

ABC's

and

123's

Cursive

ISBN 1-890666-38-6



Organization And Procedure

In addition to background instruction, this book offers two types of pages for use with your student. The **"PRACTICE"** section comes first to minimize scrolling for page selection in PDF By Hand. Use the Table of Contents below to quickly find the page number for a practice page. [The directory tree opens for page selection when you click on the plus sign.](#)

Print the **"LEARN"** page to teach the movements. Teach the child how to hold the page in writing position. Show the start point, stroke movements and teach the action words. Teach the child how to finger-trace the model while chanting the words to learn where to start, which way to go and how to move with the rhythm of the vocal. Repeat the finger-trace exercise until the child is moving smoothly with the voice.

Move to your tablet for Write & Say practice. Fluency is smoothness. When smooth movements are learned, execution at various speeds becomes possible. As language and spelling skills grow application speed can increase. The limiting factor is control. Regular, rhythmic practice will allow improvement of control for better legibility later on.

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Instructions And Background

The Objectives

1. Provide regular opportunity to improve attention span and movement control skills
2. Provide regular opportunity to develop skills for holding the pencil, good sitting posture and holding the paper for writing
3. Teach precisely the **movement process** needed to create the letters of the alphabet
4. Provide regular opportunity to practice rhythmic movement for each letterform, joined pairs or sets of each form, and as letters are learned, joined combinations for words.

General Information

Please remember that we are working to teach, improve and automate a movement process for each symbol in the alphabet and as they are learned, combinations of letters to create letter groups fluently. Correct “process” is more important than product accuracy in the beginning.

The child needs to learn:

1. Where to start
2. Which way to go
3. How to make each movement (move smoothly with the voice)

Teaching The Process

Because we will include movement as a goal from the start, position skills play a very important role. Cursive letters are created by sliding the pencil sideways. Therefore, sitting posture, pencil grip and learning to hold the paper in writing position are critical. The writing hand needs to be below the image area or it will block lateral movements that are executed with arm, wrist and fingers in coordinated movements that will produce the curved traces. The movement challenge will help with position skill training by presenting a need for good position.

Use the lateral movement exercises to allow the child to master good position skills before introducing the basic strokes and letters.

Use the movement model to show the start and end point of each stroke needed. The Color/Rhythm models will make the learning easier. Lowercase cursive letters can be formed with rhythmic, pulsing movement combinations, slide-out-to-the-right, slide-back-to-the-left. These movement combinations produce shapes we call “Basic Strokes.” Three movements are needed to create four basic strokes.



Color/rhythm models for letters show the first basic stroke in green, the second (when needed) in brown and the third (when needed) in red. Note the three “round top” letters below.



The shape names are the grammar of action used when developing the patterns for writing the letters. These names refer to the tops of the letters which are the primary source of legibility. Note that the word is legible when the bottoms of the letters are hidden.



A few lowercase letters present some “exceptions” to this basic movement plan because they have odd tops. The shapes required for these few letters will require more practice because of the odd rhythms the movements demand.



These pages are designed for a learning activity called “finger-tracing.” Finger-tracing will allow the child to record in muscle memory, gross movement sequence and rhythm information.

Demonstrate First (Illustrate and Describe)

- Touch your pointer finger to the start point.
- Say the “action words” aloud as you trace the strokes with your finger.
- Repeat the demonstration several times. Our Animated Letter Cards are useful for this demonstration also.

Make the Voice-To-Movement Connection - Air Writing

- Teach the child how to move with voice by writing in the air. The Animated Letter Card is a great tool for this activity. Repeat until everyone is moving together.

Now help the child to do the finger-tracing.

- Teach the child how to rotate the page into “writing position” and hold the page at the top with the paper-holding hand so that the writing arm can be under the image.
- Direct the finger-trace activity by chanting the words aloud with the pupil.
- Repeat the finger-trace several times. Chant slowly at first, and increase the rate a little at a time as the child establishes some rhythm. For multi-stroke letters, pace the chant to emphasize the control points within the form.

Write & Say

- Replace the movement-model page with a sheet of unlined paper or move to the chalkboard. Please remember we are working to develop gross motor patterns.
- Emphasize that the goal is to move the pencil or chalk with voice as the action words are chanted. We will write four with our voice and pick the one we like best.

- Direct the activity by chanting along with the child. To start the action and keep it going, you can use the commands, “Touch. Say it.”
- If the result is too far removed from the goal, repeat the finger-trace step and then try again. If the initial product is recognizable, choose the best and try again to make four more that are just as good or better.

Note:

All of us begin to guide the pencil with the eyes. We call this “drawing movement.” When the voice shuts off, the child is drawing instead of writing. Drawing movement is visually guided and cannot be rhythmic. The child is unable to chant as a result.

The initial hurdle is to elicit writing movement. It can be rhythmic which allows the chant. When the child has trouble vocalizing as the pencil moves, repeat the air-writing and finger-trace steps. Move back to the paper and try again.

It is often helpful to try with the eyes closed. The voice will work, but the image produced may not be very accurate. The muscle memory needs practice to learn how to “drive” the pencil. When the pencil is moving with voice to create the strokes, you know that the muscle memory has internalized the movements. He or she will no longer need to look at a model to create an example of the letter on the page. We can now begin to do some critical thinking by using the model to compare for accuracy and to set goals for improved legibility.

Introducing Lines

When the child is able to “Write & Say” fairly consistent iterations of the target letter on unlined paper or the chalkboard, you can introduce the page with models on lines. Repeat the teaching steps above. During the finger-trace exercise, the child will be learning how to use the lines as targets for movements. You can then move to a ruled practice sheet

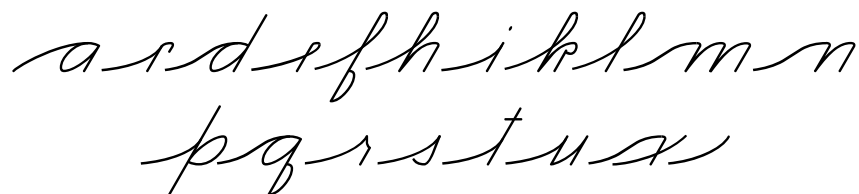
for write & say practice. Expect that this new challenge will produce mixed results at first. The child may not be able to hit the target lines accurately until practice allows control to improve. Please continue to direct practice exercises. Independent practice will usually be drawing movement and practice of old position habits as well.

Writing Size

You will find on the last few pages, several masters for ruled practice paper offering different amounts of space between the lines. As consistency and control are achieved at the “large size,” move to the next smaller ruling to begin the size reduction effort. The large-size ruling won’t be practical for practice of four or five letter words due to the laterality of cursive.

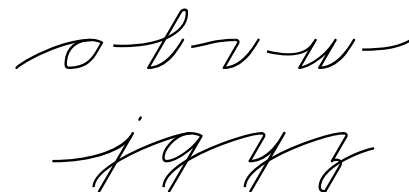
We recommend a focus on mastery of lowercase forms first. In addition, we also recommend a sequence based upon movement and control points. The fluent kind of movement is goal-oriented. The end-point of each letter is emphasized as a control point for the joining stroke that controls form, slant, size and spacing for the next letter in a word.

Eighteen of the lowercase letters end on the baseline when writing a word. We recommend that these letters be mastered first.



Numerous words are possible with these eighteen letters and we recommend moving to word practice as soon as the letters have been developed.

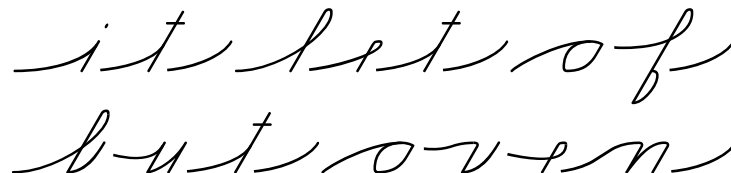
Four letters end above the baseline when writing words and four tail letters end below the baseline. These forms will require more practice and careful process instruction for pupil understanding of the joining control process.



Correlation

Your language/reading program may demand writing far sooner than your students can master the forms or develop control of the joining process. Because this is so often the case, we recommend a correlation technique called “cursive print.”

Since the student builds words one letter at a time at first, the cursive print technique allows independent application of the correct rhythmic sequence and also good joining-control. When the pupil learns how to do this correctly, he or she will simply forget to lift between letters as word patterns are established by directed joining practice activities.



When you see this:

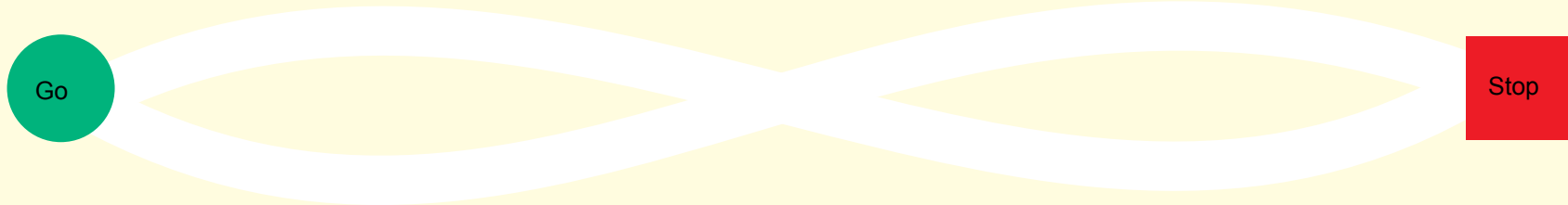


you have identified a correctable misunderstanding that would cause trouble every time the student wanted to use the letter "b" in a word.

The Target Game - Learn To Hold Your Paper In Writing Position

1 Go	1 Stop
2 Go	2 Stop
3 Go	3 Stop
4 Go	4 Stop
5 Go	5 Stop
6 Go	6 Stop

Practice Exercise 2 & 3



Solid green line

Dashed green line

Solid red line

Solid green line

Dashed green line

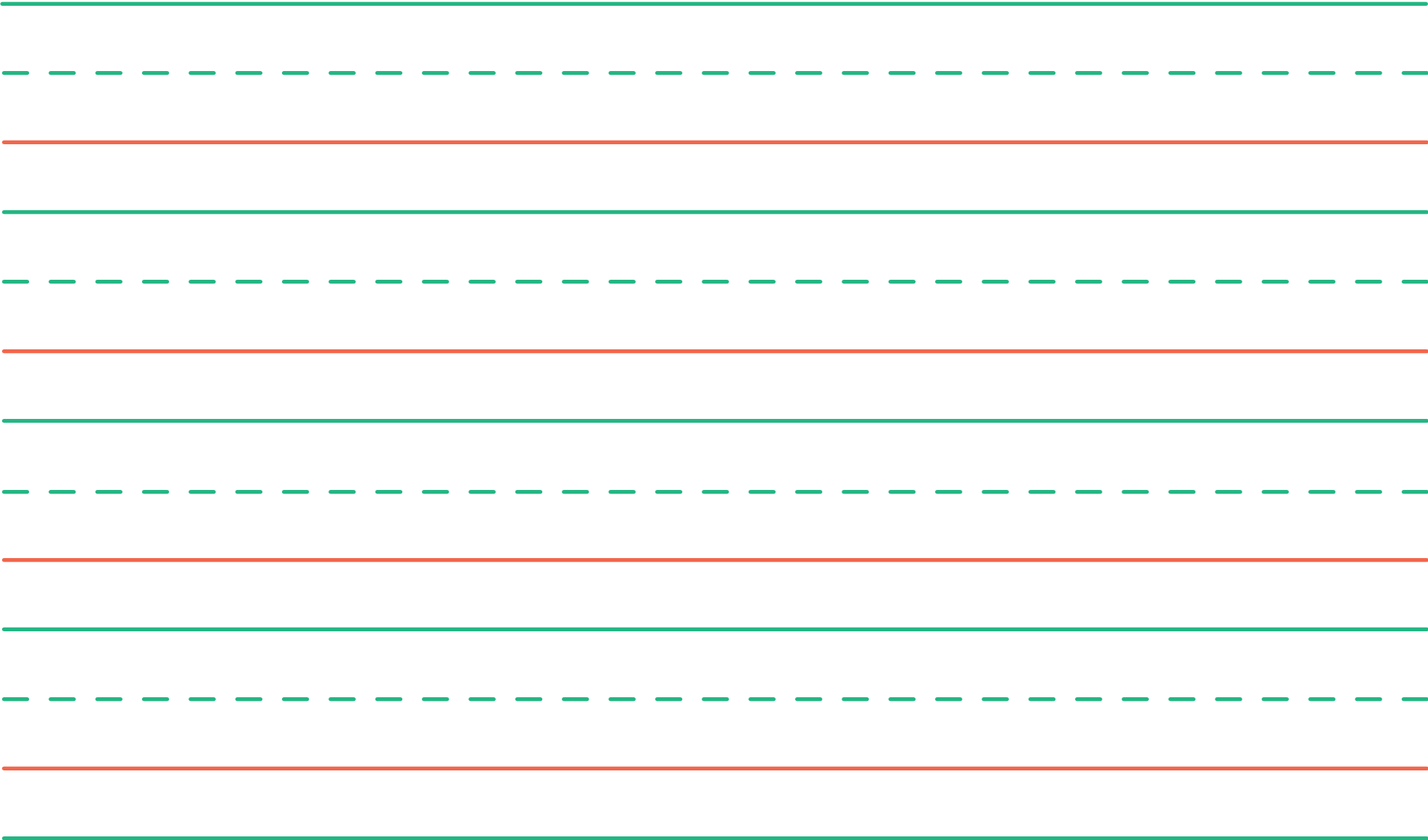
Solid red line

Solid green line

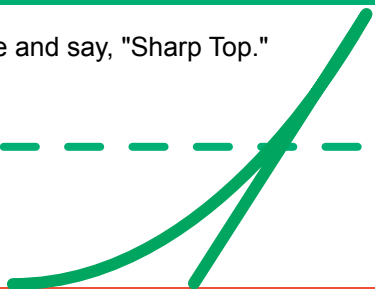
Dashed green line

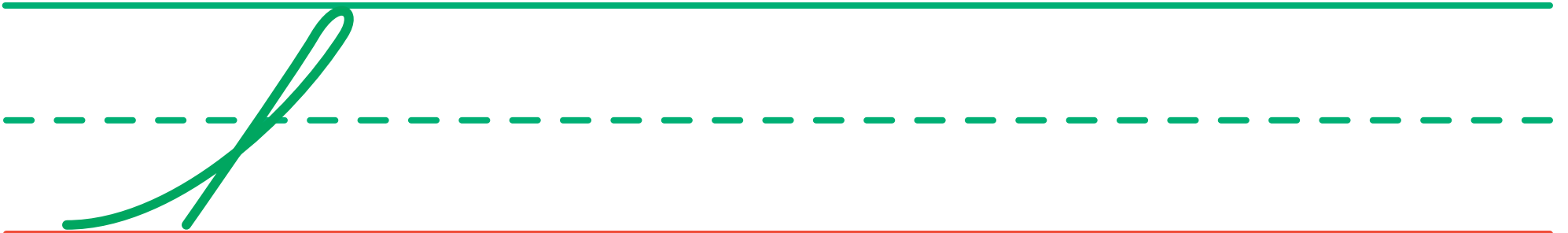
Solid red line

Solid green line

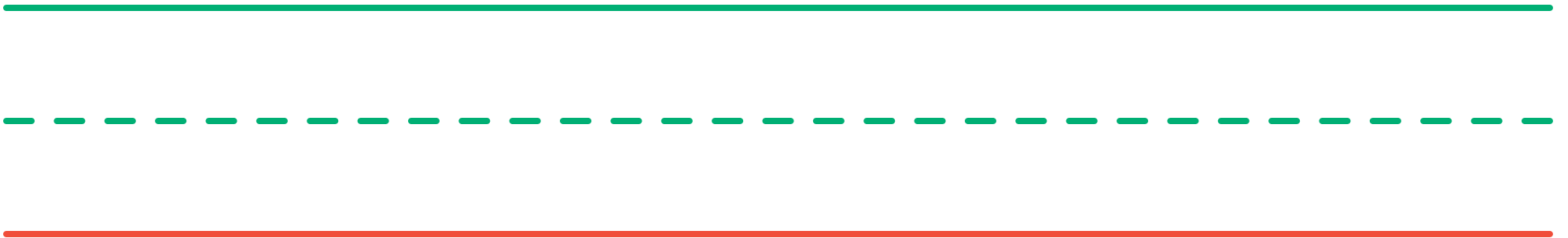
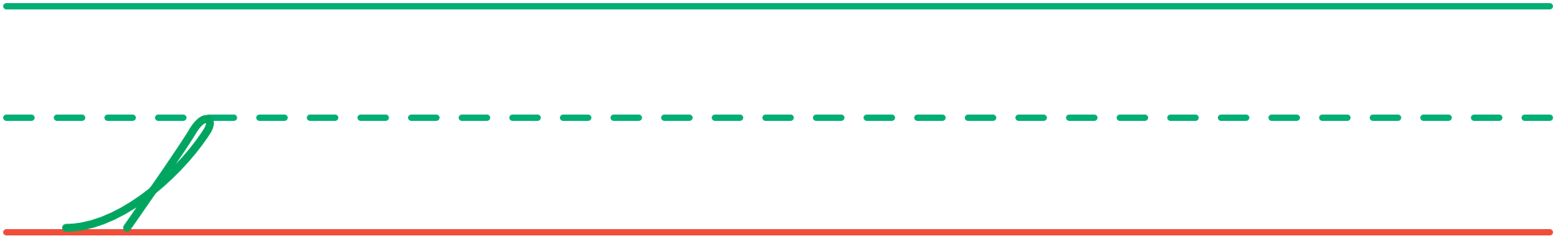


Write and say, "Sharp Top."





Write and Say, "Loop Top."



