work sells." "Life is what we make it, always has been, always will be."  
"I look back on my life like a good day's work, it was done and I am satisfied with it."  
"Painting's not important. The important thing is keeping busy."

Childe Hassam: "Art, to me, is the interpretation of the impression which nature makes upon the eye and brain."

Benjamin Waterhouse Hawkins: "...vast forms and gigantic beasts...called up from the abyss of time and from the depths of the earth."

Winslow Homer: "The sun will not rise or set without my notice, and thanks."  
"The most interesting part of my life is of no concern to the public."  
"The life that I have chosen gives me my full hours of enjoyment."

Edward Hopper: "If you could say it in words there would be no reason to paint."  
"What I wanted to do was to paint sunlight on the side of a house."  
"There is a sort of elation about sunlight on the upper part of a house."  
"No amount of skillful invention can replace the essential element of imagination."

Katsushika Hokusai: "If Heaven had only granted me five more years, I could have become a real painter."

Frida Kahlo: "I paint self portraits because I am so often alone, because I am the person I know best."

"Feet, what do I need you for when I have wings to fly?"

"I never paint dreams or nightmares. I paint my own reality."

Wassily Kandinsky: "The artist must train not only his eye but also his soul."

"There is no must in art because art is free."

"Everything starts from a dot."

Ezra Jack Keats: "Then began an experience that turned my life around—working on a book with a black kid as hero. None of the manuscripts I'd been illustrating featured any black kids—except for token blacks in the background. My book would have him there simply because he should have been there all along. Years before I had cut from a magazine a strip of photos of a little black boy. I often put them on my studio walls before I'd begun to illustrate children's books. I just loved looking at him. This was the child who would be the hero of my book."

Paul Klee: "A line is a dot that went for a walk."

"A drawing is simply a line going for a walk."

"Art does not reproduce what we see; rather, it makes us see."

"He has found his style, when he cannot do otherwise."

"Nature is garrulous to the point of confusion, let the artist be truly taciturn."

Gustav Klimt: "Sometimes I miss out the morning's painting session and instead study my Japanese books in the open."

Dorothea Lange: "One should really use the camera as though tomorrow you'd be stricken blind."

(Lange cont.): "Photography takes an instant out of time, altering life by holding it still."  
"Pick a theme and work it to exhaustion...the subject must be something you truly love or truly hate."

Jacob Lawrence: "When the subject is strong, simplicity is the only way to treat it."  
"I would describe my work as expressionist. The expressionist point of view is stressing your own feelings about something."

Leo Lionni: "I believe that a good children's book should appeal to all people who have not completely lost their original joy and wonder in life. The fact is that I don't make books for children at all. I make them for that part of us, of myself and of my friends, which has never changed, which is still a child."

August Macke: "I am interested in the creation of space through colour contrasts rather than through simple shading of light and dark."

Rene Magritte: "Everything we see hides another thing; we always want to see what is hidden by what we see."  
"Life obliges me to do something, so I paint."

Edouard Manet: "There are no lines in nature, only areas of colour, one against another."

Franz Marc: "Like everything genuine, its inner life guarantees its truth. All works of art created by truthful minds without regard for the world's conventional exterior remain genuine for all times."  
"What appears spectral today will be natural tomorrow."

Henri Matisse: "Creativity takes courage."  
"Cutting into color reminds me of the sculptor's direct carving." "Derive happiness in oneself from a good day's work, from illuminating the fog that surrounds us."  
"There is nothing more difficult for a truly creative painter than to paint a rose, because before he can do so he has first to forget all the roses that were ever painted."

Joan Miro: "I try to apply colors like words that shape poems, like notes that shape music."  
"The works must be conceived with fire in the soul but executed with clinical coolness."

Piet Mondrian: "Intellect confuses intuition."

Claude Monet: "Color is my day-long obsession, joy and torment." "People discuss my art and pretend to understand as if it were necessary to understand, when it's simply necessary to love."  
"I waited for the idea to consolidate, for the grouping and composition of themes to settle themselves in my brain. When I felt I held enough cards I determined to pass to action, and did so."

Berthe Morisot: "Real painters understand with a brush in their hand." "It is important to express oneself...provided the feelings are real and are taken from your own experience."

