



Literacy

by

Marna Scarry-Larkin, MA, CCC/SLP and Elizabeth Price, MA, CCC/SLP

Literacy

Literacy - Phonemic Awareness

Five games for learning letter sounds, symbols and letter names.

Read My Lips

Watch how speech sounds are made and learn to feel the articulators move.

ABC

Practice automatic production of letter names and letter sounds.

Put Same with Same

Distinguish essential visual and auditory features of consonant and vowel letters.

Patterns

Listen to and manipulate isolated sounds in sequential patterns.

Match Ups! Consonants and Vowels

Practice sound/symbol associations playing a concentration game.

Cut Ups!

Speech practice for real, single syllable words. Work on encoding and decoding skills, sound segmentation techniques, sound blending, and phonological awareness (240 words).

And a One, Two, Three

Speech practice for real words or short phrases with one to six syllables. Learn syllable segmentation and utilize auditory processing and speech imitation (240 words).

Literacy - Rules, Rules, Rules!

Rules, Rules, Rules!

Learn the basic rules for reading and spelling. Rehearse to remember, then practice reading the word using the rule. There are 1,100 words for reading practice.

Literacy - "Spelling Test on Friday"

"Spelling Test on Friday"

Practice spelling 1,800 words that good readers must know. Learn to recognize words instantly so that reading becomes effortless.

Match Ups! Spelling Test on Friday Words

Extend auditory and visual memory for instant reading recognition of words.



Introduction

"It's a person with little imagination that can only think of one way to spell a word." Mark Twain (paraphrased)

This was my son's favorite quote for years. He has had the darndest time with spelling. He figured that if the reader could sound out what he had written then his spelling was okay. That theory got him to third grade. I know how hard it is for some children to learn to read and spell. I also know that some children will learn to read just by waving a book over their heads. I have one of each.

I'm not proposing that this CD program is a comprehensive reading program. I developed this program to help with the repetition and consistency that some children and adults seem to need in order to become literate. I have incorporated the theoretical framework of Patricia Lindamood, my mentor, and my 19 years of clinical experience. I also feel that teaching my own children to read taught me a thing or two about education and parenting!

If you have been anywhere near education for the last ten years you'll know that there has been a pendulum swinging to and fro. I was trained in the late 70's and early 80's when anything "Auditory Processing" was played down and "Language" was the buzz word of the time. Twenty years later we're back to "Auditory Processing" and "Phonemic Awareness". This time, I hope, we will look closely at the research of Tallal, Leiberman, and others and apply this knowledge of the brain to how we help our children.

I believe that we learn to read one sound at a time. There must be a solid foundation in the sound to symbol associations. In order to establish this foundation I want each student to watch the videos. I know many will say that they don't need this part, that they already know their sounds, and that it is baby stuff. In many ways they are right. They do know most of their sounds and it is baby stuff. Babies watch mouths very closely to try to pick up on sounds and mouth movements. Many poor readers have a history of chronic otitis media (ear infections) and allergies. This has resulted in fluctuating hearing loss in the years when the auditory processing part of the brain was to be developing. A dyslexic individual's brain did not have a chance to develop the ability to segment sounds, blend them together, identify which sounds were the same which ones different, count individual sounds, notice when sounds were added, omitted, substituted or duplicated. Because these processes were not developed naturally in the early years, for reasons of genetics or environment, they need to be developed at a conscious level before literacy can be expected.

It is not as difficult as one might think. I have tried to set up a plan that will help train the brain to process speech sounds.

There are 58 Videos in *Read My Lips*. When watching the videos, have a mirror on hand for the student to watch her mouth. She should copy the mouth movements and *feel* how each sound is made.

The game **ABC** does not need to be played in its entirety. The most important aspect of this game is "**What's My Sound**". This game will put each letter on the screen and tell you what sound that letter makes. If you turn off the sound it becomes a flashcard naming game.

Put Same with Same involves the students by having them look at the letter, say the sound, then place the card on top of the identical card. Check out the options page to make this game more challenging by removing the card quickly or changing fonts.



Match Up Consonants and Vowels will most likely be a favorite game. I usually let children play this game long after they seem to need it. This of course would be *my* perception of "need it." In fact, children will choose games that still challenge them even though they get all the answers right. This is a very important concept for an educator or parent to understand. If children don't think there is enough challenge in the game, they won't play the game. If they think it's too hard, they won't play the game. Trust their judgement.

Patterns provides an opportunity for auditory bombardment and sound/symbol association. The student sees the sound, hears the sound, over and over. Repetition is good for learning. There are 225 patterns.

Cut Ups! is one of our most clever games (she said modestly). The purpose of this game is to practice sound segmentation. The student must understand the concept that words are like puzzles. There are pieces to the puzzle. Each piece must go into the puzzle at a certain place. When the puzzle pieces are in order, the puzzle looks like a picture and can be seen as a "whole" picture. The concept: Parts make up the whole. In the beginning, make sure the student goes through the entire process of listening to a sound, finding the letter that corresponds, then when the word is complete, playing the *Sounds, Blended* and *Word* buttons. This will reinforce segmenting and blending and reduce impulsivity. The goal is **not** to see *how many* of the words a student can plow through. The goal is to really understand the idea of breaking words into sounds and blending them back together again. There are 240 words to practice.

And a One. Two. Three is based on the concept of syllable segmentation. Do you remember hearing a foreign language for the first time? Most likely all you heard was, "Laladeedudum." There seemed to be no spaces between the words! Everything ran together. You couldn't tell when one word stopped and another began. As you studied the language you could start to hear pauses that you swore weren't there before. Your ear was being trained to listen to the sounds. Now the interesting part is that there doesn't seem to be a one to one correspondence between the ends of words and a pause. For example, in that last sentence there is a phrase, "and a pause." Our eyes see three words, but our ears *hear*, "andapause." Written language is the process of assigning symbols to what we hear. The rules are rather fuzzy here. We hear "andapause" but we write "and a pause." If we are ever going to be able to spell, we will have to learn to break phrases and words to smaller units. In this game, we break them into syllables. The syllable breaks are idiosyncratic as well. I tried to consistently break the words into what I thought would be natural sounding speech for a native speaker. This creates a problem. The syllable breaks don't necessarily match the dictionary breaks. They do however, match the way most English speakers speak. If you are learning English as a second language or are just having trouble acquiring English and you can model your speech after my model. Choose the "Pronunciation" model on the options page. You will probably sound more "natural" than if I had adhered to the dictionary syllable breaks. If you are working on spelling and natural speech pronunciation is not the target, use the default "Spelling" version.

Back to *And a One, Two, Three*. Have the student say the word, listen to the syllable breaks, then move the colored squares to the line. After they are successful, make the task harder. Don't listen right away to the *Syllable* button. Have the student count the vowels. Every syllable must have at least one vowel. You will get into the problem of the silent e and the two vowels that go walking, but teach these as still one vowel *sound*. Have them say what they think are the syllables, then check their thinking with the *Syllable* button. Use the colored felts to represent each syllable. There are 240 words to practice.



Rules, Rules, Rules! will introduce a select group of vowels and consonants. The first rule is "This vowel or consonant will usually say this sound." For example, letter "p" will say /p/ and "oe" will say /oe/. These are what we can expect a sound to say most of the time. Of course, if you have a rule, then you have an exception. Let the students list the exceptions if they want to, but focus on how there are *some* rules and consistencies to this language.

The addendum lists the sequence of the introduction of the rules. There isn't anything magical to this sequence. We tried to make sure that we didn't use a word before we had introduced the rule. There are 55 rules and 1,110 and words to practice.