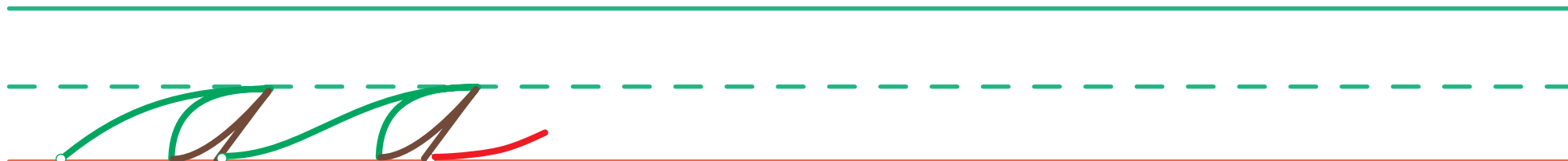
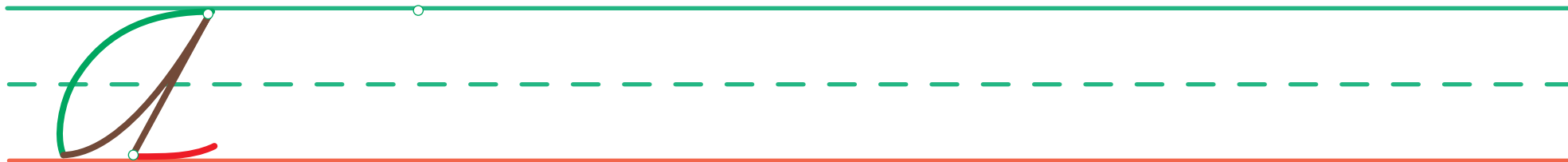
Round Top



Roll Top



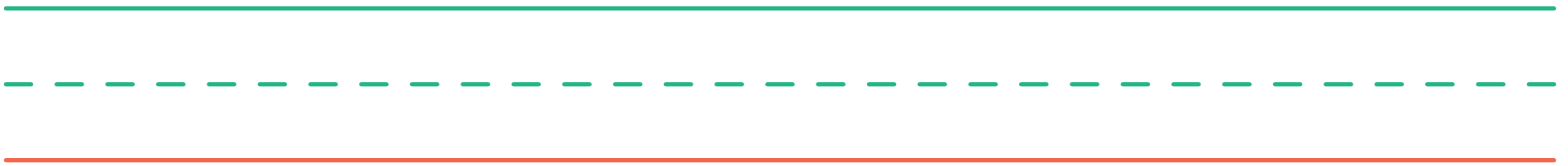
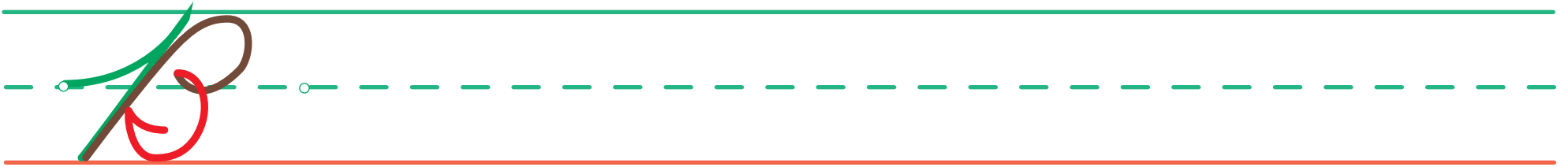
1. Curve Down
 2. Sharp Top
- Finish or Join



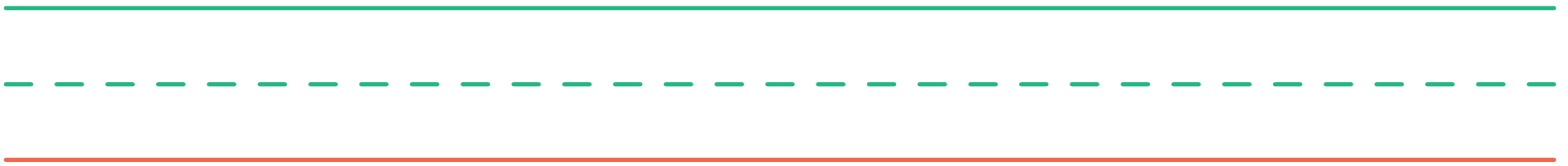
1. Roll Top
 2. Sharp Top
- Space



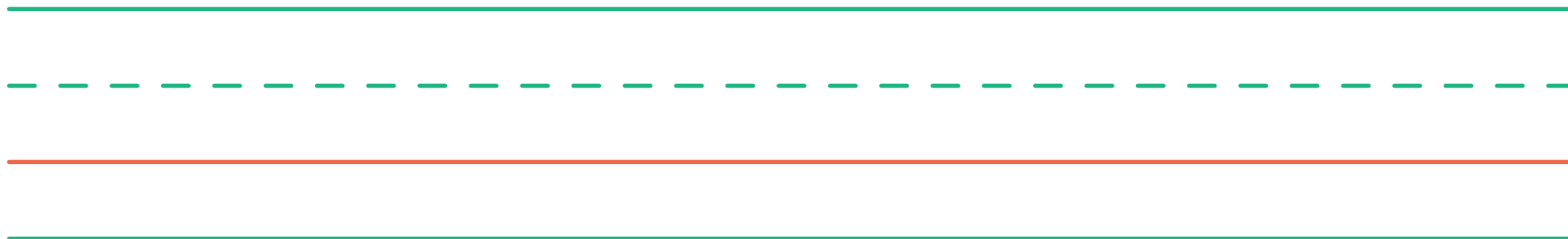
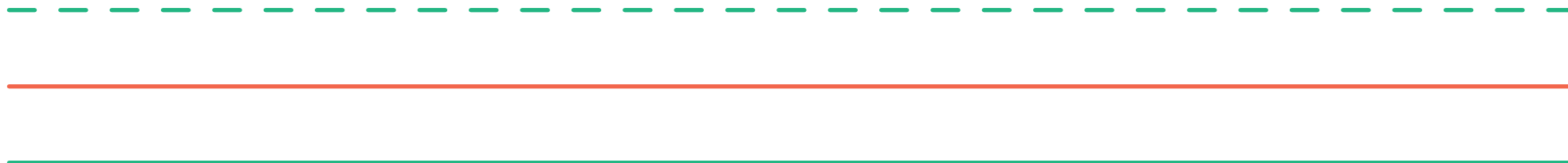
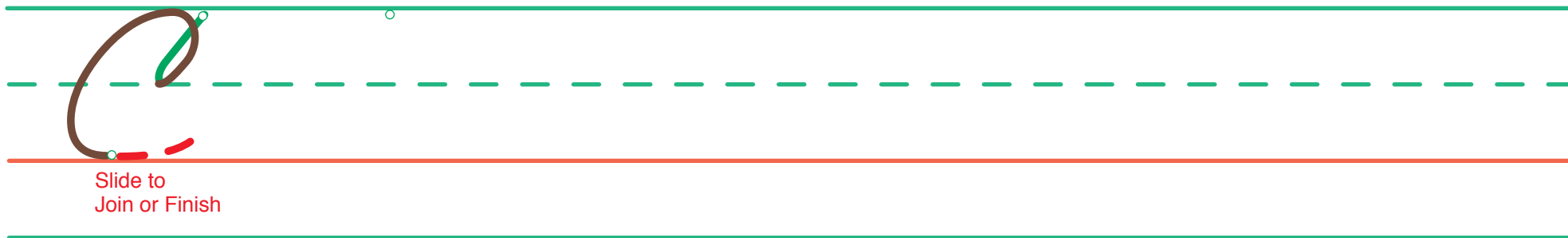
1. Sharp Top
2. Trace Around
3. Loop Around
4. Rock



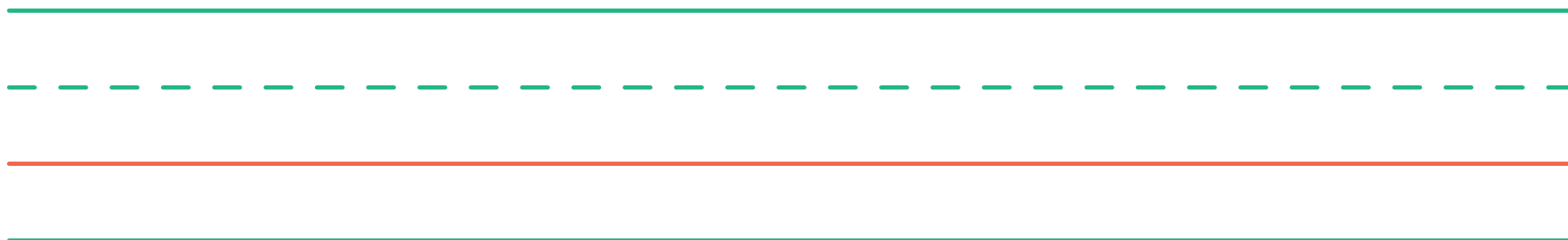
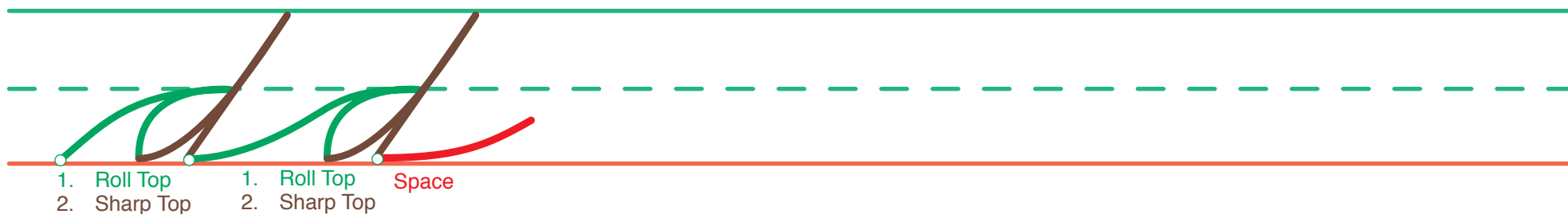
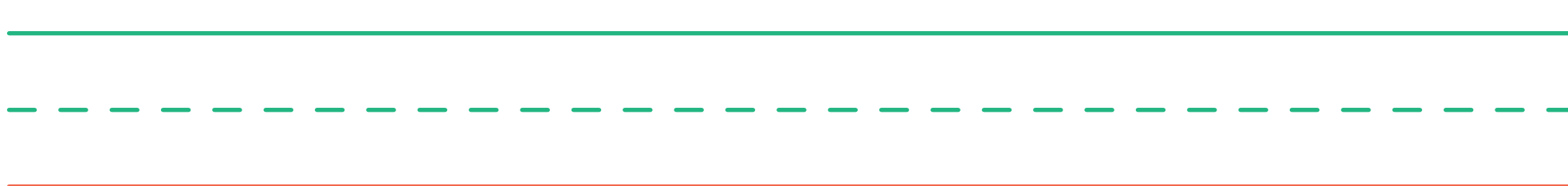
1. Loop Top
2. Sharp Trace
1. Loop Top
2. Sharp Trace
- Space



1. Down
2. Loop Around



1. Twist Down
2. Loop Twist
3. Rock Swing

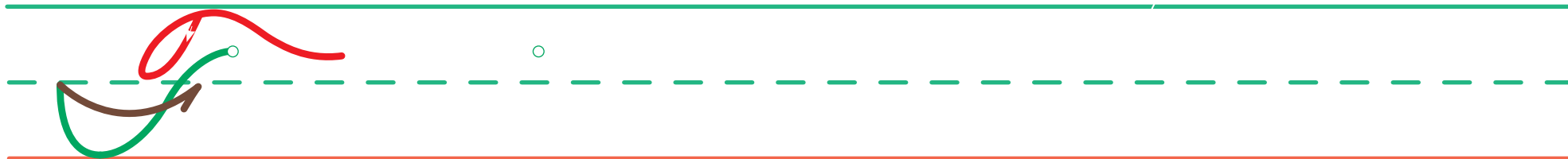


1. Down
2. Loop Around
3. Loop Around

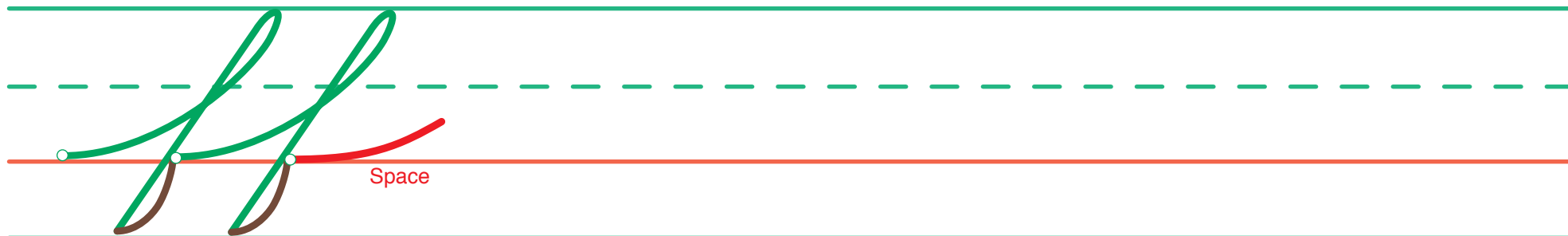
Join or Finish

Loop Top Loop Top Space

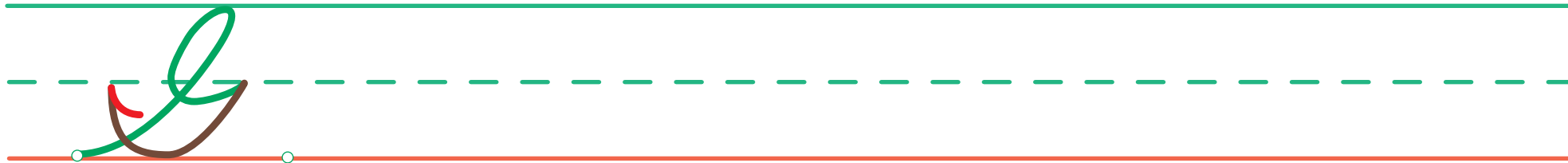
1. Twist Down Rock
2. Rock Hook
3. Loop Twist
- Never Join



1. Loop Tail
2. Rock
1. Loop Tail
2. Rock



1. Rock, Loop Rock
2. Slant Curve
3. Rock



1. Roll Top
2. Sharp Tail

1. Roll Top
2. Sharp Tail
- Roll to Finish





1. Loop Slant
2. Curve Slant
3. Trace Swing

1. Loop Top
2. Round Top

1. Loop Top
2. Round Top

Space



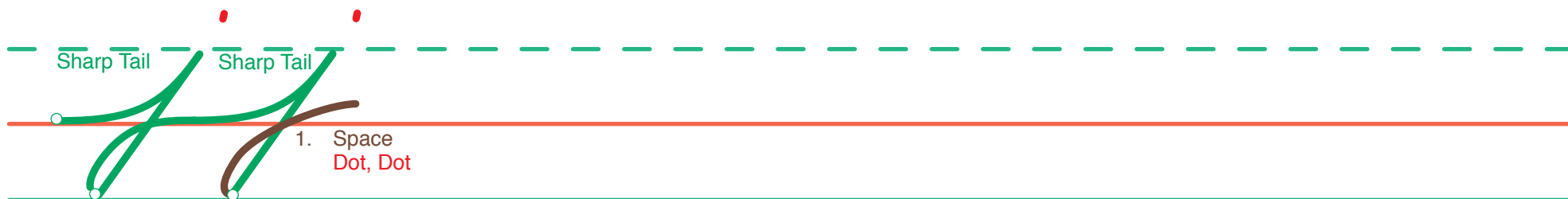
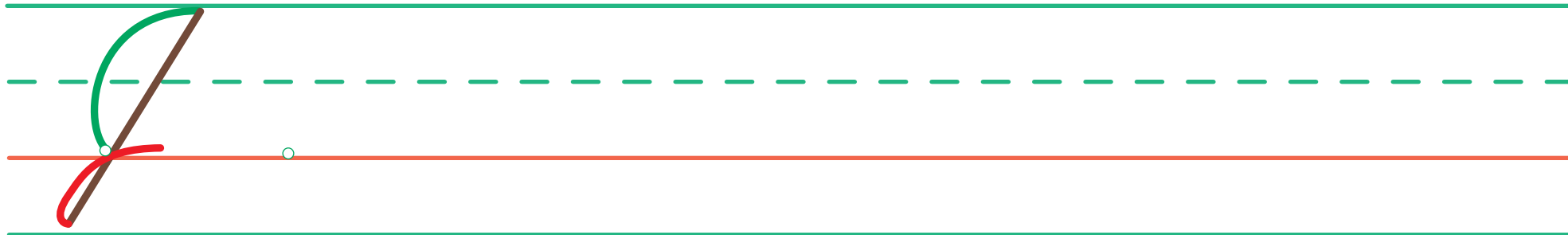
1. Roll Up
2. Curve Down
3. Rock



Sharp Top Sharp Top Space
Dot, Dot

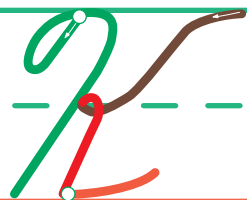


1. Roll Up
 2. Slant Tail
- Finish or Join



1. Space
Dot, Dot

1. Loop Slant
2. Twist Down
3. Loop Slant

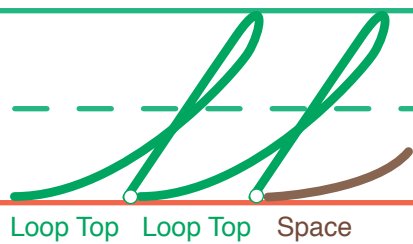
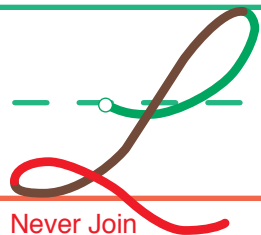


Join or Finish



- | | |
|----------------------|----------------------|
| 1. Loop Top | 1. Loop Top |
| 2. Round-hook, Slant | 2. Round-hook, Slant |
| | Space |

1. Rock
2. Loop Twist
3. Loop Twist



1. Loop Slant
2. Round Top
3. Round Top

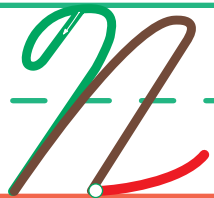


Finish or Join



1. Round Top
2. Round Top
3. Round Top

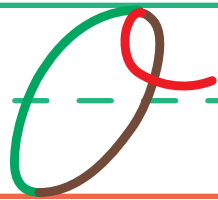
Space with a finish stroke.