Archibald Motley: "...The Negro poet portrays our group in poems, the Negro musician portrays our group in jazz, the Negro actor portrays our group. All of these aforementioned portrayals are serious, original interpretations of the Negro. There is nothing borrowed, nothing copied, just an unraveling of the Negro soul. So why should the Negro painter, the Negro sculptor mimic that which the white man is doing, when he has such an enormous colossal

(Motley cont.) field practically all his own; portraying his own people, historically, dramatically, hilariously, but honestly. And who knows the Negro Race, Negro Soul, the Negro Heart, better than himself?"

Edvard Munch: "Some colors reconcile themselves to one another, others just clash."  
"For as long as I can remember I have suffered from a deep feeling of anxiety which I have tried to express in my art." "No longer shall I paint interiors with men reading and women knitting. I will paint living people who breathe and feel and suffer and love."  
"When I paint a person, his enemies always find the portrait a good likeness."

Louise Nevelson: "True strength is delicate."  
"A woman may not hit a ball stronger than a man, but it is different. I prize that difference."  
"I never for one minute questioned what I had to do. I did not think for one minute that I didn't have what I had. It just didn't dawn on me. And so if you know what you have, then you know that there's nobody on earth that can affect you."

Georgia O'Keeffe: "I decided that if I could paint that flower in a huge scale, you could not ignore its beauty."  
"I found I could say things with color and shapes that I couldn't say any other way—things I had no words for."  
"I hate flowers—I paint them because they're cheaper than models and they don't move."  
"I often painted fragments of things because it seemed to make my statement as well as or better than the whole could."  
"I've been absolutely terrified every moment of my life—and I've never let it keep me from doing a single thing I wanted to do."  
"It was all so far away—there was quiet and an untouched feel to the country and I could work as I pleased."

(O'Keeffe cont.) "Nobody sees a flower really; it is so small. We haven't time, and to see takes time—like to have a friend takes time."

"The days you work are the best days."

Maxfield Parrish: "The hard part is how to plan a picture so as to give to others what has happened to you. To render in paint an experience, to suggest the sense of light and color, of air and space."

Bill Peet: "I believe that a good children's book should appeal to all people who have not completely lost their original joy and wonder in life. The fact is that I don't make books for children at all. I make them for that part of us, of myself and of my friends, which has never changed, which is still a child."

"I write about animals because I love to draw them. But, I also put people in my books, lots of people."

"I always begin my stories as experiments – on large yellow tablets – a mixture of writing and sketching."

"I am an author-illustrator of children's books – and yet – I must confess I don't do the books for the kids. When I'm working on a book I'm somewhere else – at the circus – or a rustic old farm – or deep in a forest – with no thought of who might read the book or what age group it would appeal to. I write them so I can illustrate them." "I do recall how I got the ideas for some of my books. Many of them are a result of doodling."

Pablo Picasso: "Art washes away from the soul the dust of everyday life."

"Painting is just another way of keeping a diary."

"I begin with an idea and then it becomes something else."

"Every child is an artist. The problem is how to remain an artist once he grows up."

Camille Pissarro: "Blessed are they who see beautiful things in humble places where other people see nothing." "It is only by drawing often, drawing everything, drawing incessantly, that one fine day you discover to your surprise that you have rendered something in its true character."

Jackson Pollock: "Painting is self-discovery. Every good painter paints what he is."  
"It doesn't make much difference how the paint is put on as long as something has been said. Technique is just a means of arriving at a statement."  
"The painting has a life of its own. I try to let it come through."

Edward Henry Potthast:  
"As are the families of the race or nation, so is its society. If the families are good, the society is likewise good."

Maurice Prendergast: "The love you liberate in your work is the only love you keep."

Arthur Rackham: "For children in their most impressionable years, there is, in fantasy, the highest of stimulating and educational powers."

Christopher Raschka: "My goal is to create a book where the entire book—text, pictures, shape of book—work together to create the theme. The placement of images and text on the page is crucial for me."

Robert Rauschenberg: "You can't make either life or art, you have to work in the hole in between, which is undefined. That's what makes the adventure of painting." "I don't think of myself as making art. I do what I do because I want to, because painting is the best way I've found to get along with myself."

Odilon Redon: "My drawings inspire, and are not to be defined. They place us, as does music, in the ambiguous realm of the undetermined."  
"While I recognize the necessity for a basis of observed reality... true art lies in a reality that is felt."

Rijn van Rembrandt: "Choose only one master - - Nature." "The deepest and most lifelike emotion has been expressed, and that's the reason they have taken so long to execute."