"Spelling Test on Friday" can be used for reading or spelling practice. I encourage you to teach the student to look carefully at the word. Find the vowel; identify the rule or rules that are operating. Decide if the word plays fair or not. Say the word the real way, then say the word the way it looks like it should be spelled. For example, "yacht" does not play fair. It looks like it should say "yeahchit". Taking time for each word will help put the spelling into the brain for good. Quantity is not the purpose. Even if a student gets only 7 words a week to spell, and learns to spell them correctly, it is better than if he had 20 assigned, only got 7 correct, and moved next week to another 20. Stay with a group until the words are learned. Don't move on just because the calendar says it is time. All brains learn at different speeds. Teach each student to recognize how they learn and to respect that each learner is different. There are 1,800 NEW words in *"Spelling Test on Friday."* The list includes easy "instant" words and more difficult sight words.

The "Spelling Test on Friday" program is based on the observation that we learn by repetition. Many of the activities of daily living were hard to learn at first but now come easily. Spelling is one of those activities that can move from being a foreground process to one that occurs in the background. This program is designed to use three channels into the brain: visual, auditory, and tactile. If you see the word, hear it, write it, and check your work, the word has more pathways into your brain and a better chance of moving from short-term memory to long-term memory.

Reading and spelling are complex neurological processing tasks. This program was developed to help the learner listen to the spelling word, look at the word, visualize what the word looks like (hide words/show words option), type the word, proof the word, and spell the word correctly before moving on to the next word.

Proofing is a difficult task for many individuals. My thought is that in order to learn to spontaneously proof your work, you must be conditioned to *remember* to proof your work. Type the word in the space. Press *Spell Word* and put your finger on each letter as it is spelled. If it is exact, press *Check Answer*. If not, change your response. Significant information can be gained from a discrepancy between percent correct on first try and percent correct after proofing. The smaller the difference between these two numbers, the more automatic the word has become for the speller.

Learning Plan

Monday: Choose the week's words and use the *Practice* button to study the words.

Tuesday: Use the program to *Practice* the words before you start your home work, and again after you have finished the rest of your homework.

Wednesday: You are ready to *Take a Test*. Print out the results of the test by clicking on the *Print* button. Try to figure out why you misspelled any words that you missed. Switch back to the *Practice* mode and run through the words again,



even if you got all of the words right. Remember that we want the words to be moved to permanent memory. The more times you see, hear, and type them, the more likely it is that you will remember them.

Thursday: Test yourself again. Review any words that you missed. Now you're ready for the spelling test on Friday!

Friday: Take that test!

Match Ups! Spelling Test on Friday Words is the final game. Almost every student looks forward to playing *Match Ups!*. We used the same concentration game format as in our other CDs, but put words on the cards instead of pictures. If you want to get rapid reading of isolated words, use the arrow button on the bottom left corner to turn all the cards over. There are three important options to this game. Look under *Options* on the Menubar. This game could remain a visual matching task if you always keep the words on the cards. You do have the option of putting a heavier load onto auditory processing and memory by removing the word from the card and playing *Symbol to Sound*. If you really want to be impish, choose the option, *Sound to Sound*! :)

In many games, you can print a homework page relevant to the screen you just played by clicking on the *Print* button. There are also extra fonts and templates in PDF files on the CD.

The timesaving features of *Session Notes* and *Save Log* on the Clinical Log page, will help with documentation requirements. The *Save Log* feature saves the session notes and the Clinical Log page. It saves the information on your hard drive in a text file. These files can be read with any word processor or printed at a later date. Session notes can be entered at the time of the therapy session. To align the numbers and notes for easier reading, use a mono-spaced font such as Courier or Monaco.

In conclusion, this program is meant to reinforce the reading and spelling lessons that are being taught at home or in class. Only isolated words are presented for reading. Do not stop there. Words in phrases and sentences must be next. Then, most importantly, there has to be a reason for reading. Reading for meaning must be checked. It doesn't do a student any good to read words if she is not connecting the words to meaning. If you suspect that students are just decoding the words and not gaining any meaning from them, the problem is a reading comprehension weakness. The treatment for this is to teach students how to connect to the words and make images in their minds when they read a word. This is a separate problem from a decoding problem but must be addressed with as much fervor as a decoding "illiteracy" problem. Students are still functionally illiterate if they can read the words, but not understand what they have read.

I hope you and your students have fun using this program. Learning to read can be a difficult task for some people. The approach we have taken is that if you can see some patterns of what "plays fair" then the "not play fair" words will be less frustrating. Have fun and practice, practice, practice.

Marna Scarry-Larkin, M.A. CCC-SLP Speech-Language Pathologist



Literacy

Read My Lips; ABC; Put Same with Same; Patterns; Match Ups! Consonants and Vowels; Cut Ups!; And a One, Two, Three; Rules, Rules, Rules!; "Spelling Test on Friday"; Match Ups! Spelling Test Words

Letter Identification

1. Learning sounds: Read My Lips (Videos) "What's My Sound?" on ABC game Put Same with Same Match Ups! Consonants and Vowels Patterns

Word Identification and Word Attack

 2. Practicing Auditory Sequencing *Cut Ups!* And a One, Two, Three Match Ups! Spelling Test on Friday Words (options page: Sound to Sound Mode) Patterns

Metacognitive Skills

3. Learning Reading and Spelling Rules Rules, Rules, Rules! Read My Lips

Dictation

4. Practicing Spelling "Spelling Test on Friday" Cut Ups! (Hide stimuli, Option H)

Memory

5. Improving Visual and Auditory Memory Match Ups! Consonants and Vowels Match Ups! Spelling Test on Friday Words Patterns (Hide Stimuli Option)
NOTE: Be sure to check each OPTIONS page for each game to use different fonts and game variations.

This 3 CD program is hierarchically organized. Each individual game is designed to be easier at the early levels and harder at the later levels. If you begin at the first level and play sequentially through each game you should be able to establish the foundation for reading and spelling. It is expected that the student will be playing one or more games from each of the modules each day. There is a folder on the CD labeled, *Teacher Workbook*. It includes word lists and homework pages that can be printed and photocopied for classroom or literacy center use.

For information on other LocuTour Multimedia products call (800) 777-3166 or (805) 544-0775.



Research

At what age can we predict that a child is at risk for a reading disorder? What skills can we look at as predictors?

"Children diagnosed as speech-and language-impaired during their preschool years are at risk for developing serious learning problems during their school careers" (Padget, 1979-1984). These learning problems include significant reading and writing deficits. In the Dunedin Multidisciplinary Child Development Study, Silva et al. found that between 58% and 67% of children with either comprehension or expressive delays at age three had a low reading score at ages 7, 9, and 11 (Silva, Williams, and McGee 1987). According to Lyle (1970) there is an association between articulatory problems in 2 1/2 to 4-year-olds and later reading difficulty. Lundberg stated that the "single most powerful predictor of reading and spelling skills in the first school years is the level of phonological awareness, especially phonemic segmentation." Van Kleek (1990) suggests that skills related to phoneme segmentation, such as breaking a word into individual sounds and understanding soundsymbol relationships, are often mastered by the end of first grade. Our clinical experience indicates that if a child does not know letter sounds by the end of the first grade he should be evaluated for dyslexia. Shaywitz describes speech sounds to written letter associations as the "alphabetic principle." In addition to sound/symbol association, there must be a discovery that "spoken words can be broken down into smaller units of sound, that letters on the page represent these sounds, and that written words have the same number and sequence of sounds heard in the spoken word" (Shaywitz 1998).