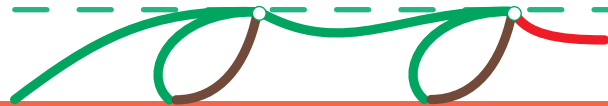
1. Loop Slant
 2. Round Top
- Finish or Join



1. Round Top
 2. Round Top
- Space



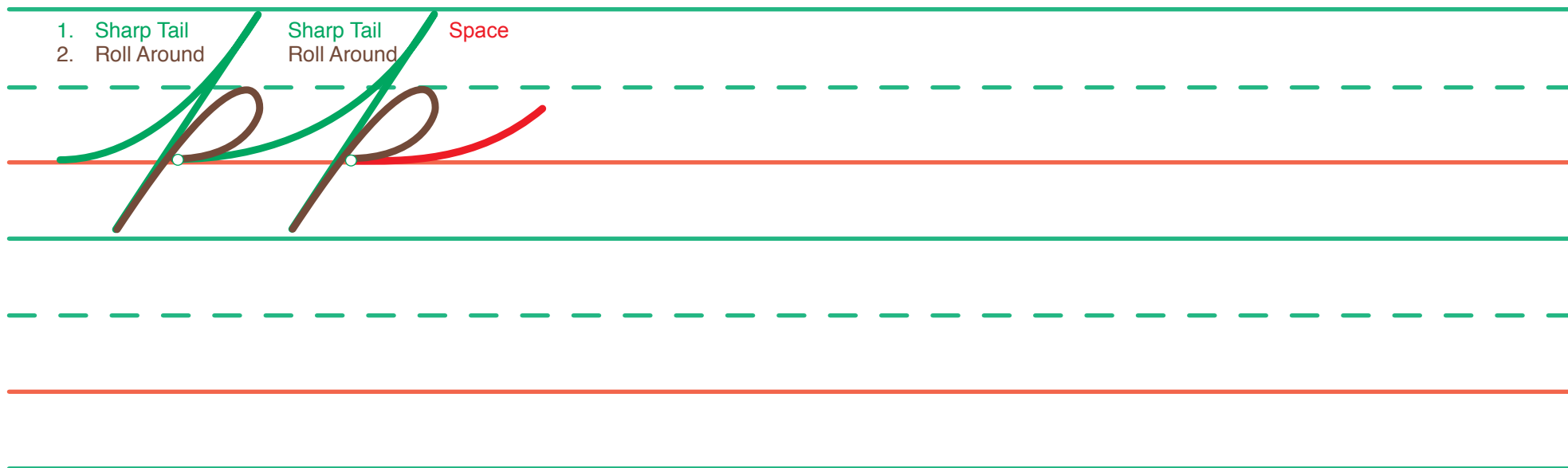
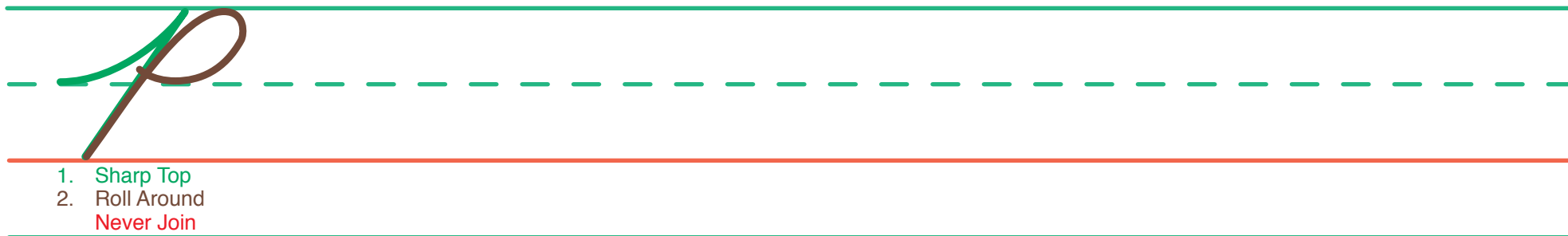
Curve Down, Rock, Swing

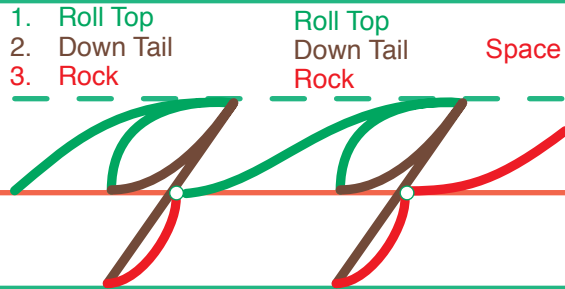
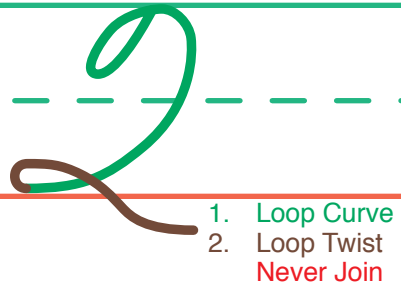


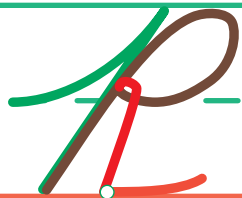
1. Roll Top
2. Rock

1. Roll Top
2. Rock

Space







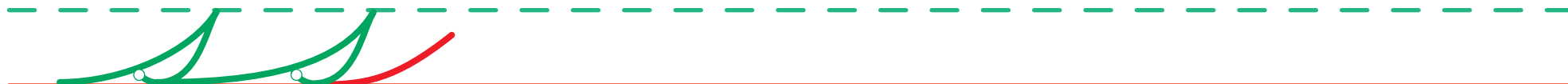
1. Sharp Top
 2. Trace Around
 3. Loop Slant
- Finish or Join



1. Sharp Roof, Slant
1. Sharp Roof, Slant
- Space



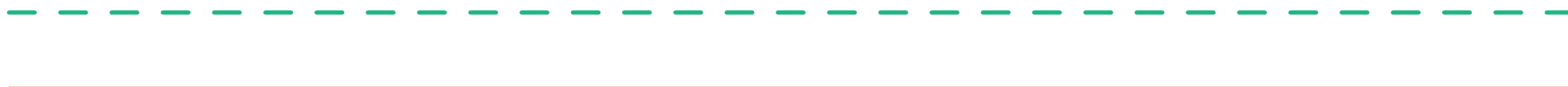
1. Rock
2. Loop Twist
3. Rock

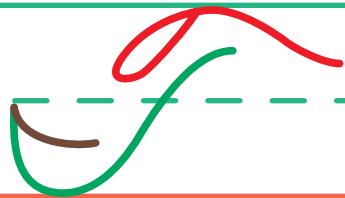


Sharp
Slant, Curve

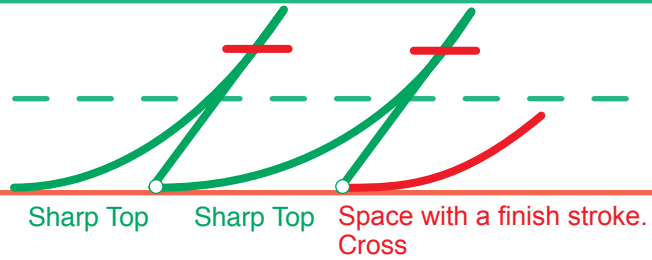
Sharp
Slant, Curve

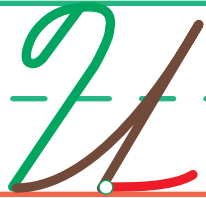
Space





1. Twist Down
2. Rock
3. Loop Twist





1. Loop Slant
 2. Sharp Top
- Join or Finish



Sharp Top
Sharp Top

Sharp Top
Sharp Top

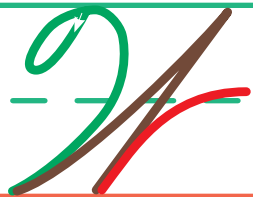
Space



1. Loop Slant
 2. Up Twist
- Never Join



- Round Top
Sharp Trace
- Round Top
Sharp Trace
- Space



1. Loop Curve
2. Sharp Top
3. Roll, Never Join



Sharp Top
Sharp Top
Sharp Trace

Sharp Top
Sharp Top
Sharp Trace

Space



1. Loop Slant
2. Join or Finish
3. Rock to Cross



Round Top Round Top Space with a finish stroke.
Cross



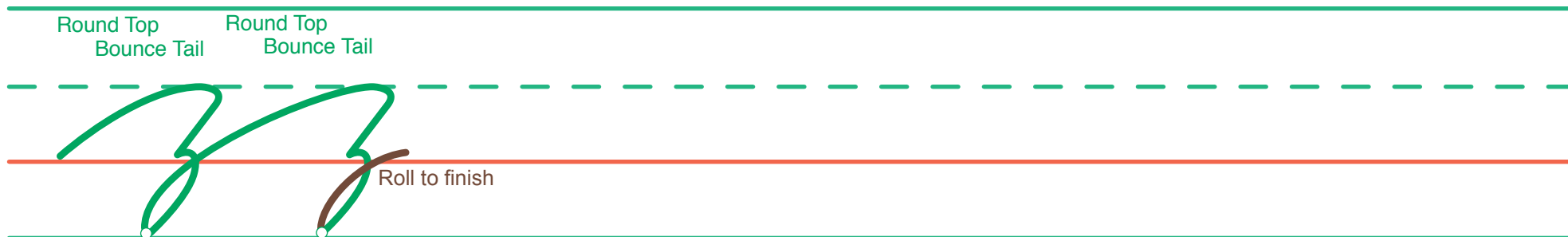
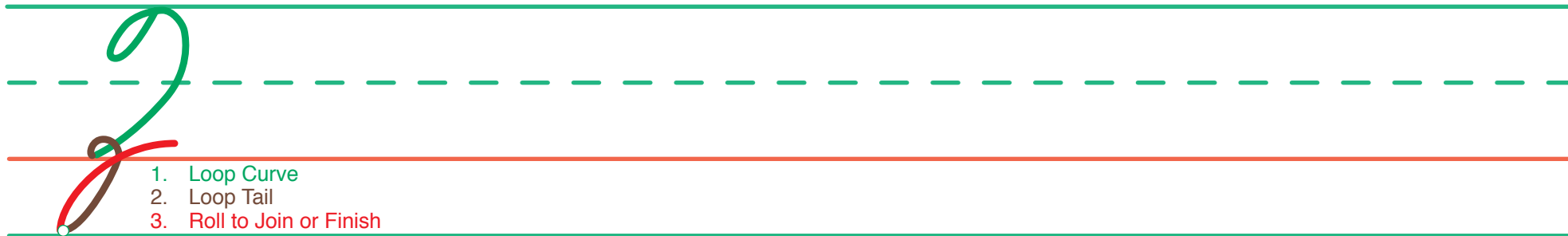
1. Loop Slant
2. Sharp Tail
3. Finish or Join

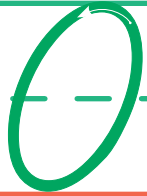
1. Round Top
2. Sharp Tail

1. Round Top
2. Sharp Tail



Roll to finish and space.

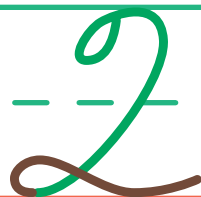




1. Hook Around Close



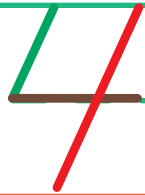
1. Slant Down



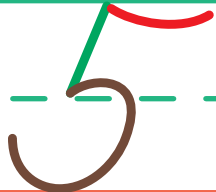
1. Loop Curve
2. Loop Twist



1. Loop Around
2. Loop Around



1. Slant
2. Slide
3. Slant



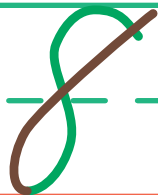
1. Slant
2. Roll Around
3. Rock



1. Curve Down
2. Loop



1. Slant
2. Twist
3. Slant



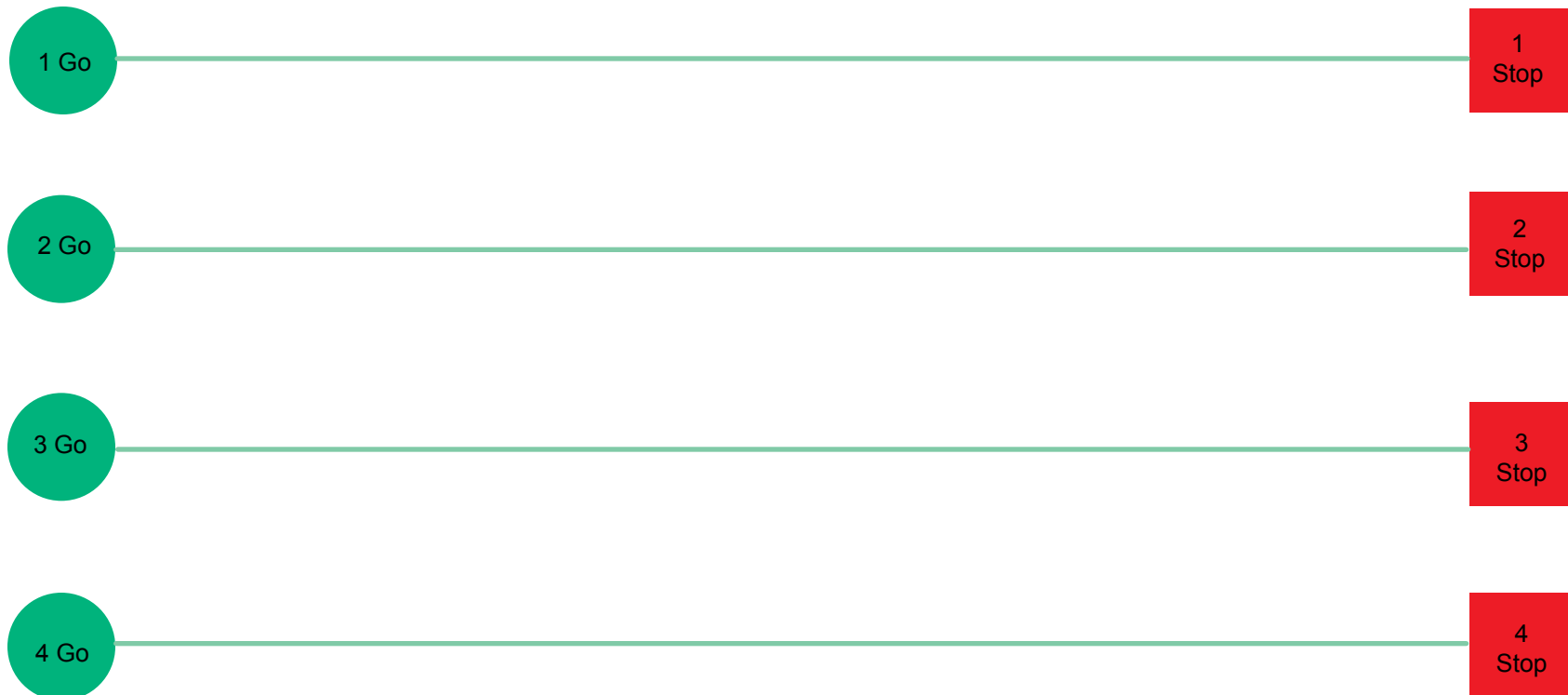
1. Hook Snake
2. Roll Up



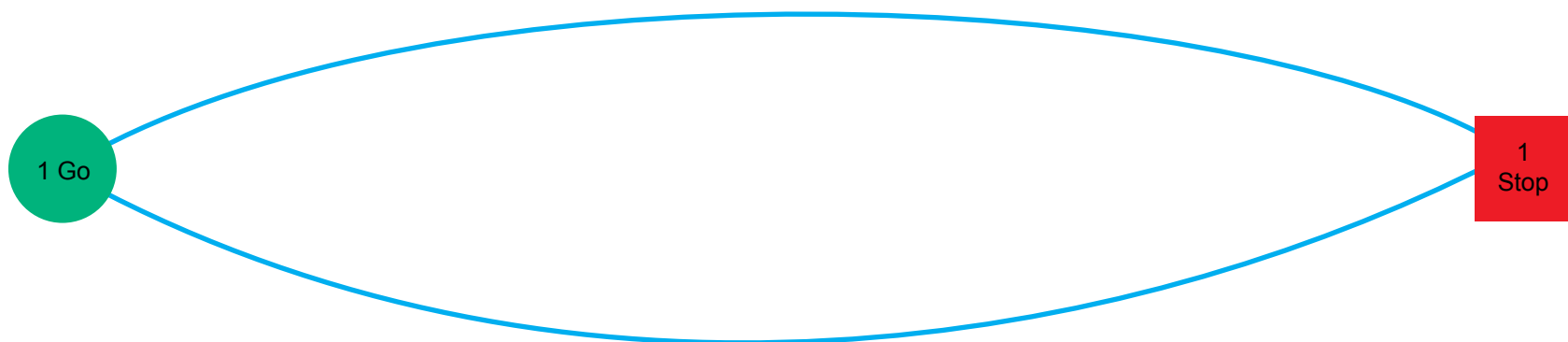
1. Curve Around
2. Slant

Learn how to hold the pencil, paper and arms in good sliding position with this game.

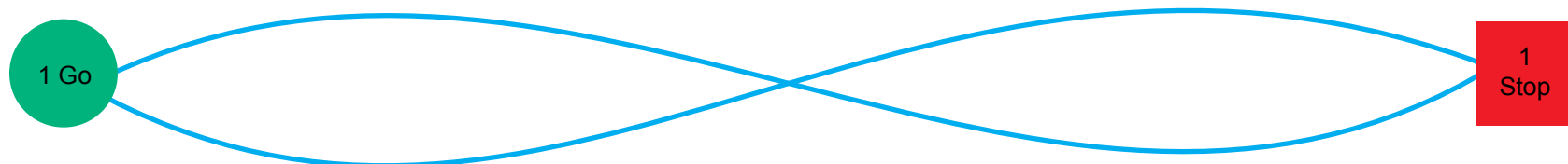
Finger-trace with action words to establish understanding of start point, end point and movement with the voice and the commands. Direct the exercise using a command sequence like, "Touch Go, Look (at the target), Say it." Say, "Slide to the right" as you move. A guide for each movement is provided on this page. The next page does not have the guide. We want the child to produce a trace with the pencil as the words are chanted aloud. The child may not hit the stop box with the movement. One goal is to provide opportunity to learn and practice goal-oriented movement. The challenge to move will create need for good position. It should help you to change poor grip habits also. Control and accuracy of the movement will improve but the child may rarely hit the target. This "Target Game" is fun and the pupils may like to keep score. Expect that it may take some practice to get some voices going. Emphasize that goal.



Use a variation of the target exercise to develop coordination between fingers and arm for creating over-curves and under-curves. Guides for finger-trace training are provided here. The next page is set up for playing the new version of the game. For a grammar of action, use a phrase like, "Roll Over" for rainbows. Try "Rock Under" for the long rockers. As the pupils master the one-direction movement as evidenced by smooth curves, you can extend the activity to include sliding over then back to the beginning spot. Use the rainbow and rocker both directions and then combine; rainbow over, rocker back or rocker over, rainbow back.