Pierre-Auguste Renoir: "Shall I tell you what I think are the two qualities of a work of art? First, it must be the indescribable, and second, it must be inimitable."  
"The pain passes, but the beauty remains."

Faith Ringgold: "When they're looking at my work, they're looking at a painting and they're able to accept it better because it is also a quilt."

Diego Rivera: "Every good composition is above all a work of abstraction. All good painters know this. But the painter cannot dispense with subjects altogether without his work suffering impoverishment."

Norman Rockwell: "The secret to so many artists living so long is that every painting is a new adventure. So, you see, they're always looking ahead to something new and exciting. The secret is not to look back."  
"I'll never have enough time to paint all the pictures I'd like to."

"Some folks think I painted Lincoln from life, but I haven't been around that long. Not quite."

Auguste Rodin: "I choose a block of marble and chop off whatever I don't need."  
"I invent nothing, I rediscover."

(Rodin cont.) "Nothing is a waste of time if you use the experience wisely."

"To the artist there is never anything ugly in nature."

Charles M. Russell: "I ain't no historian but I happen to savvy this incident."

"The West is dead... you may lose a sweetheart but you won't forget her."

John Singer Sargent: "You can't do sketches enough. Sketch everything and keep your curiosity fresh."

"Every time I paint a portrait I lose a friend."

Brian Selznick: "I've always loved children's books -- it's not that I didn't like them, I just didn't think I wanted to do that. But then I suddenly realized I did..."

Maurice Sendak: "You cannot write for children. They're much too complicated. You can only write books that are of interest to them." "I have been doodling with ink and watercolor on paper all my life. It's my way of stirring up my imagination to see what I find hidden in my head. I call the results dream pictures, fantasy sketches, and even brain-sharpening exercises."

Georges Seurat: "Originality depends only on the character of the drawing and the vision peculiar to each artist." "Some say they see poetry in my paintings; I see only science." "Painting is the art of hollowing a surface."

Theodore Clement Steele: "It is light that gives mystery to shadow, vibration to atmosphere, and makes all the color notes sing together in harmony."

John Steptoe: "You will reach the far-off land if you keep hope alive within you."

James Tissot: "It is imagination that inflames the passions by painting in a fascinating or terrible fashion an object which impresses us."

Henri de Toulouse-Lautrec: "I have tried to do what is true and not ideal."

"I paint things as they are. I don't comment."

J. M. W. Turner: "There's a sketch at every turn." "If I could find anything blacker than black, I'd use it."

Chris van Allsburg: "I have lots of ideas. The problem for me has always been which one to do."

"At first, I see pictures of a story in my mind. Then creating the story comes from asking questions of myself. I guess you might call it the 'what if - what then' approach to writing and illustration."

"The idea of the extraordinary happening in the context of the ordinary is what's fascinating to me."

Vincent van Gogh: "For my part I know nothing with any certainty, but the sight of the stars makes me dream." "What would life be if we had no courage to attempt anything?"

"I feel that there is nothing more truly artistic than to love people."

"The way to know life is to love many things."

"I wish they would only take me as I am."

"There may be a great fire in our soul, yet no one ever comes to warm himself at it, and the passers-by see only a wisp of smoke."

"If you hear a voice within you saying, 'You are not a painter,' then by all means paint... and that voice will be silenced."

(van Gogh cont.) "Great things are not done by impulse, but by a series of small things brought together."

"I dream of painting and then I paint my dream."

Andy Warhol: "They say that time changes things, but you actually have to change them yourself."

"I think having land and not ruining it is the most beautiful art that anybody could ever want to own."

"An artist is somebody who produces things that people don't need to have."

Benjamin West: "A kiss from my mother made me a painter."

James Abbott McNeill Whistler: "It takes a long time for a man to look like his portrait."

"An artist is not paid for his labor but for his vision."

"You shouldn't say it is not good. You should say, you do not like it; and then, you know, you're perfectly safe."

Grant Wood: "All the good ideas I ever had came to me while I was milking a cow."  
"I had to go to France to appreciate Iowa."

Frank Lloyd Wright: "Simplicity and repose are the qualities that measure the true value of any work of art."

"I know the price of success: dedication, hard work, and an unremitting devotion to the things you want to see happen." "The space within becomes the reality of the building." "Every great architect is - necessarily - a great poet. He must be a great original interpreter of his time, his day, his age."

"No house should ever be on a hill or on anything. It should be of the hill. Belonging to it. Hill and house should live together each the happier for the other."