Are there common characteristics of children who have difficulty learning to read?

Yes, the commonalities are: a history of delayed language, trouble with the sounds of words, a family history of dyslexia, difficulty naming letters, difficulty associating the letter name with the letter sound, and poor phonologic awareness--the knowledge that words can be broken into smaller sound segments (Shaywitz 1998).

Does early intervention work? If so, what are the elements of the intervention that make it successful?

Brady and Fowler (1988) have found that early intervention does result in improved reading ability when both phonological awareness and knowledge of the alphabet were learned. Some understanding of metalinguistic processes was necessary as well as rapid decoding of single words. The best predictor of poor reading comprehension is slow and inaccurate decoding (Fletcher, Shaywitz, et al.). When decoding is quick and accurate the reader can focus attention on reading for meaning instead of decoding skills.

How have these factors been incorporated into Literacy? (Games that correspond to the target skills are in parentheses).

To learn to read, a child must discover that spoken and written words can be broken down into smaller sound segments (And a One, Two, Three), that printed letters correspond to these sound



segments (Read My Lips, ABC, Put Same with Same, Match Ups! Consonants and Vowels, Patterns), and that written words have the same sounds in the same sequence as the spoken word (Cut Ups!). Lindamood, (et al. 1992) makes a distinction between phonic programs that presume the presence of some phonological awareness and those that teach phonological awareness through a "comparator function." They argue that practice in phonics instruction will not necessarily teach phonemic awareness. There must be a sensory-cognitive connection at a self-correcting cognitive level of awareness. The comparator function includes a hold-and-contrast concept for noticing the sameness/difference, number, and sequence of sounds in syllables. There also seems to be a need for the development of a metalinguistic understanding of the rules of reading and spelling (Rules, Rules, Rules). In addition to phonemic awareness and metacognition, the visual perceptual elements of word recognition and memory play an important part in rapid automatic recognition and decoding of single words (Match Ups).

The goals of Literacy are to build a solid foundation for phonemic awareness, teach the application of this skill to real words, and provide practice in rapid decoding. The next step is to apply single-word decoding skills to reading and spelling in context.

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Read My Lips

Consonants; Vowels; Alternate Vowel Spellings

The student will model productions of English phonemes.

How to Play

Objective

The clinician assists the student in maintaining visual attention as the video demonstrates a speech sound. The student watches the screen and makes the isolated speech sound. The student uses a mirror to check placement.

Response Options Choose Videos to see the complete production of each speech sound. *Photos* shows one point in the sound production that represents an important distinguishing feature of that sound. The sounds /ch/ and /j/ show the model's hand to indicate the puff of air that accompanies the production of these sounds to differentiate between /sh/ and /zh/. Lip rounding is a natural position for the /r, er, ir, ur/ sounds, even though as speech pathologists we teach the pulled-back lip position for the /r/ to avoid the /w/ sound. There are two positions modeled for the /or/ and /ar/ sounds. Click on the *Consonants, Vowels*, or *Alternate Vowel Spellings* to choose the sounds the student is to view. On the Video or Photo screen, choose the sounds to be modeled by clicking on the individual letters, one at a time. Record the student's imitation of the sound by using the VCR-like buttons. Compare the student's production to the model, and score it using the *CDI* button. Click on *Replay* to hear and see the sound again. The *Print* button will give you a homework page that includes a photo and questions about the sound. Click on the *Finished* button to stop the display of pictures and videos.

The *left arrow* allows you to repeat the previous screen. The up arrow key or the *up arrow* on the *volume* button increases the volume and the *down arrow* decreases the volume. *H* takes you to the *Help* screen. *X* allows a quick exit from the program. The *Print* button allows you to print the picture on a homework page. Refer to *I Like Keys* for more keyboard shortcuts.

- Monitoring and Self-Monitoring The student or clinician can determine if the student's target sound production should be scored Correct (C), Distorted (D), or Incorrect (I). Use the "Record and Play" features to record and listen to the student's production of the target. Listen for the samenesses and differences between the two productions. Have the student monitor his own speech and determine accuracy using the CDI button. Compare the student's perception of accuracy with your own. You may use the CDI button each time the student says the target sound to keep a running tally of accuracy.
 - Options Random/Sequential, Display Text/Hide Text, Stop at Each Picture/Continuous Play.

Random/Sequential: You must be in the *Continuous Play* mode to choose *Random/Sequential*. When the random option is chosen the sounds display in a randomly chosen order. They will continue to play in this order for subsequent trials in the same category. *Option R* will toggle the random feature on and off.

Display Text/Hide Text: Choose this option to hide the text displayed under the video. *Option H* will toggle the hide text/show text feature while the text is on the screen.

Stop at Each Picture/Continuous Play: The computer will automatically stop after each video or photo (the default setting) unless you select the *Continuous Play* option. Then it will play one video after another without stopping.

- *Screens* 27 consonant sounds, 26 vowel sounds, and 8 alternative spellings for vowel sounds.
- *Game Results* Level (video or photo), Number Viewed, Total Time Viewed, Speech: % Correct (C), %Distorted (D), and %Incorrect (I).
 - *Rationale* Video allows multisensory instruction as to the placement, tone, and volume of English speech sounds. Use the visual, auditory, and motor-kinesthetic sensory pathways to enhance rapid identification and production of speech sounds.
- Applications This is appropriate for children and adults learning to process English speech sounds.





ABC

What's My Name?; What's My Sound?; What's My Alphabet?; What's My IPA Symbol?

- *Objective* The student will repeat letter names or letter sounds after the voice stimulus. The IPA symbols are for the clinician/teacher.
- *How to Play* The student listens to the voice and watches the screen, then repeats the name of the letter or the sound of the letter. Click on the *Next* button to move to the next screen.
- **Response Options** Click on the *Listen to the Sound* button to listen to the sound, letter name, or alphabet sequence again. The *left arrow* allows you to repeat the previous screen. The up arrow key, or the *up arrow* on the *volume* button, increases the volume and the *down arrow* decreases the volume. *H* takes you to the *Help* screen. X allows a quick exit from the program. The *Print* button allows you to print the picture on a homework page. Refer to *I Like Keys* for more keyboard shortcuts.
- *Monitoring and Self-Monitoring* The student or clinician can determine if the student's target sound production should be scored Correct (C), Distorted (D), or Incorrect (I). Use the "Record and Play" features to record and listen to the student's production of the target. Alternate between the model and the student's recorded productions. Stress the importance of the concept that, "Contrast aids perception." Listen for the samenesses and differences between the two productions. Have the student monitor her own speech and determine accuracy using the *CDI* button. Compare the student's perception of accuracy with your own. You may use the *CDI* button each time the student says the target to keep a running tally of accuracy.
- **Recording Options** Use the mouse to click on the VCR-like controls beneath the *Listen to the Sound* button. The round red button records your voice. The red rectangular button stops the recording (or the playback) and the green triangular button plays the sound. If the buttons are gray they are not available.
 - **Options** Random/Sequential

When the random option is chosen the pictures display in a randomly chosen order. They will continue to play in this order for subsequent trials at the same level. To reset the random sequence, start a new trial by clicking on the large button above the level buttons or start by pressing the spacebar. *Option R* will toggle the random feature on and off.