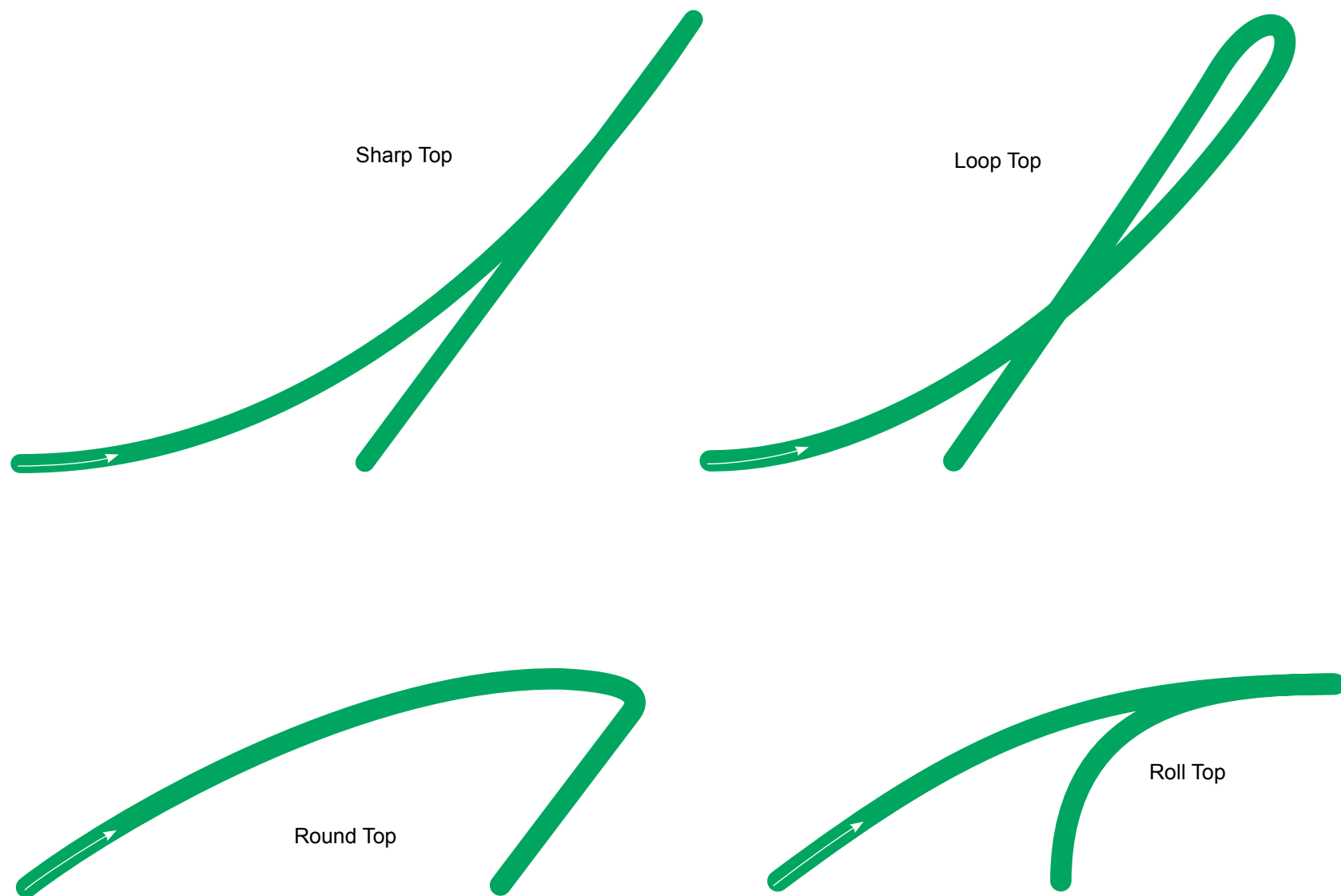


Another variation offers very valuable exercise. The goal is to combine rolls and rocks as the lateral movement is made. Master the left-to-right combination first. Then you can slide over and back to create a big propeller. "Over, under." or "Roll, Rock" can be used as a grammar of action for the movements. The students can execute the movements multiple times on the same sheet. Just keep the voices working so that they do not try to make each new trace precisely on top of the first. Correlate counting as multiple iterations are produced to keep them moving.



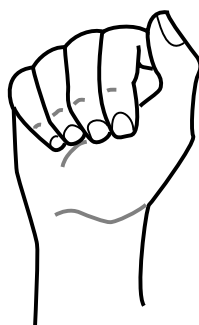
Be sure to emphasize that the exercise is designed for practice of good paper holding and good pencil position. These exercises should be very helpful to develop good paper holding habits and to those who need improve the pencil grip. Work for relaxed sliding movement executed with the voice.

Learn 4 Basic Strokes

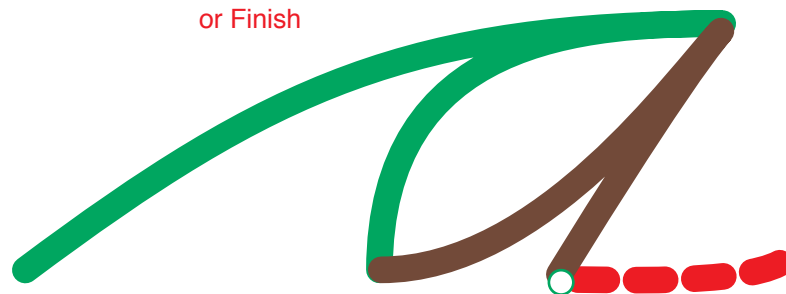


These four relatively simple shapes are the building blocks for all 26 lowercase letters. They can be formed with one set of muscles once the child learns how to slide the beginning stroke sideways far enough to allow the return to travel back to the left. Learning to hold the paper and writing arm in writing position is the first difficult challenge. The paper should be rotated so the writing arm can be under the image area to allow lateral movement.

1. Curve Down
2. Sharp Top
3. Slide to join
Or finish



1. Roll Top
2. Sharp Top
Slide to Join
or Finish



Anne
Anne

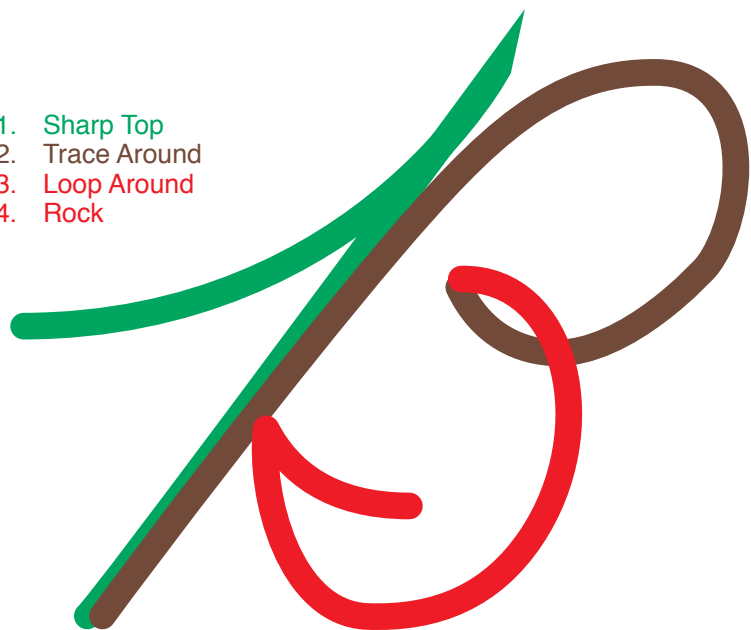


apple
apple

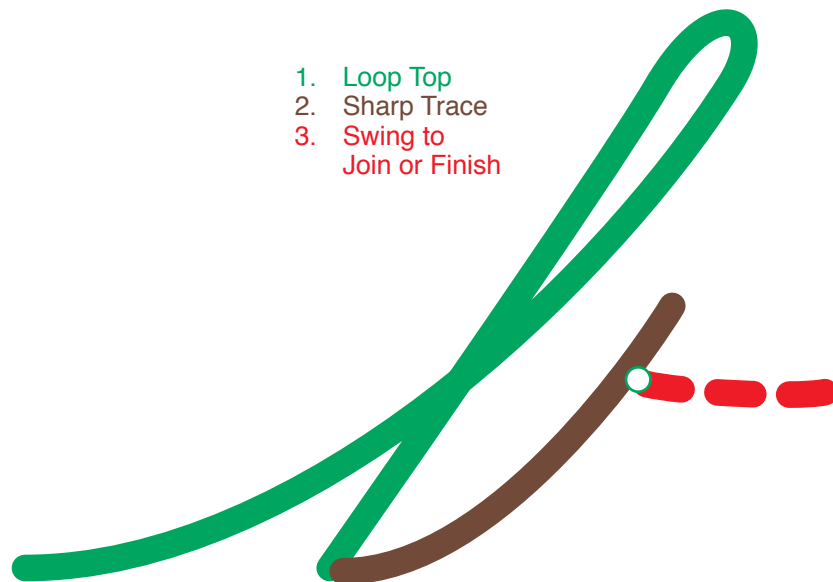


ape
ape

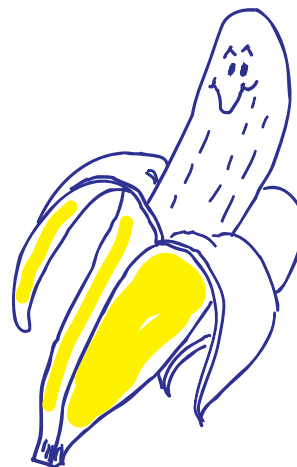
1. Sharp Top
2. Trace Around
3. Loop Around
4. Rock



1. Loop Top
2. Sharp Trace
3. Swing to Join or Finish

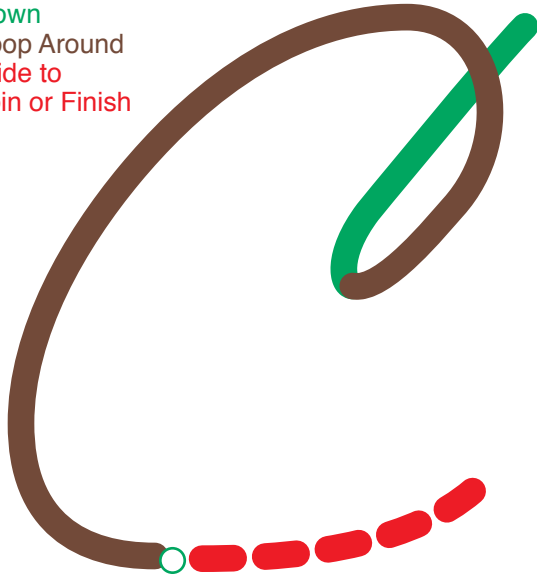


Bill
Bill



banana
banana

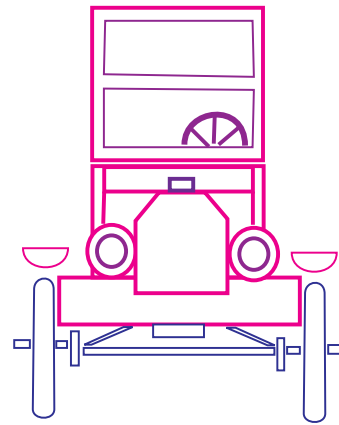
1. Down
2. Loop Around
Slide to
Join or Finish



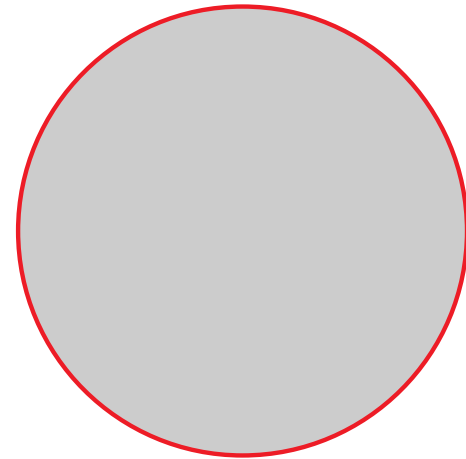
1. Rock, Hook Slant
Slide to
Join or Finish



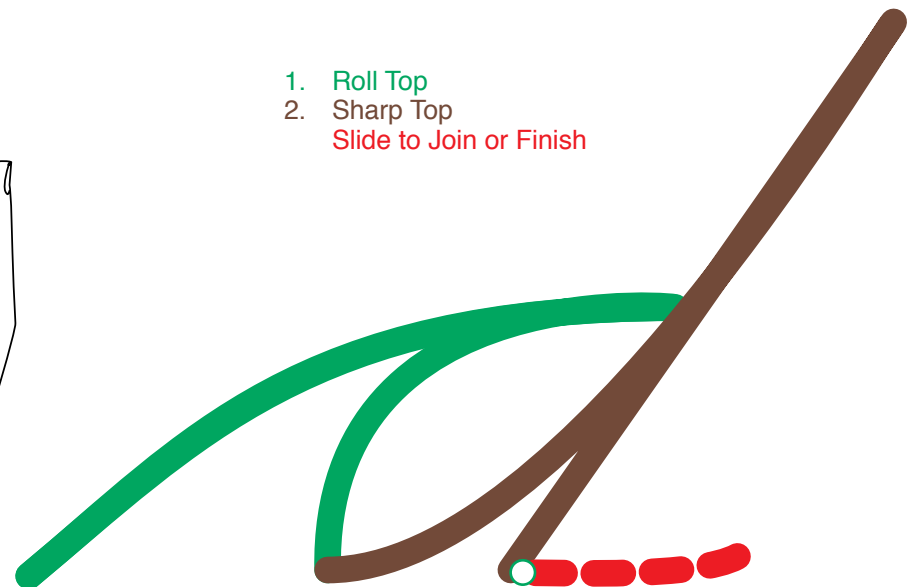
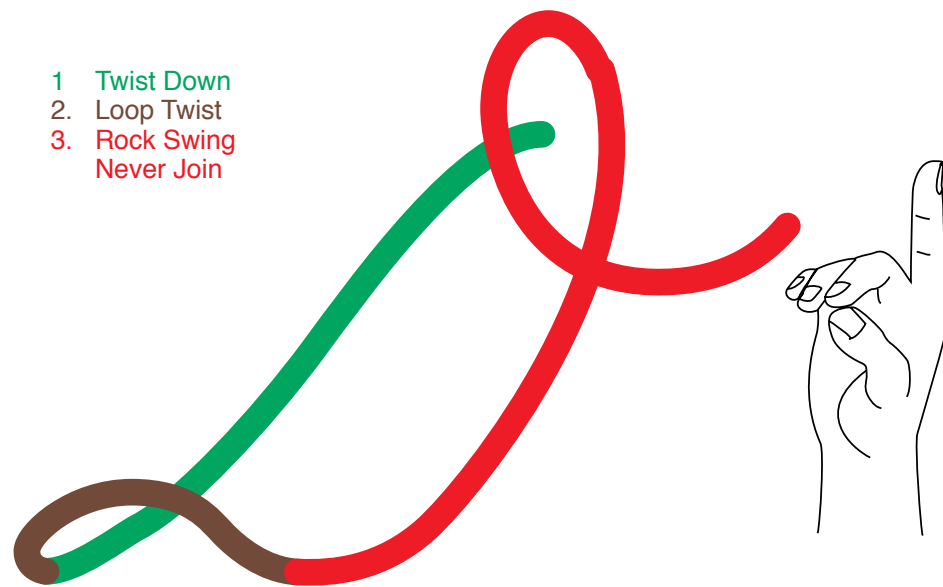
Carl
Carl



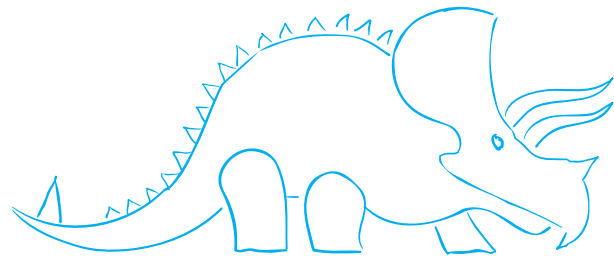
car
car



circle
circle

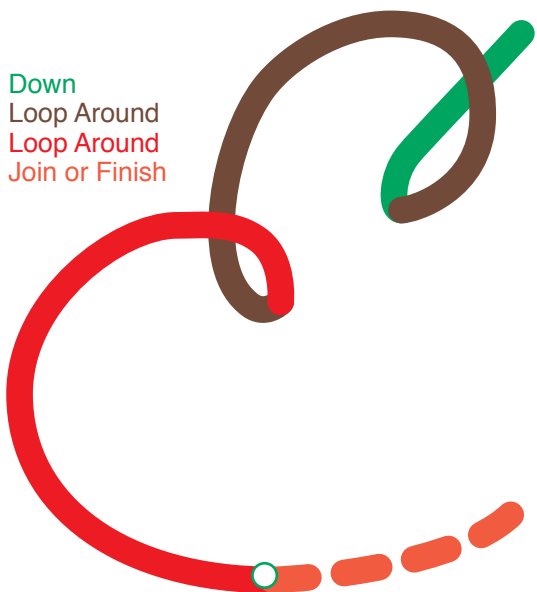


Dana
Dana



dinosaur
dinosaur

1. Down
2. Loop Around
3. Loop Around
4. Join or Finish



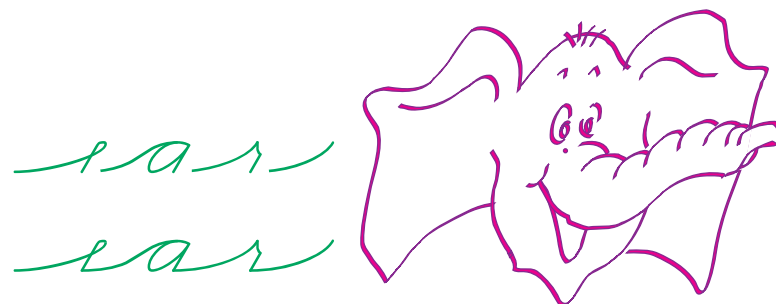
Eric
Eric



1. Loop Top
Slide to Join
or Finish

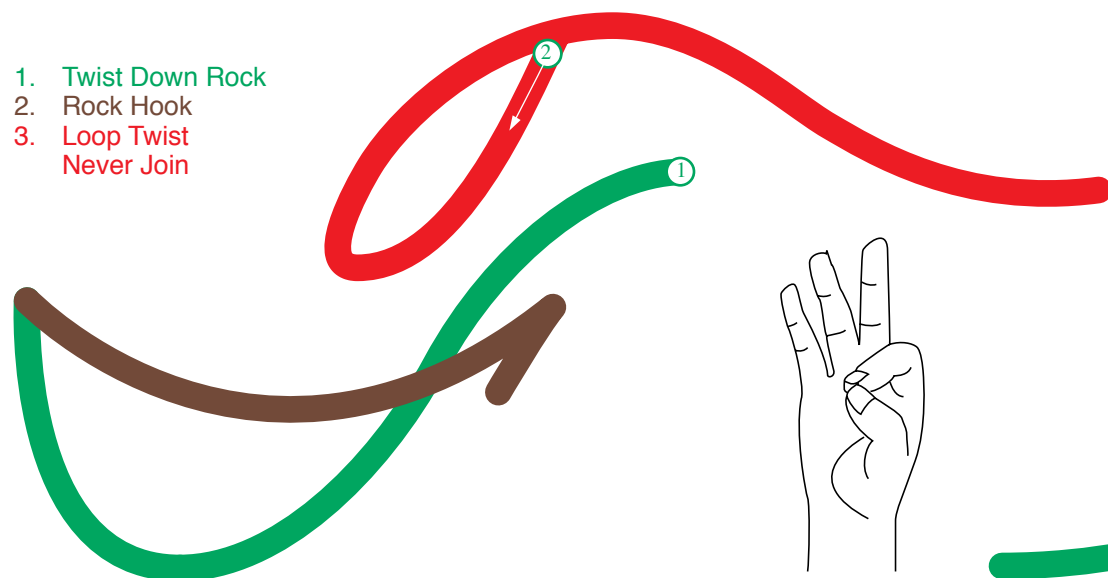


elephant
elephant

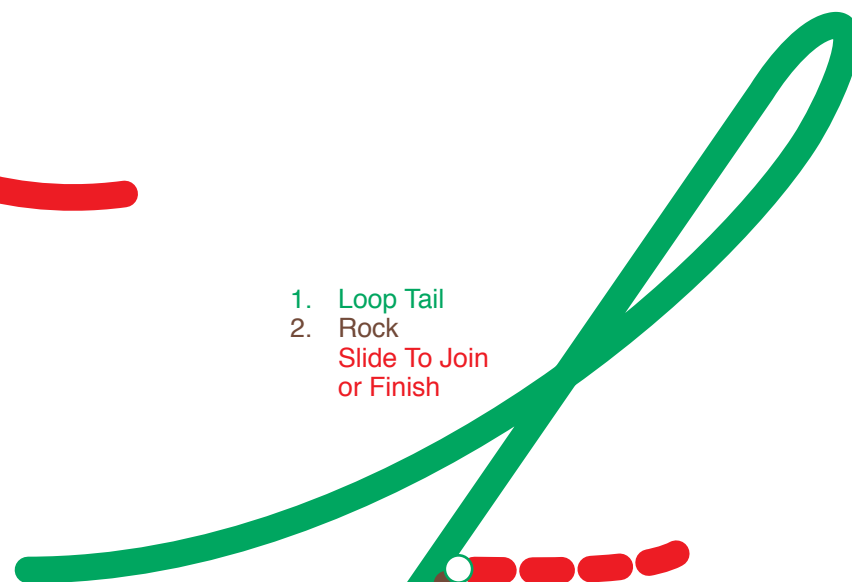


ear
ear

1. Twist Down Rock
2. Rock Hook
3. Loop Twist
Never Join



1. Loop Tail
2. Rock
Slide To Join
or Finish

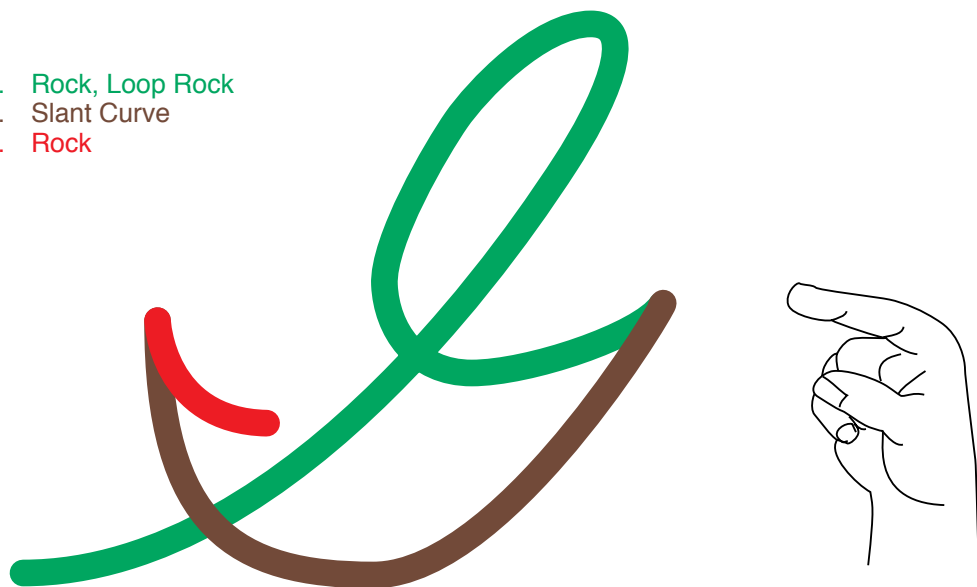


Fran
Fran

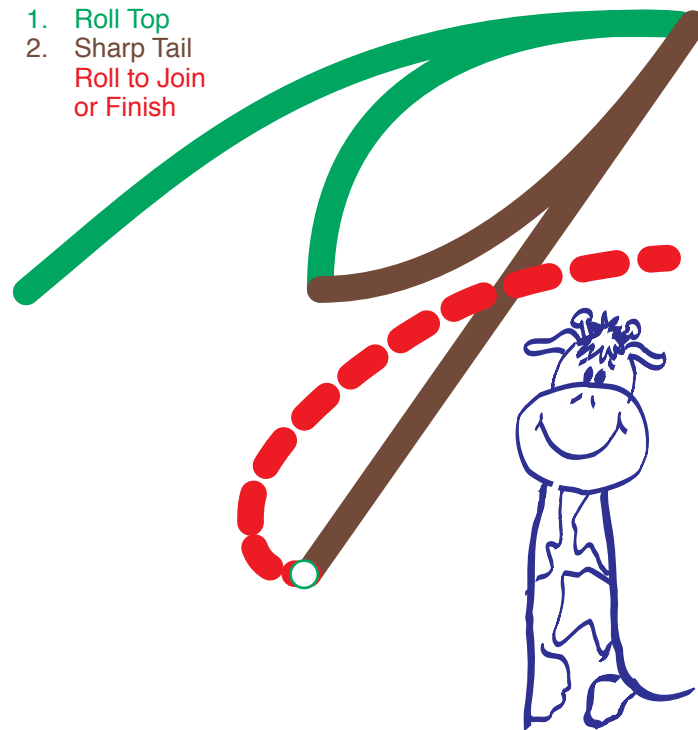


fish
fish

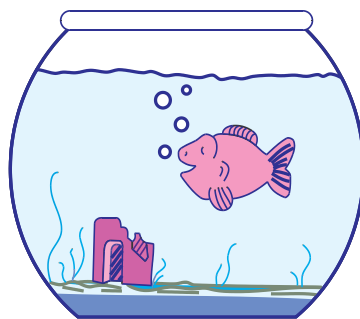
1. Rock, Loop Rock
2. Slant Curve
3. Rock



1. Roll Top
2. Sharp Tail
- Roll to Join or Finish



Gail
Gail



goldfish
goldfish

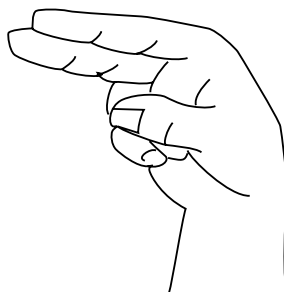


giraffe
giraffe

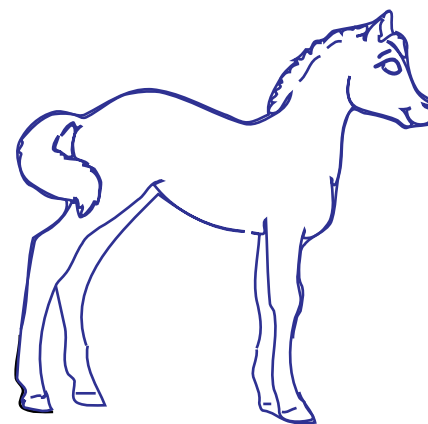
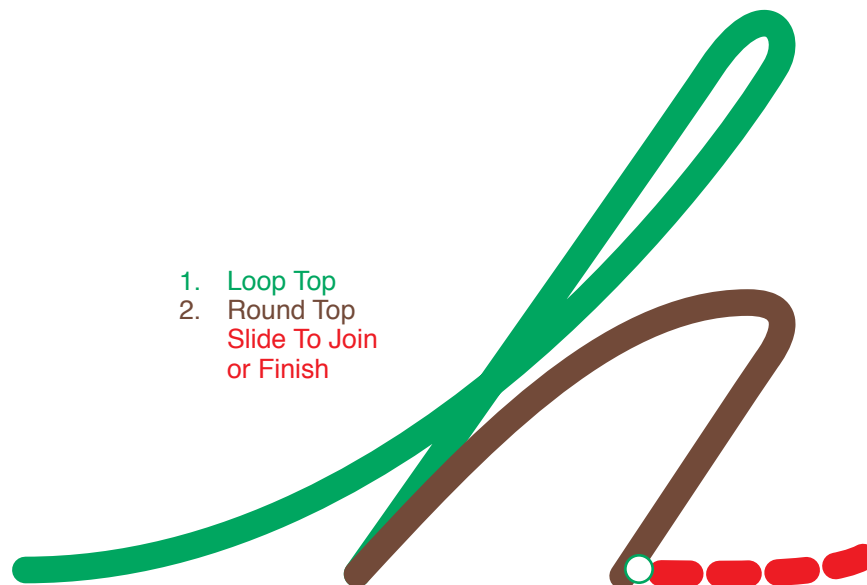
1. Loop Slant
2. Curve Slant
3. Trace Swing



Hank
Hank

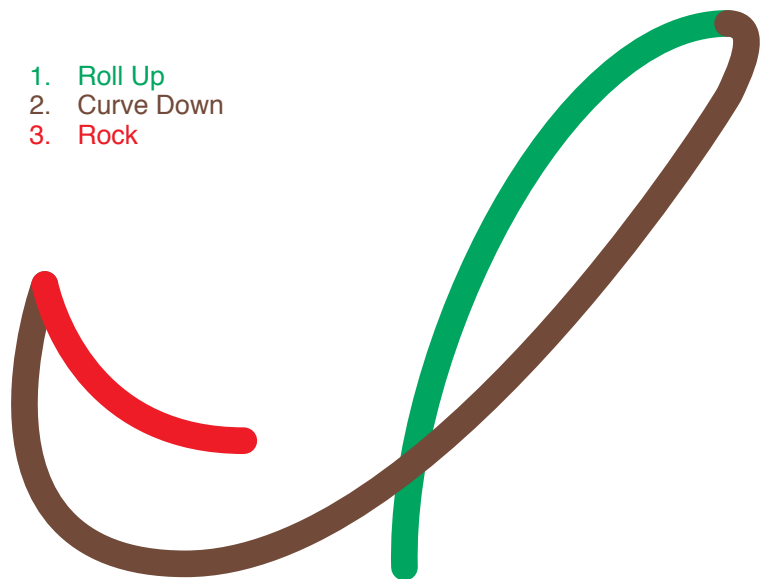


1. Loop Top
2. Round Top
Slide To Join
or Finish

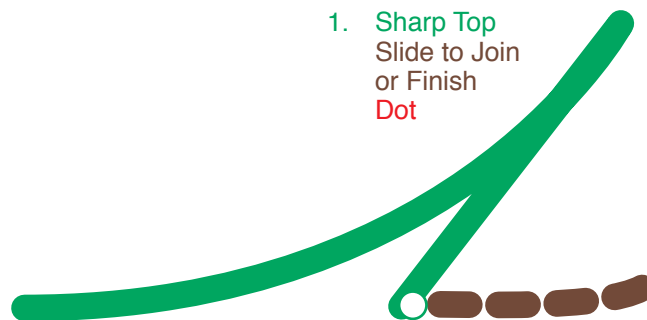


horse
horse

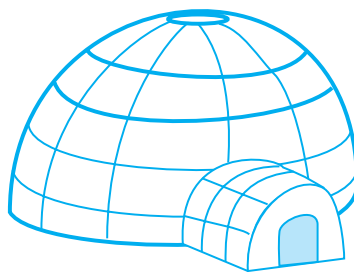
1. Roll Up
2. Curve Down
3. Rock



1. Sharp Top
Slide to Join
or Finish
Dot



Ivan
Ivan

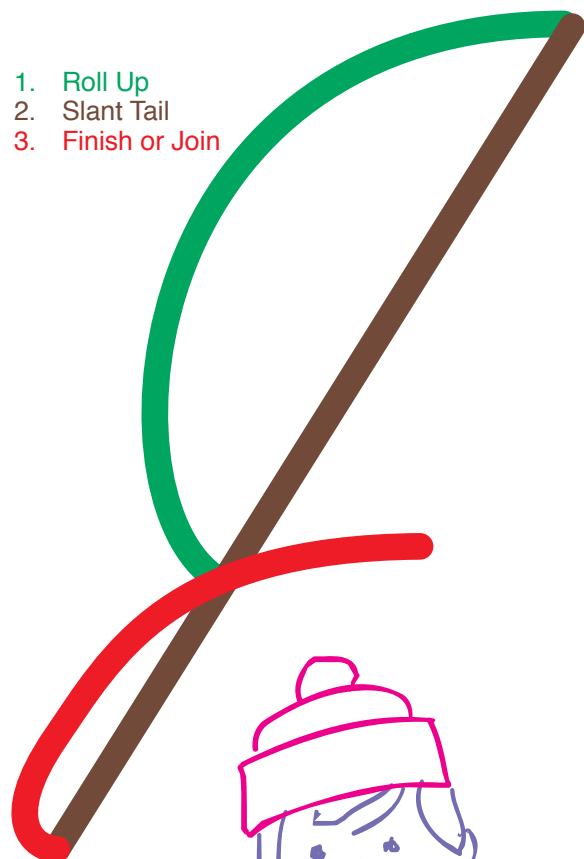


igloo-
igloo

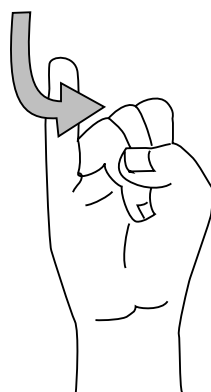


ice
ice

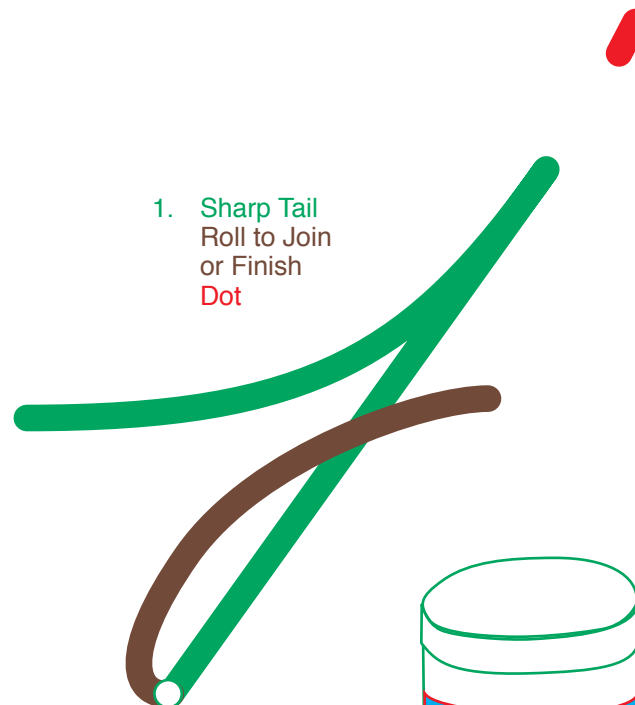
1. Roll Up
2. Slant Tail
3. Finish or Join



jerry
jerry

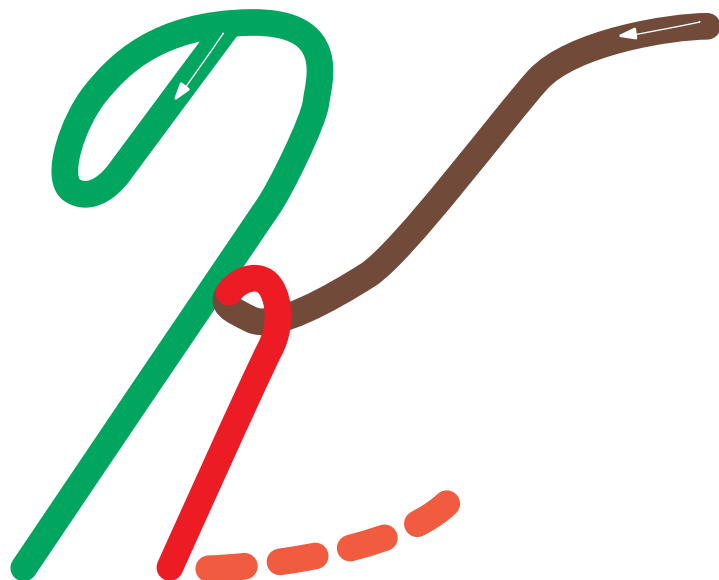


1. Sharp Tail
Roll to Join
or Finish
Dot

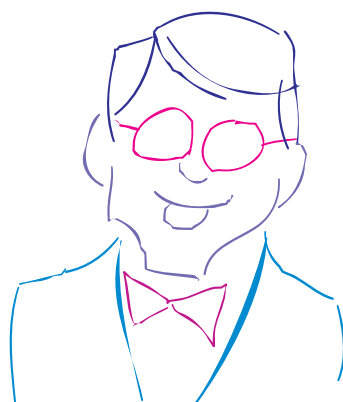
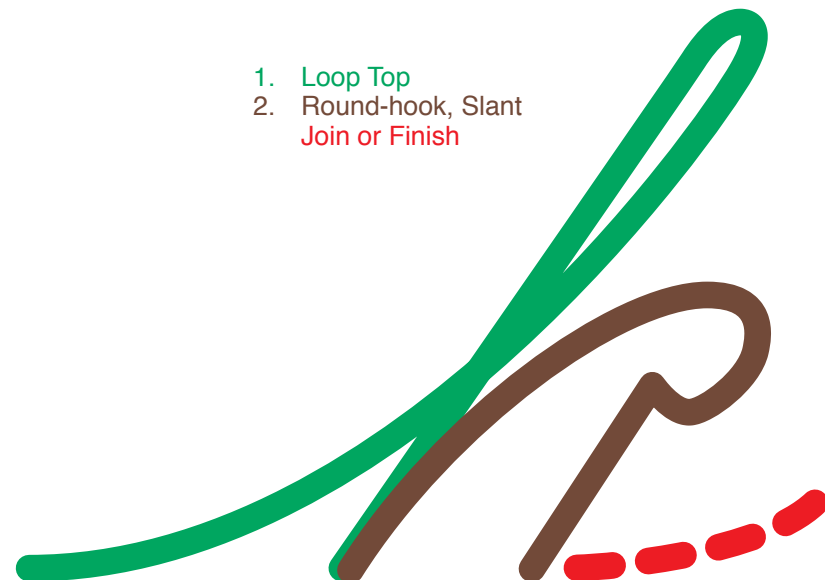


jar
jar

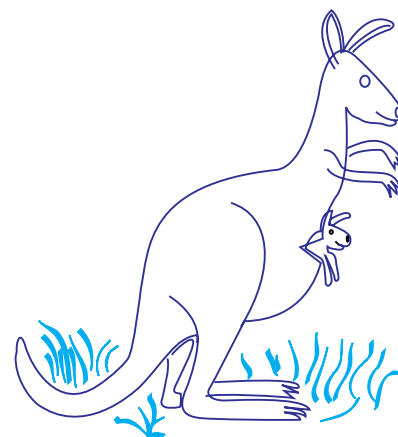
1. Loop Slant
2. Twist Down
3. Loop Slant
Join or Finish