- Screens Lower case sounds (56), Lowercase/Uppercase Names (52), Alphabet in sequence (18), IPA (36).
- Game Results By Trial: Category, %Correct(C), %Distorted (D), and %Incorrect (I), and Average Time.
 - **Rationale** This task is intended for students in Rancho Levels VII and above and requires the ability to attend to an auditory stimulus. This task is designed to prepare the student for letter and word recognition tasks found on other LocuTour games. This game establishes the "rules" for consonant and vowel sounds utilized in the other games.
- *Applications* This game is appropriate for children and adults learning language or pre-reading skills, or those with reading and spelling difficulty. This game can also help develop pronunciation skills with those individuals learning English as a second language.





Put Same with Same

Consonants I; Consonants II; Vowels; Mix All

Objective	The student will select matching letters from a field of four letters. Specific Objectives: CONSONANTS I : The student will select matching consonants from a field of four visually differ- ent consonant foils. CONSONANTS II : The student will select matching consonants from a field of visually similar consonant foils. VOWELS: The student will select matching vowels from a field of four vowels. MIX ALL: The student will select matching consonants or vowels from a field of four consonants or vowels.
How to Play	Click on the number corresponding to the letter or drag the target letter to the matching letter. Check your answer before moving to the next screen. You will not get credit for a correct answer if you move to the next screen by clicking on the <i>Next</i> button. To assign homework for this game, print the homework template from the <i>Teacher Workbook</i> on the CD.
Response Options	Touch screen: Touch the letter that is the same as the target. Keyboard: Press 1, 2, 3, 4 to indicate response. Mouse: Click on the letter that is the same as the target.
	Click on the <i>Replay Sound</i> (sound waves + ear) button to listen to the sound again. The <i>left arrow</i> allows you to repeat the previous screen. The up arrow key, or the <i>up arrow</i> on the <i>volume</i> button, increases the volume and the <i>down arrow</i> decreases the volume. <i>H</i> takes you to the <i>Help</i> screen. <i>X</i> allows a quick exit from the program. Refer to <i>I Like Keys</i> for more keyboard shortcuts.
Options	 Random/Sequential, Visual Cue Only/Auditory Cue Only/Auditory and Visual Cues, Choose Fade Time (Fast .5 sec., Regular 4 sec., Slow 10 sec., Never), Choose Font. Random/Sequential: When the Random option is chosen the pictures display in a randomly chosen order. They will continue to play in this order for subsequent trials at the same level. To reset the random sequence, start a new trial by clicking on the large button above the level buttons or start by pressing the spacebar. Option R will toggle the random feature on and off. Visual/Auditory Cues: The clinician can choose what the student sees and hears. Choosing Visual Cue Only will instruct the computer to display the letter symbol without saying the sound. With the Auditory Cue Only option there will be no visual stimulus; the computer will say the letter sound. Finally, the letter symbol will be displayed and its sound will be spoken when the Auditory and Visual Cues option is selected. Choose Fade Time: If you would like to add a memory component to this task, choose the Fast, Regular, or Slow fade option. Fast, fades the visual stimuli at .5 seconds, Regular at 4 seconds, Slow at 10 seconds, and Never allows stimulus to continue to be displayed. Choose Font: There are 18 fonts available for matching practice. There is a cursive font to help students learn to read cursive. Some of the fonts turn this game into a visual-perceptual challenge! Choose Fonts: Choose from 18 different font styles.
Game Results	By Trial: Correct, Error, and Average Time.
Rationale	This task is intended for students in Rancho Levels VII and above and requires the ability to attend to auditory and visual stimuli. This task requires motor persistence, visual attention and scanning, visuomotor coordination, and the ability to encode and recall the symbols (Lezak 1985).
Applications	New readers must develop a conscious awareness that letters represent sounds. Those with co- existing visual-perceptual weaknesses will need to learn to visually distinguish similar looking let-

ters from each other.





Match Ups! Consonants and Vowels

Symbol to Symbol; Symbol to Sound; Sound to Sound

Objective The student will learn sound to symbol correlation through a concentration game format. The student will turn over two cards on each turn to find matching letter pairs. The student will use verbal rehearsal to provide auditory and visual stimuli to support memory and recall of consonants and vowels.

- *How to Play* The clinician assists the student in choosing one of four levels. The levels correspond to the number of cards on the screen. There are 6, 12, 24, and 48 cards in levels 1, 2, 3, and 4, respectively. The student turns over one card by clicking on it with the mouse. The student hears the letter sound or the letter name, notices where the letter is on the grid, and searches for the match. The options allow the clinician to increase the difficulty of the task. It is very important to use the option *Change Pictures.* Twelve different decks of cards are available, each with a specific visual-perceptual or auditory focus.
- **Response Options** Click on a card with the mouse to turn it over. After a card is turned over, you can listen to the sound again by clicking on the card. (If you are using a touchscreen, touch the card to turn it over). You can repeat the last game by clicking on the *Repeat* button. If the cards don't match, they can be turned over by clicking on the button that has a right-facing arrow on it. Or you can click on a new card. If no cards are turned over, you can turn all of the cards over by clicking on the button that has a right arrow on it. Once this is done, you can match same to same. The up arrow key or the *up arrow* on the *volume* button increases the volume and the *down arrow* degrees the volume at the up arrow to the *Volume*.

decreases the volume. *H* takes you to the *Help* screen. *X* allows a quick exit from the program. Refer to *I Like Keys* for more keyboard shortcuts.

 Options
 Show symbol and play sound for both cards (Symbol to Symbol); Show one symbol and play one sound (Symbol to Sound); Play sound only for both cards (Sound to Sound).

 Display Cards/Turn Cards Over After Error, Remove Cards /Continue to Display Cards After Correct, Choose Card Backs, Choose Font.

Symbol to Symbol/Symbol to Sound/Sound to Sound: The Options page allows three ways to play. In *Symbol to Symbol to Symbol* the student sees a letter and hears the letter name on both cards. In *Symbol to Sound* the student sees a letter on one card and hears the letter sound on the other. In *Sound to Sound* the student hears the sound for both cards; there is no display. She has to listen for the matching sounds.

Display Cards After Error/Turn Cards Over After Error: The default option is to have the game pause when two cards that do not match are turned over. If this option is turned off, the cards will be turned so that the backs are visible after three seconds.

Remove Cards When Correct /Continue to Display Cards When Correct: The default option is to have the game pause for two seconds when two cards that match are turned over, then remove them from the screen. If this option is turned off, the cards will remain face up through the duration of the game.

Choose Card Backs: Change the card backs from the default to one of 16 choices.

Choose Font: We chose many different typefaces for practice in recognizing the letter shape. It is important to recognize the fundamental "sameness" of a particular letter even though a stylized font would make each letter look "different". Choose from 18 different font styles.

Game Results By Trial: Level, Seconds, Moves, Completion Status.



- *Rationale* This task is intended for students in Rancho Levels VII and above. This is a task of psychomotor performance it requires motor persistence; sustained visual attention and scanning; visuomotor coordination; and the ability to encode and recall the symbols. (Lezak 1985)
- *Applications* This game is appropriate for individuals with auditory/visual short-term memory deficits, verbal rehearsal and visual memory problems. Rapid naming of each sound is an excellent retrieval task. Use the arrow button (\Rightarrow) on the screen or type *A* to show all items.
- *Game notes* The letter "y" in this game has one sound: /j/ (yuh). In other places on the CD this letter also says the sounds: /ee/ (as in busy), /i/ (as in gym), and /ie/ (as in fly). Of note as well, is the fact that the /f/ and /th/ sounds are difficult to distinguish in the sound-only game. Students might also have difficulty distinguishing / s/ and /th/ sounds, and can peek at the answer if necessary.



р	t	p
р		

Patterns

Training Level; Level 1; Level 2

Objective The student will learn sound to symbol correlation for consonants and vowels. The student will complete sequential patterns of increasing complexity by choosing the correct letters from a field of four.

- *How to Play* The student plays the training level first. There is an auditory model which demonstrates how to "read" the pattern. Encourage the student to play with the auditory model until she can accurately name each consonant and vowel sound. Listen to the student during the naming of the sounds to ensure accuracy. The student reads the pattern aloud. When the student comes to the empty pink cards she decides how the pattern should continue, picks up the next card in the sequence, and drops it on the space where it should go. When the student is finished, click on the *Check Answer* button. If all of the cards have been correctly placed in the pattern, the computer will move on to the next screen. If the patterns have been incorrectly placed, the computer will leave the correct ones in the pattern and allow the student to place the correct cards. Encourage the student to say each sound as she picks it up to place it in the sequence.
- Response Options
 Touch screen: Touch the card in the bottom row that completes the pattern and drag it to the correct blank card in the sequence.

 Keyboard:
 Type the number corresponding to the letter that belongs in the next open space on the answer line. For example, #1 matches the letter in the first choice box, #2 the letter in the second box, etc. #0 puts all the letters back into the choice boxes. This is a great coding task that may improve the alternating skill necessary to copy information from the board to the paper.

 Mouse:
 Click on the card that corresponds to the next card in the pattern.
 - *Options Options Random/Sequential, Visual Cue Only/Auditory Cue Only/Auditory and Visual Cues, Choose Fade Time (Fast .5 sec., Regular 4 sec., Slow 10 sec., Never), Auditory Reward/No Reward.*

Random/Sequential: When the random option is chosen the pictures display in a randomly chosen order. They will continue to play in this order for subsequent trials at the same level. *Option* R will toggle the random feature on and off.

Visual/Auditory Cues: The clinician can choose what the student sees and hears. Choosing *Visual Cue Only* will instruct the computer to display the letter symbol without saying the sound. With the *Auditory Cue Only* option there will be no visual stimulus. The letter symbol will be displayed and its sound will be spoken when the *Auditory and Visual Cues* option is selected.

Choose Fade Time: If you would like to add a memory component to this task, choose the *Fast, Regular,* or *Slow* fade option.

- Game Results By Trial: Level, %Correct, %Error, Average Time
 - Rationale A much more complex task than Match Ups, Patterns is intended for students at the high end of Rancho Level VII. It draws on Luria's (1973) third functional unit of higher visual functions requiring perception of elements of a visual presentation, analysis of the features of the presentation including orientation to each other, and synthesis in what Luria called "intellectual operations in space." This task draws upon the V1 and V2 areas of the occipital cortex, the inferior temporal cortex, and the superior colliculus. Functions of the frontal and occipito-parietal regions are highly challenged by this task. The linguistic content of the task utilizes the temporal and auditory processing areas.
- *Applications* This game is appropriate for children learning pre-reading and math skills. Children and adults with reading and spelling difficulty, short-term memory problems, or sustained and shifting attention difficulties will also benefit from this activity.





Cut Ups!

Simple; Complex; Most Complex; Mixed

Objective

The student will develop sound segmentation skills and sound blending skills by sequencing two to six pieces of a word when a visual and auditory model is provided.

How to Play

The student listens to the word as it is pronounced, and lines up the cards with the letters onto the blank cards in the order that they heard the sounds. They can also use the keyboard to move the pieces by typing the number of the piece to be moved, and then the number of the empty space where it belongs. To move a piece back to the top set of blocks, type the number of the space holding the piece to be moved, then the number **0** to move it to its starting position. Encourage the student to think about how many sounds there are in the target word. It is most helpful to use a multisensory approach to sound segmentation. Develop motor kinesthetic awareness of speech sounds through *feeling* the sounds as they are made with the lips, tongue, teeth, and palate, and as the sounds resonate in the oral and nasal cavities. Develop kinesthetic awareness of the voiced/voiceless features of phonemes and compare the similarities and differences between sounds. *Feel* the sounds as they are made. Both the student and clinician can use mirrors to look at the mouth and *watch* the articulators as individual speech sounds are made. This develops visual discrimination between sounds. Rely heavily on the other senses of feeling and seeing to integrate the auditory mode. Sound segmentation is not just an auditory task. Integrate the sensory systems to allow the student the greatest possible success.

The words for this game have been cut up into the correct number of sounds. Don't be fooled by the number of letters; we're thinking about how many *sounds* there are in this word. Some sounds have two letters, like *oi*, *oy*, *ow*, *ou*, *oo*, *au*, *aw*, *er*, *ir*, *ur*, *ar*, *or*, *ae*, *oa*, *ai*, *ay*, *ey*, *ch*, *sh*, *zh*, *th*, *th*, *wh*, and *ng*. Some vowels have one sound but the letter *e* is split off from the other vowel partner. For example: *ae*, *ee*, *ie*, *oe*, and *ue* are usually written with a consonant in between, i.e., "tape" and "cute." So think about how many *sounds* that you *see*, *hear*, and *feel* as you say the word. It might help you to play "What's My Sound" in ABC.

Simple and complex sounds were chosen for their phonological ease or complexity of processing, **not** vocabulary. You may need to teach the meaning of the words as your student is learning to sound out and spell the new word. *Simple* words follow a consonant-vowel (CV), vowel-consonant (VC), or consonant-vowel-consonant (CVC) pattern. *Complex* words follow the patterns of CCV, VCC, CCVC, CVCC. *Most Complex* words follow the CCVCC, CCCVC, CCCVCC or CVCCC patterns. Consonant and vowel rules are defined in *LocuTour Guide to Letters, Sounds, and Symbols,* included with this manual.

NOTE: Unlike the Cut Ups! games on other LocuTour CDs, these words are accompanied by colorful patterns and pictures that are randomly displayed for interest's sake. The picture is not associated with the word's meaning.

Response Options Use the touchscreen or mouse to select the *Sounds, Blended*, or *Word* button to hear the target word spoken. By typing the letters *L*, *B*, or *W* you will hear the sound corresponding to the sounds the letters make (L), the blended word (B), or the word (W). Click on the picture piece at the top of the screen to hear each isolated sound in the word. Put the pieces into the correct order in the answer box by clicking and dragging each piece from the middle of the screen When using the keyboard, touch key 1 to pick up the picture in box 1, and keys 1-6 to place the picture in an empty box. If there are only two boxes, then only keys 1 and 2 are available. If there are three boxes, then only keys



1, 2, and 3 are available, etc. The *Print* button allows you to print a homework page for additional practice.

- Monitoring and Self-Monitoring: The student or clinician can determine if the student's production should be scored Correct (C), Distorted (D), or Incorrect (I) using the *CDI* button. Alternate between the model and the student's recorded sounds. Stress the importance of the concept that, "Contrast aids perception." Listen for the samenesses and differences between the two productions. Have the student monitor his own speech and determine accuracy. Compare the student's perception of accuracy with your own. You may use the CDI button each time the student says a target word to keep a running tally of accuracy. When you finish lining up the cut up picture, click on the *Check Answer* button or type C to check your answer. The computer will automatically move you to the next screen if you are correct. If you cannot line up the cut up pieces yourself, click on the Show Answer button or type A to have the computer line them up correctly for you. The *Repeat* button lets you replay the current screen, even after a correct response has been given. Clicking on the *right arrow* or pressing on the right arrow key moves you to the next screen without recording a correct or incorrect response. The left arrow allows you to repeat the previous screen. The up arrow key or the up arrow on the volume button increases the volume and the down arrow decreases the volume. H takes you to the Help screen. X allows a quick exit from the program. The Print button allows you to print the picture on a homework page. Refer to the I Like Keys insert for more keyboard shortcuts.
- *Recording Options:* Use the mouse to click on the VCR-like controls. The round red button records your voice. The red rectangular button stops the recording (or the playback) and the green triangular button plays the sound. If the buttons are gray they are not available.