1. Loop Top
2. Round-hook, Slant
Join or Finish

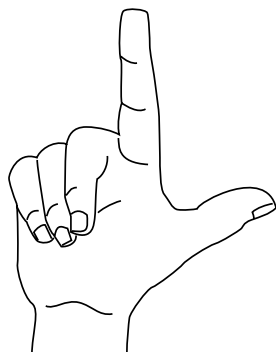
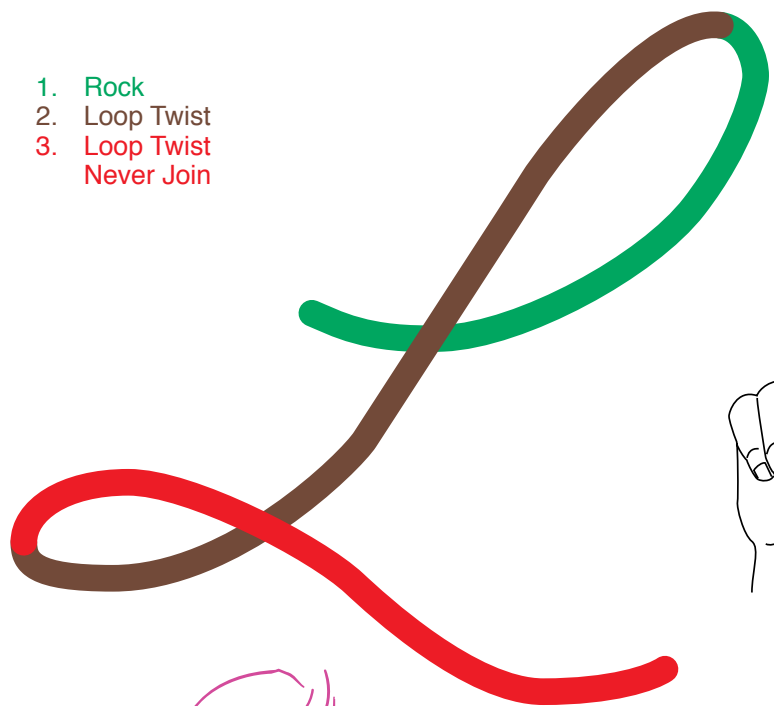


Kurt
Kurt



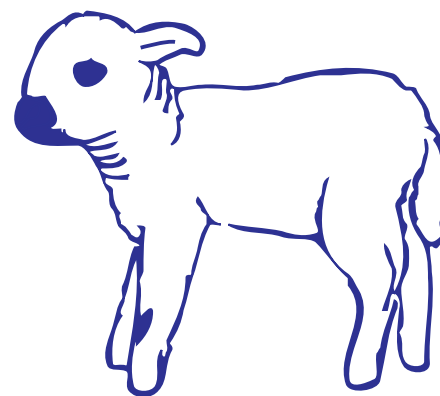
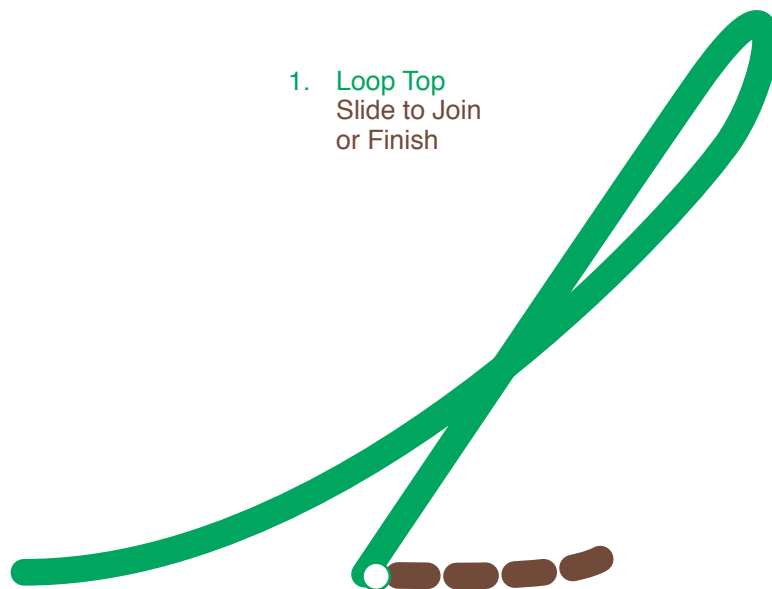
kangaroo-
kangaroo

1. Rock
2. Loop Twist
3. Loop Twist
Never Join

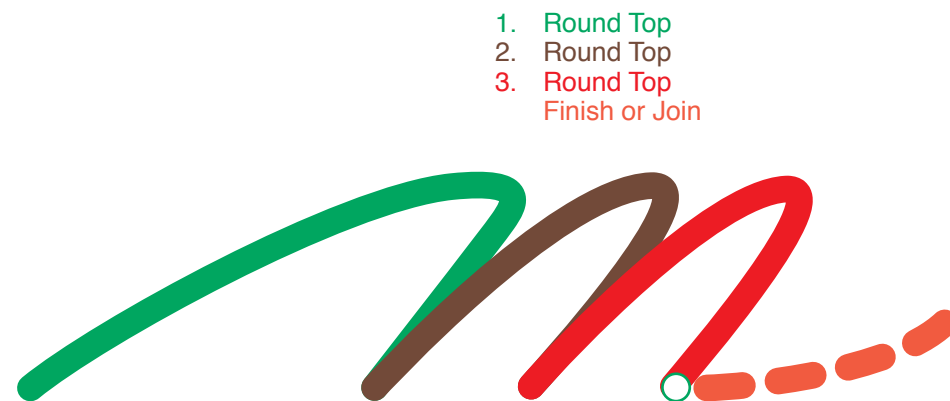
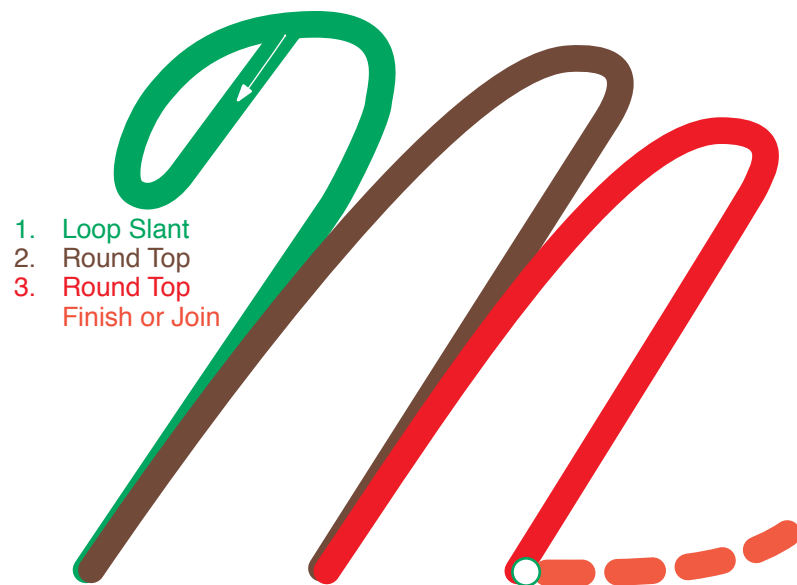


Liz
Liz

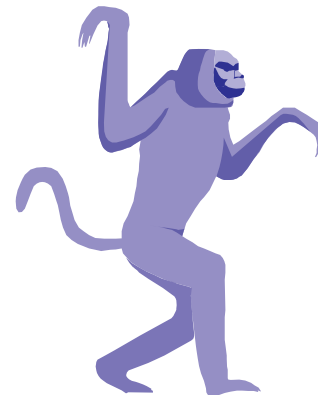
1. Loop Top
Slide to Join
or Finish



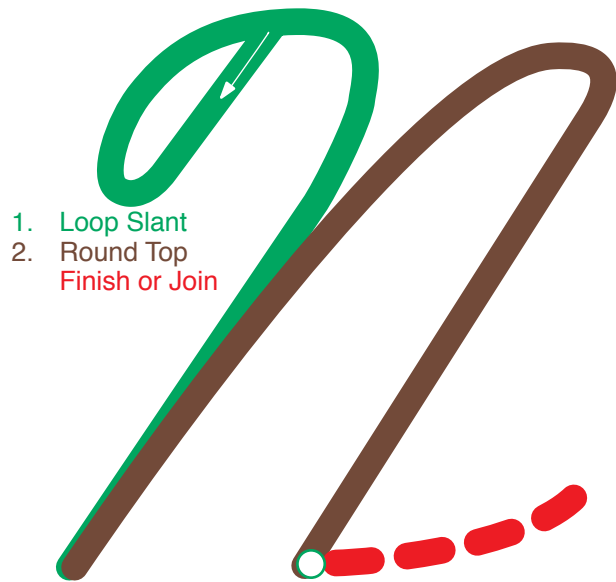
lamb-
lamb



Mary
Mary



monkey
monkey



nina
nina

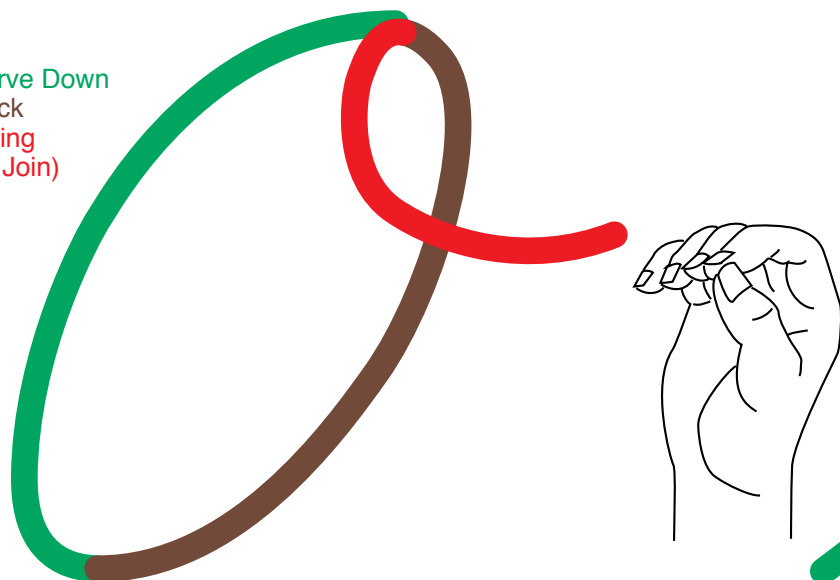


1. Round Top
2. Round Top
Finish or Join



nest
nest

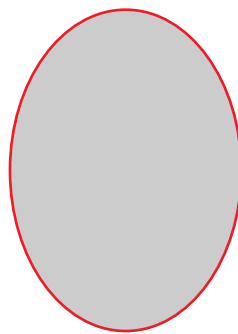
1. Curve Down
2. Rock
3. Swing
(Never Join)



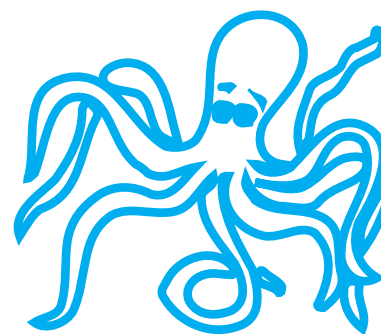
1. Roll Top
2. Rock
Swing to Join
or Finish



Ollie
Ollie

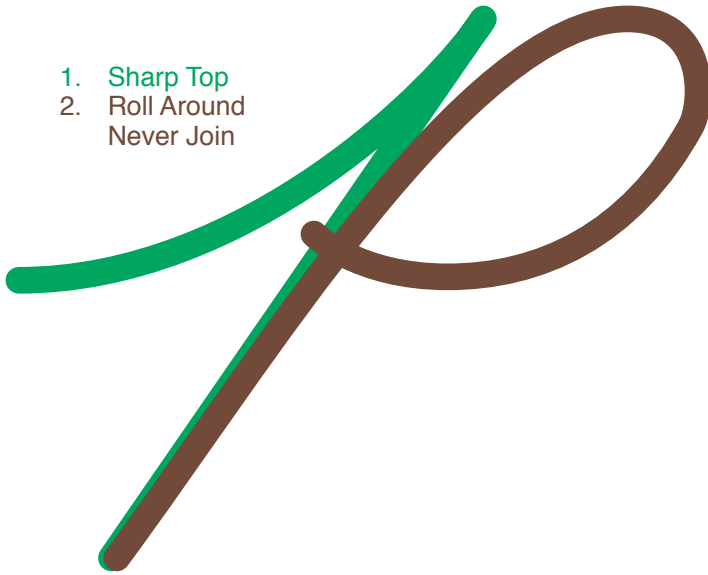


oval
oval

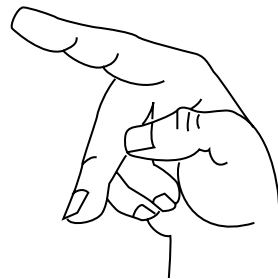
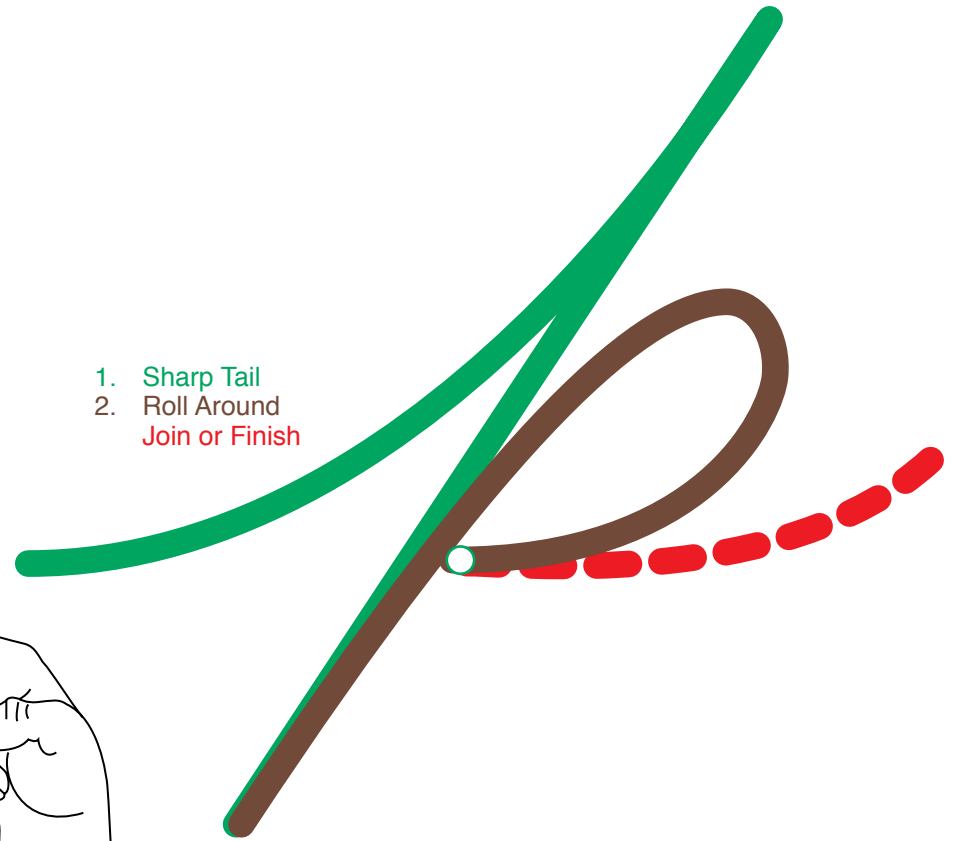


octopus
octopus

1. Sharp Top
2. Roll Around
Never Join



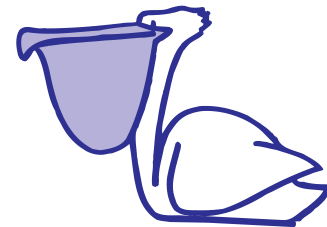
1. Sharp Tail
2. Roll Around
Join or Finish



Pam
Pam

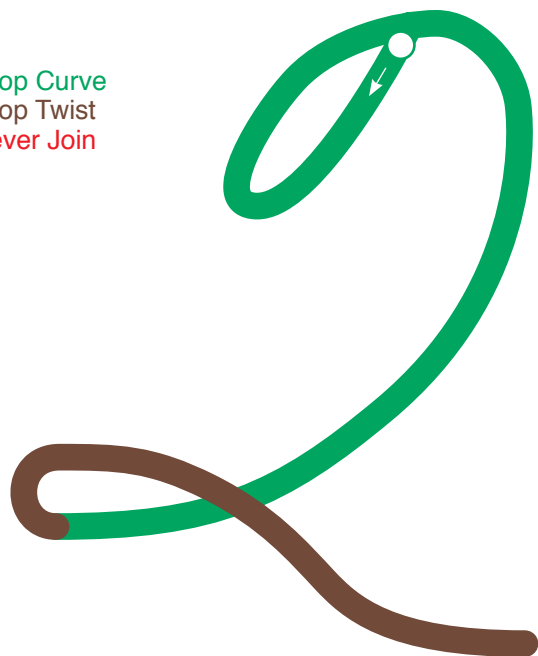


pencils
pencils



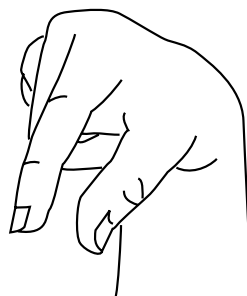
pelican
pelican

1. Loop Curve
2. Loop Twist
- Never Join



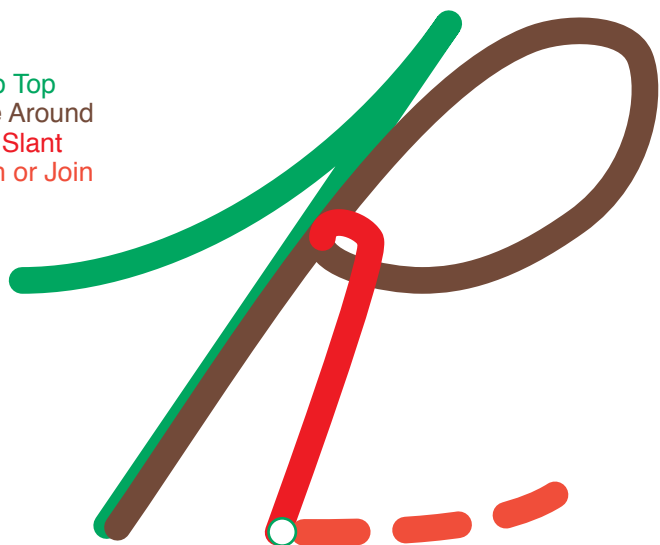
Quinn
Quinn

1. Roll Top
2. Down Tail
3. Rock
- Join or Finish



quarter
quarter

- 1 Sharp Top
- 2 Trace Around
- 3 Loop Slant
Finish or Join



1. Sharp
Roof, Slant
Join or Finish

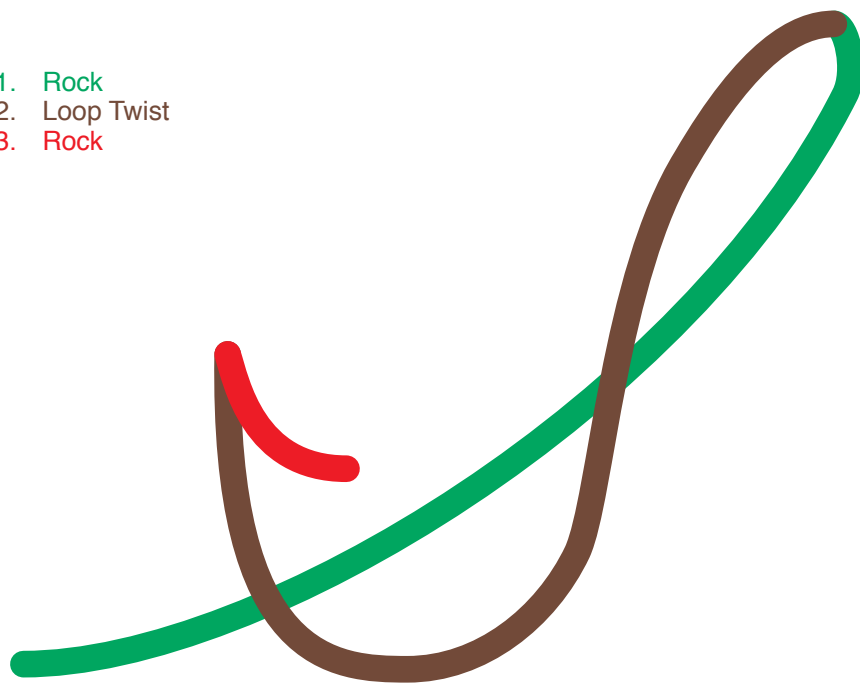


Reed
Reed

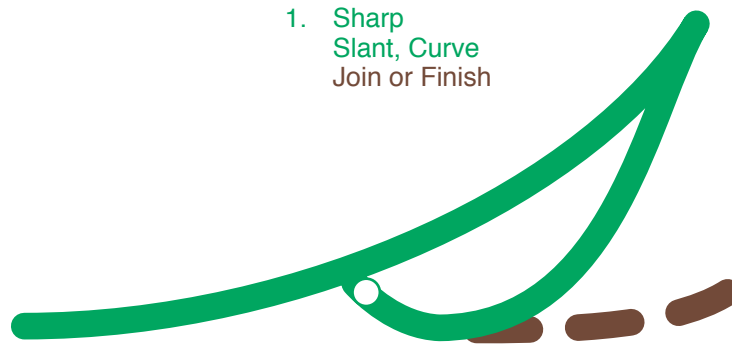


raccoon
raccoon

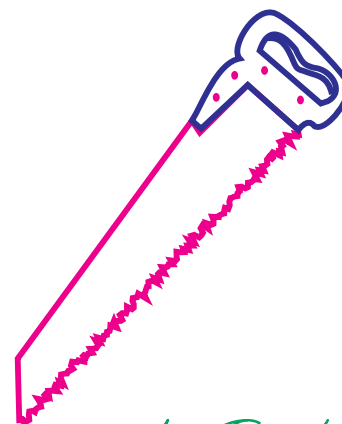
1. Rock
2. Loop Twist
3. Rock



1. Sharp
Slant, Curve
Join or Finish

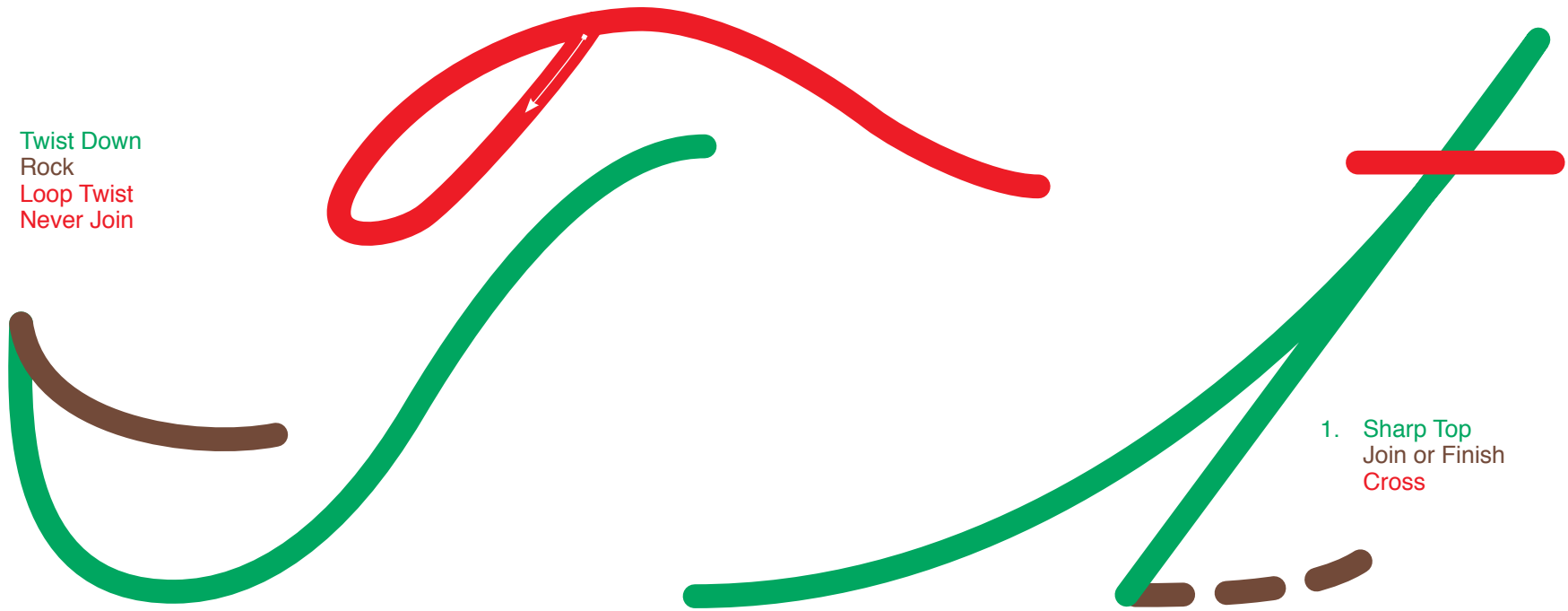


Sarah
Sarah



saw-
saw

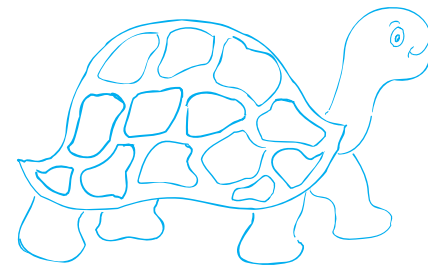
1. Twist Down
2. Rock
3. Loop Twist
Never Join



1. Sharp Top
Join or Finish
Cross

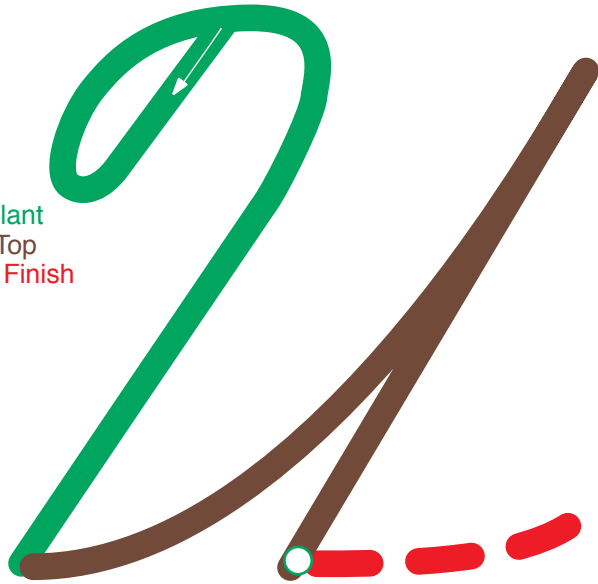


Tom
Tom

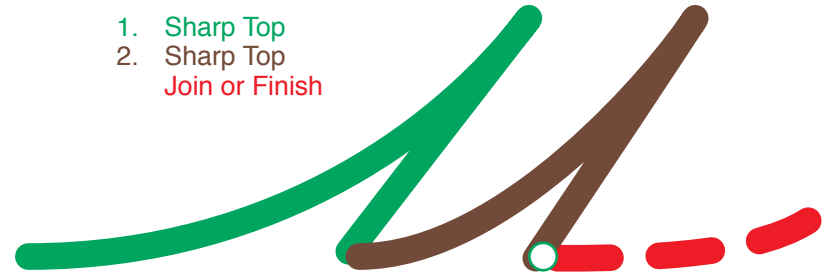


turtle
turtle

1. Loop Slant
2. Sharp Top
Join or Finish

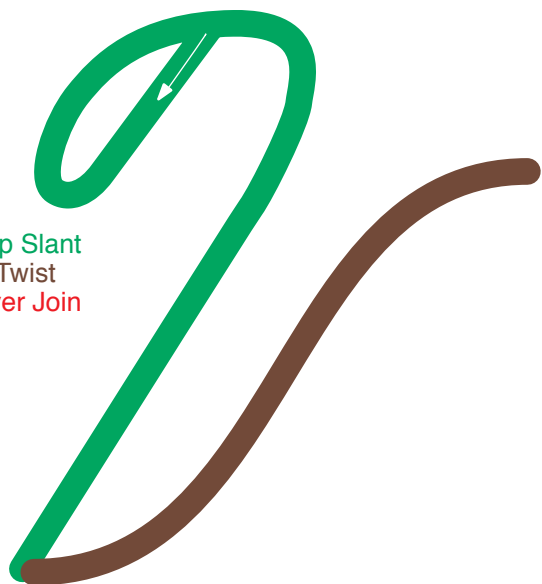


1. Sharp Top
2. Sharp Top
Join or Finish

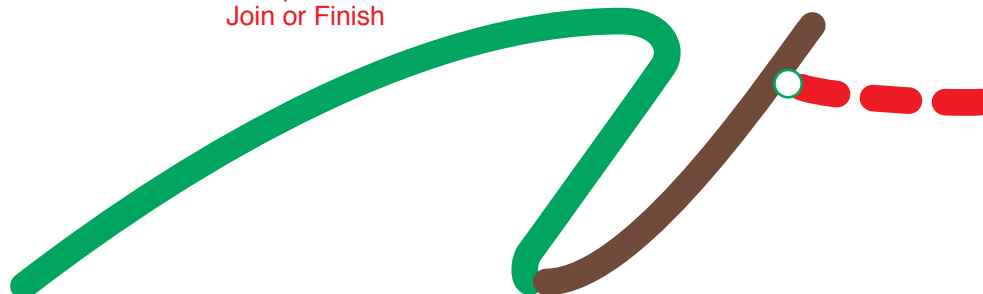


Uri umbrella unicorn
Uri umbrella unicorn

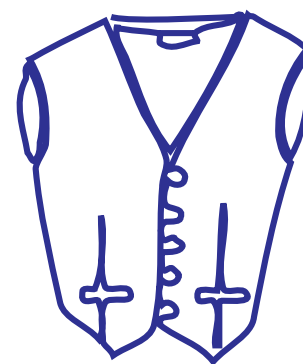
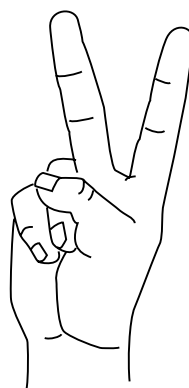
1. Loop Slant
2. Up Twist
Never Join



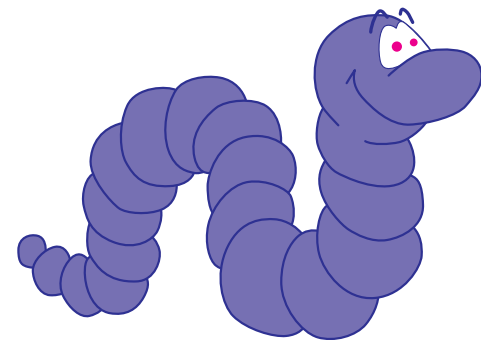
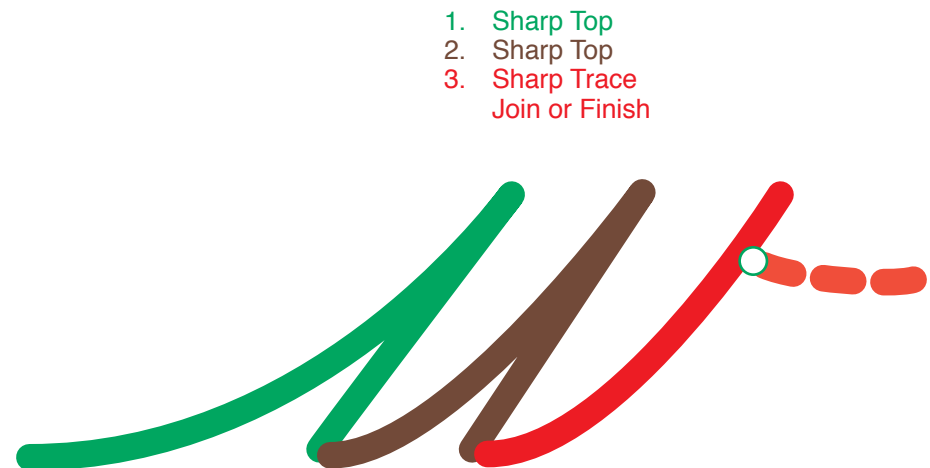
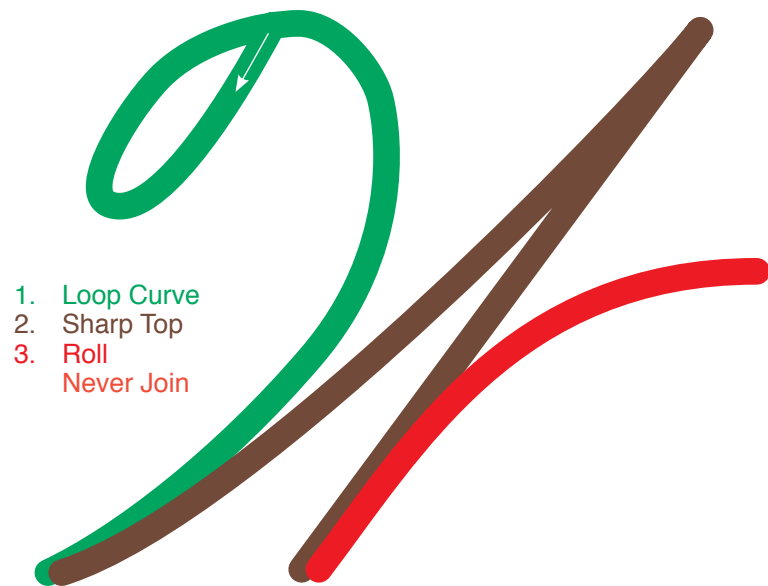
1. Round Top
2. Sharp Trace
Join or Finish