Options Random/Sequential, Display Words/Hide Words, Go to Next Screen/Stay on Same Screen if Correct.

Random/Sequential: When the *Random* option is chosen, the pictures display in a randomly chosen order. They will continue to play in this order for subsequent trials. To reset the random sequence, start a new trial by clicking on the large button above the level buttons or start by pressing the spacebar. *Option R* will toggle the random feature on and off. Choosing the *Mixed* level from the game page randomizes the pictures and resets the *Random/Sequential* option to random.

Display Words/Hide Words: This option will hide or show the letters and pictures in the top display box. This will allow auditory memory or auditory discrimination practice. If you hide the pictures and letters in the top display box and turn off the volume, you can play a game similar *to Hangman*, in which you try to guess the word when given mixed up letters.

Go to Next Screen /Stay on Same Screen if Correct: If the student answers correctly, the default option is to go to the next screen after the student has clicked the *Check Answer* button. If the *Stay on Same Screen* option is selected, the current picture will be displayed until the student clicks on the *Next* button. Staying on the same screen allows the clinician and student to talk about the current item before moving on to the next.

- *Screens* Simple 80 words, Complex 80 words, Most Complex 80, Mixed 240 words from all levels. When the game starts it plays the first 20 words in order of increasing difficulty. To play the next screen in the series, (i.e. # 21), click the highlighted level button. To reset the counter to #1, click the large button that says Cut Ups! In order to play all screens do not reset the counter. To choose specific syllable patterns (CV,VC, CVC, etc.), click on the Choose Target button on the main screen. The target groups available are: Simple (CV,VC, CVC), COC), Complex (CCV, VCC, CVCC), and Most Complex (CCVCC, CCCVC, CCCVC).
- Game Results By Trial: Level, Pictures, %Correct, Extra Moves, Average Time.



- **Rationale** This task is intended for students in Rancho Levels VII and above as it requires the ability to attend to a complex auditory stimulus, analyze the sound segments, hold this analysis in memory, and perform a motor response. This task involves a degree of conceptual or symbolic functioning. At a basic level, the student can "think it through" one auditory segment at a time while an individual capable of more complex processing can implement his entire analysis before verification.
- *Applications* This game is appropriate for children and adults: who are learning language, pre-reading, and math skills; have difficulty with reading or spelling; or have a central auditory processing dysfunction.





And a One, Two, Three!

1 Syllable; 2 Syllables; 3 Syllables; 4 Syllables; 5 Syllables; 6 Syllables; 1,2,3 Syllables; 4,5,6 Syllables; Mix All Syllables

- Objective
- The student will indicate the number of syllables for an auditorily presented word.

How to Play The student listens to a word as it is pronounced and thinks about how many syllables are in the word. When she clicks on the Syllables (Spelling) button the word will be said in syllable chunks with a spelling focus. When she clicks on the Syllables (Pronunciation) button the word will be said in a more natural way; still containing syllable breaks. She is to count the number of syllable chunks and tap out the number of chunks on the table, or clap the number of syllable chunks. You can use cut-out felt squares on the table in front of you to count the syllables. Choose one of the Syllables buttons again, and this time the student counts the syllables to monitor and self-correct. When she is sure, she can pull down the colored squares from the pile and place one on the line for each syllable that is counted. The student can always pull down the colored squares, then click a Syllables button to recheck her work. Click on the Check Answer button to check the answer and record the response. Many of the words will need to be looked up in the dictionary. For English as a second language speakers, the pronunciation button will provide an accurate model of the word. The spelling button, however, will be an affected model, and would not be good for pronunciation practice. The purpose of the spelling button is to emphasize the closed syllable concept and the expectanciesha, ha, ha,--of spelling!

Response Options Touch screen: Touch the colored square and drag it to the line below. Drag one colored square for each syllable chunk. Touch the *Word* button or one of the *Syllables* buttons to hear the word or syllables and see them displayed on the screen. Touch the *Check Answer* button to check your answer. Touch the *Show Answer* button if you would like the answer spoken and shown to you. *Keyboard:* The number keys 1-6 correspond to a colored square. If you type a *I*, the first colored square moves down, etc. Use the 0 (zero) key to return all of the squares to the line. Type *W* for *Word* or *Y* for *Syllable (spelling)* or to hear the word or syllables and see them displayed on the screen. Type *Z* to hear the more natural *Pronunciation*. Sometimes the word will be divided differently for the spelling and pronunciation versions. Type *A* for the *Check Answer* button to check your answer. This will automatically move you to the next screen if you are correct. Type *L* to show the answer on the Line and hear the word spoken in syllable chunks.

Mouse: Click on the colored square and drag it to the line below. Drag one colored square for each syllable chunk. Click on the *Word* button or the *Syllables* button to hear the word or syllables and see them displayed on the screen. Click on the *Check Answer* button to check your answer. This will automatically move you to the next screen if you are correct. Click on the *Show Answer* button if you would like the answer spoken and shown to you.

Clicking on the *right arrow* or pressing on the right arrow key moves you to the next screen without recording a correct or incorrect response. The *left arrow* allows you to repeat the previous screen. The up arrow key, or the *up arrow* on the *volume* button, increases the volume and the *down arrow* decreases the volume. If you turn the volume off, you can scroll faster through the pictures using the right or left arrow keys. *H* takes you to the *Help* screen. *X* allows a quick exit from the program. The *Print* button allows you to print a homework page that provides six tasks to reinforce the target word. Refer to *I Like Keys* for more keyboard shortcuts.



Monitoring and Self-Monitoring:

The student or clinician can determine if the student's target sound production should be scored Correct (C), Distorted (D), or Incorrect (I). Use the "Record and Play" features to record and listen to the student's production of the target. Alternate between the model and the student's recorded sounds. Stress the importance of the concept that, "Contrast aids perception." Listen for the samenesses and differences between the two productions. Have the student monitor her own speech and determine accuracy using the *CDI* button. Compare the student's perception of accuracy with your own. You may use the *CDI* button each time the student says the target sound to keep a running tally of accuracy.

Recording Options Use the mouse to click on the VCR-like controls beneath the *Word* or *Syllable* buttons. The round red button records your voice. The red rectangular button stops the recording (or the playback) and the green triangular button plays the sound. If the buttons are gray they are not available. Use the record buttons to spell the word orally, then play back the spelling and practice writing to your own dictation.

 Options
 Go to Next Screen/Stay on Same Screen if Correct, Random/Sequential, Display Words/Hide Words, Start at Word Number 1, Word 21.

 Go to Next Screen/Stay on Same Screen if Correct Answer: If the student answers correctly, the de

fault option is to go to the next screen after the student has clicked the *Check Answer* button. If the *Stay on Same Screen* option is selected, the current word(s) will be displayed until the student clicks on the *Next* button. Staying on the same screen allows the clinician and student to talk about the current item before moving on to the next.

Random/Sequential: When the random option is chosen the words display in a randomly chosen order from easier to harder. They will continue to play in this order for subsequent trials. To reset the random sequence, start a new trial by clicking on the large button above the level buttons or start by pressing the spacebar. *Option R* will toggle the random feature on and off. Choosing the *Mix All* level on the game menu screen randomizes the words and resets the *Random/Sequential* option to random.

Display Words/Hide Words: Choose this option to make this an auditory-only task. *Option H* will toggle the display words/hide words feature while the words are on screen to allow auditory and visual memory practice or decoding practice.

Start at Word Number 1/ Word Number 21: This option is helpful if you have practiced words 1-20 and do not want to go over them again.

- Screens I Syllable 40 words, 2 Syllable 40 words, 3 Syllable 40 words, 4 Syllable 40 words, 5 Syllable-40 words, 6 Syllable 40 words, 1-3 Syllable 120 words from Levels 1 to 3, 4-6 Syllables 120 words from Levels 4 to 6, Mix All 240 words from all Levels. If, after 20 words, you would like to begin again with number 1, click the large button on the game screen to reset the counter. If you would like to continue on number 21 to 40, double click the smaller syllable button.
- *Game Results* By Trial: Category, % Correct (C), % Distorted (D), % Incorrect (I), % Syllables Correct, and Average Time.

When the answer is correct, the computer will count it as correct. When incorrect, the computer will count it as wrong. If you get the answer incorrect and then fix your error, the computer will count that as one correct and one incorrect response, thus giving you a score of 50%. If, for example, on a sequence of 20, you make an error on 1 picture, then get it correct and move on to the next one, your score will be one error with 20 correct and your percent correct will be 95.2% (20/21). The purpose is to count the number of times the syllables are identified correctly. The same is true for the *C*, *D*, *I* scoring. The computer keeps track of the number of times you indicated that the student's production of the word or phrase was correct (C), distorted (D), or incorrect (I) over the total number of attempts. There is no limit to the number of attempts at correct production for each page.

Rationale This task is intended for students in Rancho Levels VII and above as it requires the ability to attend to a complex auditory stimulus, analyze the sound segments, hold this analysis in memory, and perform



symbol, and the motor ability to represent this information spatially. Accurate ability to process and self-monitor the syllable breaks within words is an auditory processing skill. Self-monitoring can be extended to self-correction of rate and syllable reduction using the stimuli as a tool for speech practice.

Applications

Central Auditory Processing Disorder

Recent research indicates that phonemic processing is critical to auditory processing of connected speech. This game allows for auditory processing of speech sounds at the syllable and word levels using the *Syllable* and *Word* buttons. This segmentation of the word allows listeners to process the phonemic units that make up the word, imitate the units, record their production, and play back their speech to self-monitor. Self-correction and self-monitoring are the first steps in automatic integrated auditory processing and accurate verbal expression.

- *Dyslexia* This game is appropriate for children and adults learning to read or those with reading and spelling difficulty. Refer to the *LocuTour Guide to Letters, Sounds, and Symbols* for more information about spelling and pronunciation rules. *Transfer activity:* Use the homework pages to practice copying the word and spelling new sentences. If the student copies the word from the computer screen and writes it on a word list, he is also developing shifting attention skills, visual perceptual, and motor sequencing skills.
- Aphasia TherapyThis version of And a One, Two, Three has text instead of pictures. It is still appropriate to use with
students who have aphasia, and will allow practice of single and multisyllable words. Students with
apraxia will want to repeat the stimuli several times in chorus with the computer to practice speech
initiation. Use of the Sequential presentation option allows the clinician to present the same stimuli
each day. As the student progresses, clinicians can increase the variability of responses using the Ran-
dom option. Repeating the words, phrases, and sentences forward and backward on a level at which
your student is successful 85% of the time, will develop short term memory skills and mental flexibil-
ity. I always use felt squares placed on the table to "anchor" the words.

Dysarthria and Apraxia

Auditory feedback is critical for self-monitoring of dysarthric speech. The words were chosen for content and phonemic complexity. The screen was designed to allow printed and/or auditory stimuli. A student with apraxic speech may prefer to have the words displayed and use the *Word* and *Syllable* buttons for self-paced imitative speech practice. The student with dysarthric speech may choose to practice words to improve intelligibility for phrases and sentences. Most students can practice on their own or with an assistant. Use of the *CDI* button will allow students to keep track of how they think their production of the stimuli sounds. The comparison of *their* perception of intelligibility and *your* perception of intelligibility can be insightful when planning therapy goals.

A Comment about the Syllable Breaks

There are multiple acceptable alternative syllabic divisions, just as there are acceptable variances in spelling and pronunciation. There isn't a definitive "right way". The general rule we followed for the Spelling version was: 1. Close the syllable if the vowel said its sound. 2. Be ready to flex the vowel if it was open. That means a vowel at the end of a syllable will usually say its name, but it could say its sound or say the schwa sound "uh". 3. Make auditory hooks for double consonants, i.e. pronounce both "m" letters in "com • mu • ni • ty" The Pronunciation version is different from the Spelling Version. The rule for Pronunciation was to provide natural sounding speech in syllable breaks. Therefore, if the most natural way to pronounce the word was to break the, "close the syllable rule", then we did. For example, in Pronunciation we say: ta • lent, ho • nest, and va • nish and in Spelling we say: tal • ent, hon • est, and van• ish. We think that the Pronuciation version is the most appropriate version for speakers of English as a second language and children or adults that overlearn rules, such as those with Autism or Asperger's syndrome.





Rules, Rules, Rules!

Groups 1-55

Objective	The student will learn to read words by identifying the vowel sound, sounding out the word, and
	identifying the rule.

How to Play There are two ways to play *Rules*. If you choose to play hierarchically, you will have isolated sounds presented first, then simple to more complex words and rules. It is in an "easier to harder" format. Button "1" is the first and easiest group of sounds and words. Button "55" is the most difficult. When you play Conceptual Level, a concept can be chosen and words representing the concept will be presented. Refer to the list on the next page for a list of rules and button correspondence.

Isolated Sounds: The student repeats the sound, says the letter name, finds the target letter in a field of letters, and identifies whether the sound is a consonant or a vowel.

Single Syllable Words: The student finds the vowel, sounds out the word, repeats the word after the voice stimulus, spells the word, and identifies the rule. When the student clicks on *Find the Vowel*, the vowel letters will be highlighted in red. When the button called *What's the Rule?* is clicked, the consonant letters that match the rule will turn blue. If the *Sound it Out* button is chosen, all letters that are not pronounced will be grey. Green letters indicate that more than one rule is operating or that there is a need to "notice" the exception. When a consonant and a vowel is part of the rule the green color is used. *Multisyllable Words*: The student repeats the word, finds the vowels, says the syllables, says the word, spells the word, and identifies the rule. If the student clicks on *Say the Syllables*, all letters that are not pronounced will turn grey, and the vowels will be highlighted in red to demonstrate that every syllable contains a vowel.

Rule Card: The student repeats, then memorizes the rule.

Response Options Click on a button to listen to a vowel, sound, word, or rule again. **Isolated Sounds:** When you click on Say the Sound, the computer will produce the letter sound. You will hear the letter name if you click on Say the (Letter) Name. If you click on Find the Sound your student will play a scanning game in which he is to find three target letters in a field of letters. Click on Return to go back to the screen with the isolated sound. The What's the Rule? button will name the target as a consonant or vowel. **Single Syllable Words:** If you choose Find the Vowel, the computer will say the vowel sound then turn the letter or letters of the vowel red. When you click on Sound It Out, the computer will segment the word into its individual sounds. You will hear the whole word by clicking on Say the Word. Clicking on Spell the Word will get a letter-by-letter spelling. Finally, a common spelling rule will be heard when What's the Rule? is chosen. **Multisyllable Words:** Click on Find the Vowels to direct the computer to say the vowels and highlight them. The computer will break the word into syllables when the Say the Syllables button is chosen. The next three buttons are the same as in Single Syllable Words. Rule Card: Choose What's the Rule? and the computer will give you an important spelling rule.