Vera
Vera



vest
vest



Wanda
Wanda

worm
worm

1. Loop Slant
2. Join or Finish
3. Rock to Cross



1. Round Top
- Join or Finish
- Cross

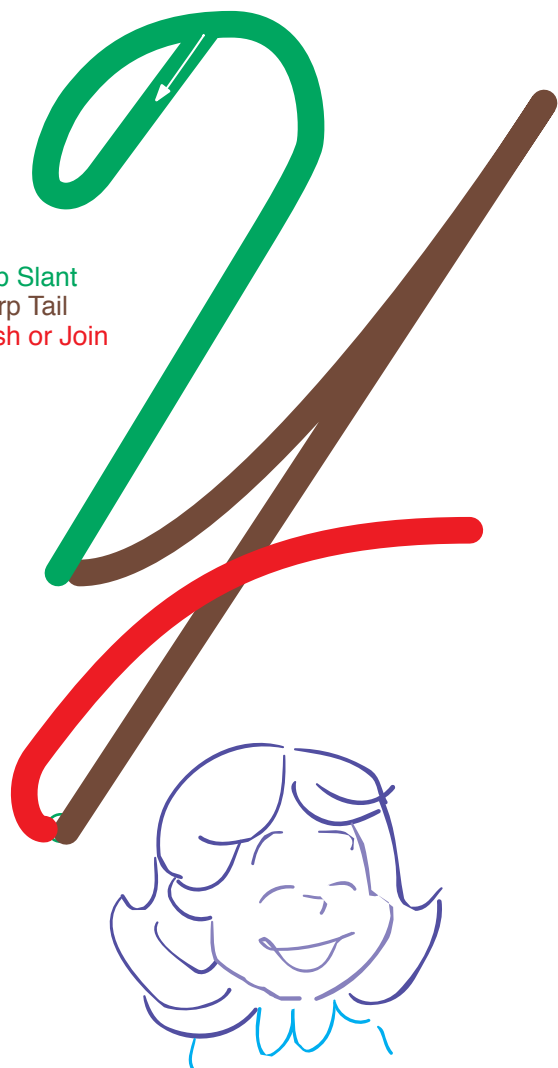


Xavier
Xavier



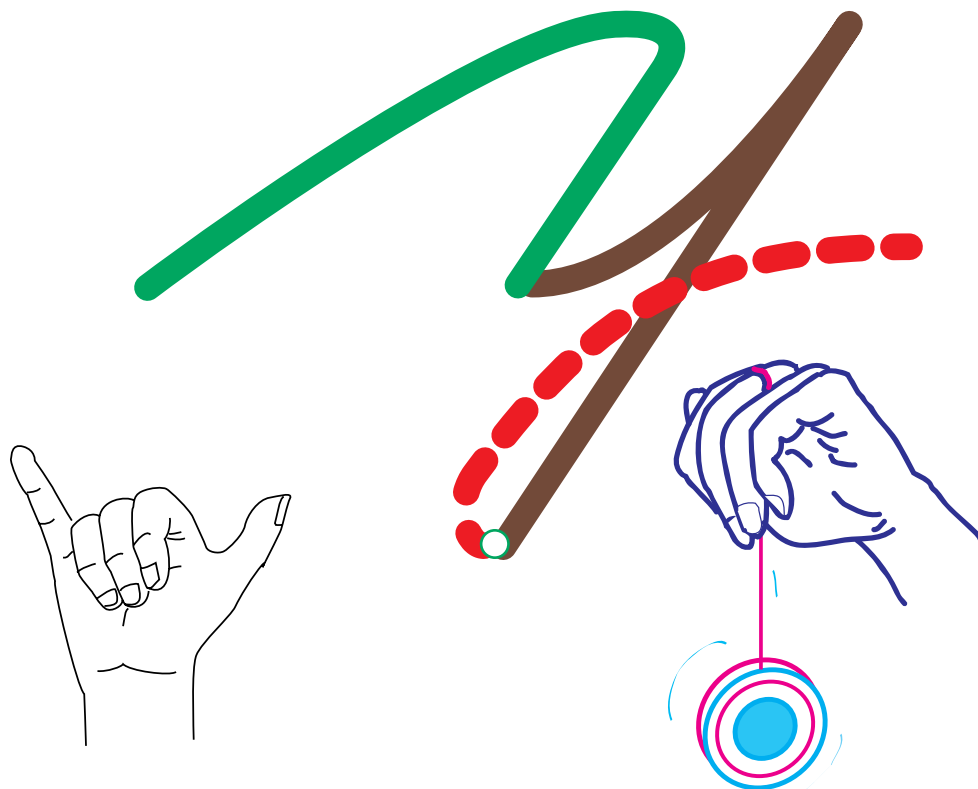
taxi
taxi

1. Loop Slant
2. Sharp Tail
3. Finish or Join



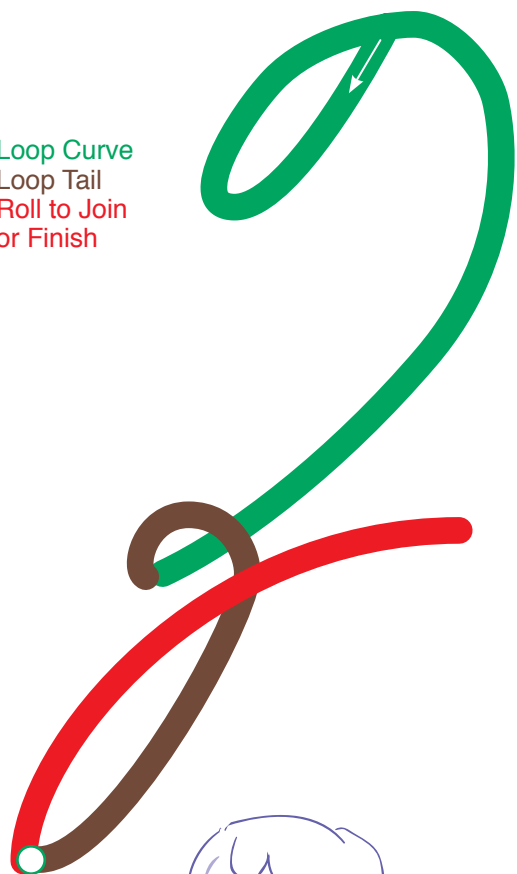
Yeva
Yeva

1. Round Top
2. Sharp Tail
Roll to Join
or Finish



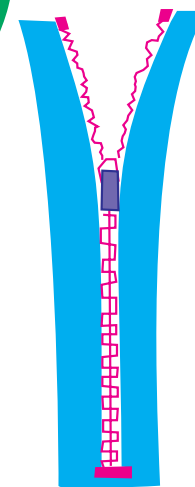
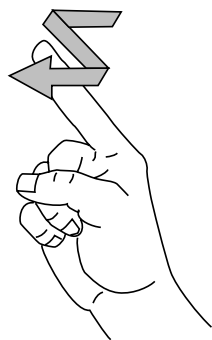
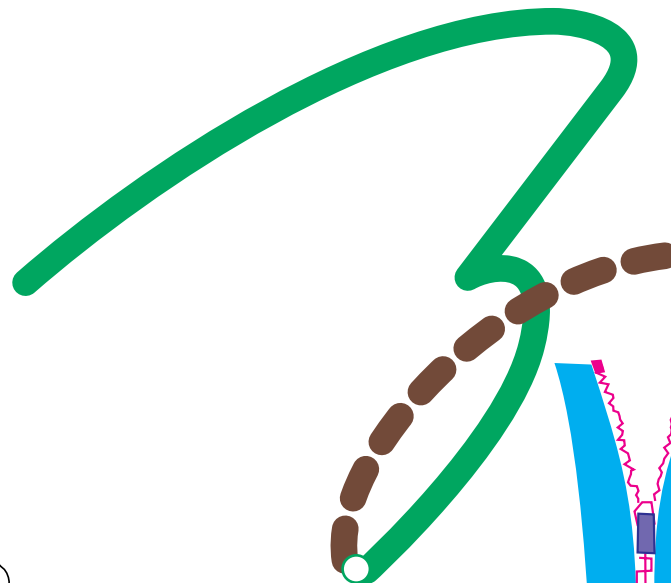
yoyo-
yoyo

1. Loop Curve
2. Loop Tail
3. Roll to Join or Finish



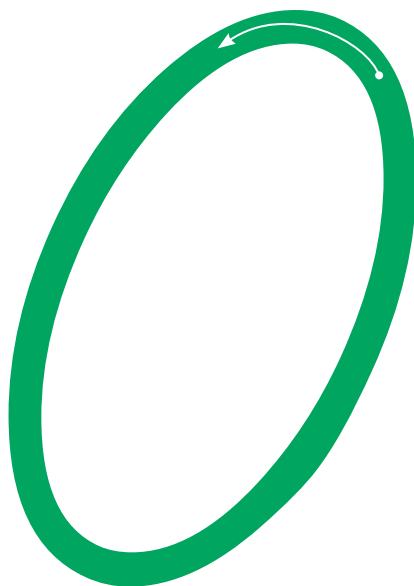
Jack
Jack

1. Round Top
Bounce Tail
2. Roll to Join or Finish



zipper
zipper

1. Hook Around Close



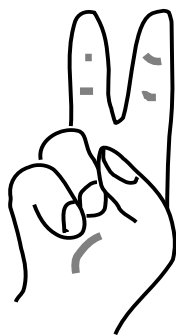
zero-
zero

1. Slant Down



one
one

1. Loop Curve
2. Loop Twist



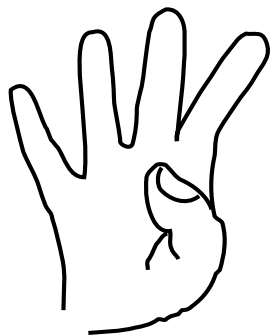
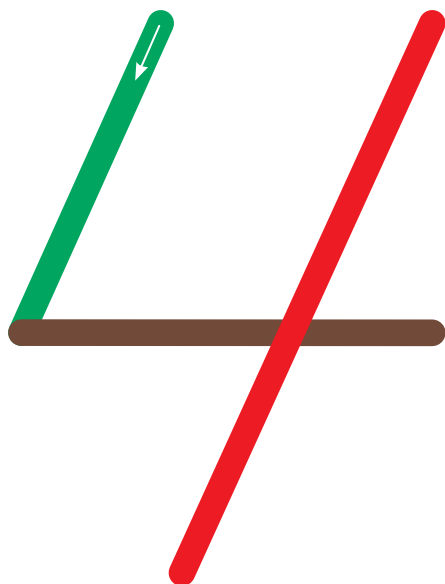
*two-
two*

1. Loop Around
2. Loop Around



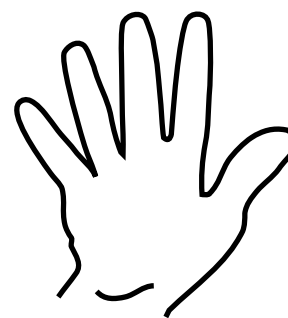
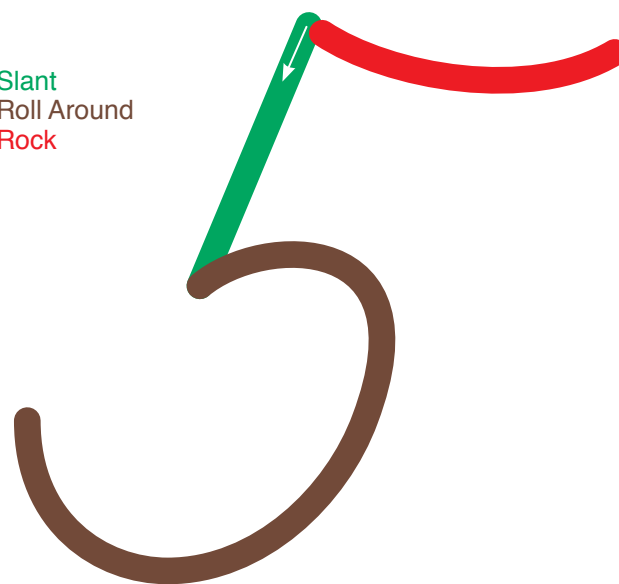
*three
three*

1. Slant
2. Slide
3. Slant



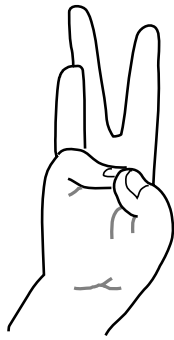
four
four

1. Slant
2. Roll Around
3. Rock



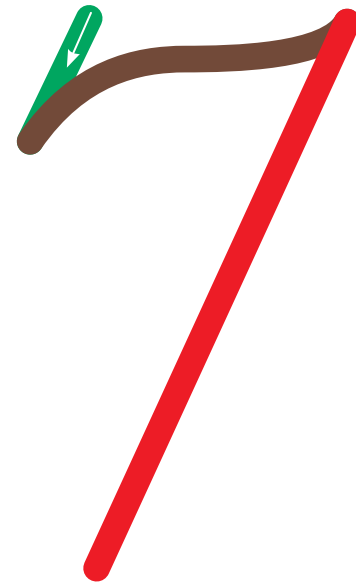
five
five

1. Curve Down
2. Loop



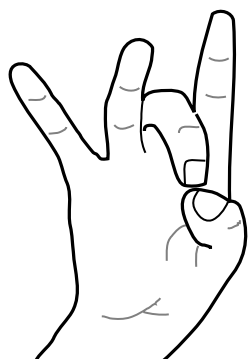
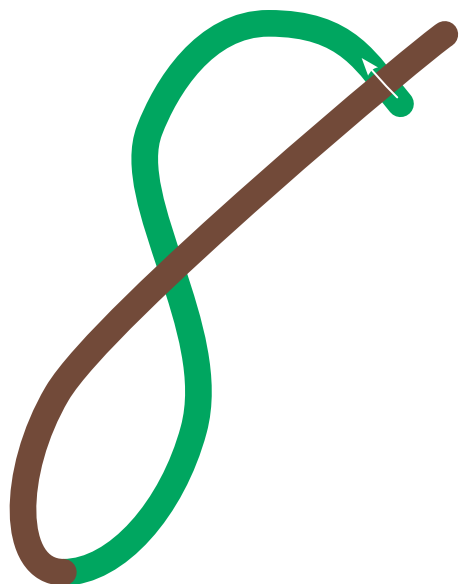
six
six

1. Slant
2. Twist
3. Slant



seven
seven

1. Hook Snake
2. Roll Up



eight
eight

1. Curve Around
2. Slant



nine
nine

Background For Cursive

A growing number of people are interested in introducing written language using cursive alphabet forms. Some reading specialists feel that words presented in joined sequences will make it easier for the child to learn to read. This makes sense, but there are additional considerations related to movement training that create issues that need to be understood.

The child must first internalize the movement process that will create each letter before it will be possible to assemble a word successfully. Initially the child builds words one letter at a time. This process is particularly demanding when the child is operating visually.

Our first goal for this tool, is to provide the means for causing internalization of the movement pattern for each individual letter so that the child will no longer have to look at a model then draw the shape. Once internalized, the child can call that form from within and no longer need to look at a visual model to recall the shape.

Given long established motor learning tenants, this effort is aimed at gross motor first. It is now known that the recordings established at the gross level are shared readily among various muscle groups and will pass control information on to the fine level as we work to reduce the size to a more practical level. That is the reason for the large models.

You will use those models in exercises by having the child trace using the pointer finger as you and the students chant the "action words" aloud. The action words are designed to create a beat when chanted. The result is that the brain is challenged to move with rhythm which greatly enhances the internalization process. The child is learning to look ahead to goals and move to each goal with smooth rhythm as the form is created. Our Color/Rhythm models exaggerate goals within the whole sequence making it easier for the student to learn how to use this special kind of goal oriented movement.

As the Finger-Trace exercise progresses, the internal system is recording start point, direction, movement sequence and how-to-move information simultaneously.

One critical understanding is the impact of end point for each letter. You will quickly see that our models are different from any other program. The end point of each letter, as it will be used in words, is exaggerated. Because the child needs to form words as quickly as possible, we exaggerate the point of control, the end point of each letter.

That end point is the spot where another letter will begin when writing a word. We call it a "control point" because it allows the child to stop, preplan the next sequence and control the beginning stroke of the coming form. The beginning stroke controls the shape, size, slope and spacing of the letter within the word, and therefore, the legibility of the outcome.

Because virtually every other program introduces the individual letters with a tail or finish stroke, our models will probably look strange to you. We do teach the child to use a finish stroke to space words. And, when a letter is written alone like a word, it needs a finish stroke to space it in a sentence. It is also true that some forms like "b," "v," and "w" need a finish stroke for legibility when written alone.

We also teach each lowercase letter with a beginning stroke while many other programs do not. There are a number of reasons for this process and they need some explanation.

1. The control factor for shape, size and spacing mentioned earlier is an important advantage.
2. The beginning stroke is really a joining stroke. The letter will be used internally more often than at the beginning of a word. For some letters the beginning stroke isn't necessary for word legibility when the letter starts a word. But, that beginning stroke also adds to sentence legibility through improved word spacing. The finish stroke combines with the beginning stroke to allow the motor system to achieve good word spacing with minimal need for visual input.
3. The most important reason for this approach relates to rhythm for fluency and legibility. There are only four basic shapes needed to create the 26 lowercase letters. Use an index card to cover the bottom half of letters across a cursive word. You will see four basic shapes of letter tops in all program models. For legibility, we need to make sharp tops, loop tops, round tops and roll tops. These four shapes can be well controlled with a pulsing, rhythmic movement, out-right, back-left. Without the beginning stroke, that rhythm advantage is lost.

For this age group, fluent legibility is a long term goal. It is clear that a lot of language skills are needed before the entry level student will be able to generate text fluently. This movement-based approach combines beginning and end point to enable understanding of the assembly process that will enhance internalization of automatic patterns for word production.

Types of Lessons - Develop, Practice, Apply

Initially the goal is to DEVELOP internal patterns for producing each letter. The book is alphabetically arranged so that you can use this method to conduct patterning exercises in conjunction with your reading and language program sequence.

As you introduce each form, you simply add this physical training exercise to each lesson to DEVELOP an internal pattern for writing the symbol. The child who can produce multiple iterations of the target form while chanting the grammar of action aloud, has developed a pattern for producing the shape. Use the voices as your guide.

You will quickly see that PRACTICE activities are needed. The initial forms produced with rhythmic movement won't be very accurate and in some cases may be barely recognizable. Few children will have used this type of movement before. Up to this point, all experience with writing has been visually guided drawing. They will need regular opportunity to improve control in order to bring results closer to the model. That is what practice is all about. The trick is to PRACTICE the right kind of movement. This will be your first important challenge.

The child will care more about shape accuracy (product) than the movement used (process). The pupils will quickly abandon rhythmic movement when practice is independent. They will also revert to sequences that may have been previously established. They will revert to the poor pencil grip habit you are trying to correct. When you work hard to maintain the movement goal by directing the activity, you provide the opportunity to improve control of the automatic kind of movement, to apply correct sequences and to use good position skills. Directed practice offers the best hope of developing the right kind of skills that will enable fluency later on. It is all about building confidence. Write & Say four copies. Choose the best from that group and try again.

The product will improve quickly in most cases and confidence will improve as well. Master the movement challenge with the basic stroke, and all the others forms will come along much more easily.

In that regard, it is probably a good idea to concentrate on mastery of lowercase forms first. The advantage of cursive lies in the challenge to use the "threading process" in words.

If your language program creates a demand for writing words early on, you

need to teach a process for APPLICATION that will work for the children. The Peterson cursive concept is uniquely suited to meet this challenge. Because of our focus on end-point for each form, it is possible for your pupils to begin to apply letters in words in a way that is appropriate for beginning language skills. The Peterson concept is the only one that can support early application of cursive forms without forcing a total reversion to drawing.

The student has no pattern for writing a new word. They build a target word one letter at a time until they can internalize all of the needed movement sequences. Each new word offers a challenge similar to that presented by a new line dance. It can be learned step-by-step. Our process for initial application is called "Cursive Print."



It allows a child to apply the correct letter sequence one letter at a time just like they are thinking.



This approach transforms application into practice of the correct rhythmic units for each letter. An actual lift isn't necessary, but knowing where to stop and think is truly a gift. As the word sequence is internalized and control of joining movements improves, fluency can begin to emerge. When the pupil no longer needs to stop and think he or she can keep moving to flow the word onto the page. It is not likely that adult flow will emerge until much later, but the right control information is stored to allow it when the child is ready.

Cursive does not work like this:



The sentence above illustrates one misunderstanding that causes a majority of grade four students to revert to print writing. Poor concept leads to drawing and cursive cannot be applied automatically. It interferes with composition. Controlled fluent movement is goal oriented and rhythmic. Learning how to overcome the cursive challenge will boost language processing across the board.

More About Fluency

The concept of handwriting fluency is tricky to explain. It involves production rate, but also legibility. It is easy to measure and therefore, is a very good way to track progress and spot the need for help. Literally thousands of digital samples helped to provide much better understanding.

Many people wrote easily on the digital tablet. Because the pen did not produce traces on the surface, the experience is a lot like writing with your eyes closed. Try that now and discover how well your internal system controls your pen. The people who wrote without trouble found it easy to call upon their internal pen driver. The results however, differed drastically.

Some produced a sentence or word that was barely legible or worse. Others however, produced text that was easily read and usually quite attractive. We used motor-control software to analyze the recordings and discovered the source of the different results. Legible ease showed very consistent rhythm (acceleration/deceleration cycles) for each form written. Hard to read but fluent scrawl did not show consistent rhythm.

Other people had a great deal of trouble and found it difficult to write their name without being able to see the traces produced by the pen. Still others found it difficult, but managed to carefully produce very legible text by watching the cursor and traces produced on the computer screen. Analysis revealed a lack of consistent rhythm in the movements in both cases. It was later learned that the visual feedback system cannot guide rhythmic movement.

We changed the nib on the pen so that it would produce traces. Subjects wrote on paper taped to the tablet. It was surprising to discover that much the same results were measured. The only real difference was that very few people had great difficulty. The rate of production (fluency) was very much the same as were the measures of rhythm. The conclusion was that some people relied heavily on the visual system to produce a legible product while others could accomplish the task much more easily with or without help from the visual feedback system, and rhythm was a key to legibility.

Measuring Fluency

A fluency score is easy to establish. It is expressed as Letters-Per-Minute. Conduct a timed writing exercise and allow only one minute for the student to write. Count the number of legible letters and you have a letters-per-minute fluency score (LPM).

However, legibility can add a level of difficulty to what otherwise seems to be a simple and quick activity. The child who just wrote the sample knows what letters were written. Therefore, they are all legible. But, when you look at the page, there may be some forms that you cannot easily identify.

Teaching the legibility factors or "qualities" involves teaching some critical thinking skills. At first the process is more important than the product. But over time, as practice improves movement control, we can tighten the range of acceptance and identify specific goals that will bring the product closer to the model goal.

The simple act of conducting the "fluency test" will help the child see the goal and the reason for directed practice exercises. Once a month would likely be sufficient for diagnostic purposes but once a week would be more motivating. When the fluency score does not improve beyond 20 LPM, it is likely that child needs help with internalization and learning how to use the internal driver for his or her pencil. The goal for an entry level child should be 30-40 LPM by the start of grade one.

Challenge Levels

A kindergartner may increase a fluency score fairly rapidly when the writing task entails writing the alphabet only. A higher level of difficulty is presented when the task for the test is to write a word, or a sequence of simple words. An even higher level of difficulty is presented when the child is asked to write a sentence using several words.

Early on you may have students that are challenged to attend to the writing task for a full minute. And of course, you may have many that do not know how to write any letters at all. You can address both issues and use the fluency test as a means to solidify the learning as letters are presented.

The child can write repeatedly, one letter in spaced pairs or a series during a 20-second timed exercise. Count the number of legible letters written and multiply by 3 to convert the count to a LPM Score. After teaching several letters you can have the child write as many known letters of the alphabet as possible during the time allowed. The goal is to stimulate the child to write from memory rather than copy from a display on chart or chalkboard. Early on, it is a good idea to provide strips of unlined paper for writing and show the child how to write from left to right across the strip.