The *left arrow* allows you to repeat the previous screen. The up arrow key, or the *up arrow* on the *volume* button, increases the volume and the *down arrow* decreases the volume. *H* takes you to the *Help* screen. *X* allows a quick exit from the program. The *Print* button allows you to print a homework page. Refer to *I Like Keys* for more keyboard shortcuts.

Monitoring and Self-Monitoring: The student or clinician can determine if the student's target sound production should be scored Spontaneous Correct(C), or Incorrect(I) and/or Imitative Correct(C), or Incorrect(I). Use the "Record and Play" features to record and listen to the student's production of the target. Alternate between the model and the student's recorded sounds. Stress the importance of the concept that, "Contrast aids perception." Listen for the samenesses and differences between the two productions. Have the student monitor his own speech and determine accuracy using the *CI* buttons. Compare the student's perception of accuracy with your own. You may use the *CI* buttons each time the student says the target sound to keep a running tally of accuracy.



Recording Options Use the mouse to click on the VCR-like controls. The round red button records your voice. The red rectangular button stops the recording (or the playback) and the green triangular button plays the sound. If the buttons are gray they are not available. The "R" key begins a recording, the "S" key stops the recording, and the "P" key plays the recording. You must have a microphone connected to record speech.

Options Random/Sequential

When the random option is chosen the screens display in a randomly chosen order within the group. They will continue to play in this order for subsequent trials at the same level. To reset the random sequence, start a new trial by clicking on the large button above the level buttons or start by pressing the spacebar. *Option R* will toggle the random feature on and off.

- Screens Choose Target, Hierarchical Level, Contextual Level, Lesson Number
- *Game Results* By Trial: Group, Spontaneous Correct and Incorrect, Imitative Correct and Incorrect, Pictures, and Average Time.
 - *Rationale* This task is intended for students in Rancho Levels VII and above and requires the ability to attend to an auditory stimulus. This task is designed to reinforce automatic reading recognition skills based on a foundation of phonemic processing.
- *Applications* There really are some rules to the English language. This game is appropriate for adults or children. Learning the "metalinguistics" of English helps organize the seemingly random process of reading and spelling.

Concept Groupings	<u>Group Number(s)</u>
Consonant/vowel practice in isolation and in VC, CV, & CVC syllables	1-6, 9-11
"Two vowels go walking"	7, 8, 9
Alternative vowel spellings- VC, CV, CVC, VCC, CCV, CCVC, and CCCV	12-15
CVCC and CCVC patterns	16
"Y" practice	17, 20
Open/Closed syllables	18, 19
"X"	21
"QU"	21
"C" practice	22
"G" practice, contrasted with the /j/ sound	23, 24
Blockers (ck, dge, tch)	25, 26
Silent letters +ph (kn, wr, mb, rh, gn, bt, ps, lm, lk, sch)	27, 28, 29, 33
Double the final sound	30
"GH", "GHT", "H"	31, 32
"R-Controlled Vowels"	34
"LE" endings	35
"ED"	36
"IE" and "EI"	37, 38
Spelling the sounds, /s/ and /z/	39, 40
More open/closed practice with double consonants	41
More "E" rule practice	42 through 46
Plural/singular	47 through 51
Schwa	52
Suffixes (tion, sion, ture, tive, cial, ous)	53
Prefixes (pre, re, mis, trans, hyper, un, non, ex, in, sub)	54
Single syllables	1 through 17
Single and Multisyllables	18 through 55





"Spelling Test on Friday"

Practice; Take a Test

Objective The student will learn to spell words through a six-step process: Look, Listen, Say, Listen, Spell, Check.

How to Play The student looks at the word, hears the word, says the word, listens to the word again, spells the word out loud, then types the word into the empty box. (If she puts a space before or after the word, the computer will count it wrong, reading the space as an incorrect letter). The last step of the six-step process is to have the student click on the *Check Your Work!* button or type return to proof the spelling and move on to the next screen. After completing all 20 words in a section, she will be returned to the game menu. The *Compare* button at the bottom of the screen will allow you to compare the student's first entry with his final correct spelling. When the student is ready to take a test, select the *Take a Test* button. The practice word list will be randomly spoken. The student will listen, type the words into the white box, and hit either return or *Next* arrow to move through the list. When all the words have been given, a proofing page will come up. This provides an opportunity to proof your work before the final grading. Click on the speaker icon and the word will be pronounced. Listen, then check your spelling of the word. If you want to make a change, type the change into the box. The *Results* page will show the words typed and the percent correct. The *Print* button will print a homework page with the selected words.

Response Options Click on the *Hear Word* button to listen to the word again. The *Hide Word* button hides the word as you spell. The word will stay hidden until the *Show Word* button is clicked. There are three ways to move to the next word during the *Practice* phase: 1) type the word correctly and hit return, 2) type the word correctly and click on *Check Your Work!*, 3) type the word incorrectly, or type nothing, and use the right arrow key or click on the *Next* button. If the word is typed in wrong and the student presses return or clicks on the *Check Your Work!* button, the computer will spell it out correctly. The *Show Word List* button displays the entire spelling list. After you type in the complete list, the computer will automatically return to the main game screen. On this screen you can choose the *Compare* button to see the results of your practice session. You can notice how many words were spelled correctly on the first trial and on the final trial. You will also get information about the total number of words practiced. On the *Results* page you can type in session notes or make notes to remind yourself of the memory hooks you created to learn to spell the practice words. Use the scroll bar to see all of the results of your session.

The up arrow key, or the *up arrow* on the *volume* button, increases the volume and the *down arrow* decreases the volume. *H* takes you to the *Help* screen. *X* allows a quick exit from the program. The *Print* button allows you to print the word lists on a homework page. Refer to *I Like Keys* for more keyboard shortcuts.

Options Random/Sequential; Choose the Voice Prompt--Word, Spelling, Word and Spelling, Nothing; Display Words/Hide Words; Lock Finish Button.

Random/Sequential: When the random option is chosen the pictures display in a randomly chosen order. They will continue to play in this order for subsequent trials at the same level. To reset the random sequence, start a new trial by clicking on the large button above the level buttons or start by pressing the spacebar. *Option R* will toggle the random feature on and off.

Choose the Voice Prompt: This option allows the clinician to tell the computer what to say when each word comes up. If *Word* is chosen, the computer will speak the word. It will spell the word when *Spelling* is chosen. The student will hear both the word and its spelling if the option, *Word and Spelling*



is selected. Finally, the written word will appear without a voice prompt when the option, *Nothing* is chosen.

Display Words/Hide Words: Choose this option to hide the word. *Option H* will toggle the hide words/ show words feature while the word is on the screen to allow auditory memory practice or decoding practice.

Lock Finish Button: When this option is chosen the student cannot end the program before he is finished by clicking on the *Finished* button. This option essentially disables the *Finished* button so the student must complete all of the programmed trials.

- *Screens* Ninety groups of 20 words each, for a total of 1,800 words.
- Game Results
 Practice Results: Word; Your Spelling; Correct; %Correct on First Try; %Correct on Second Try; Number of Words; Number Practiced.

 Test Results: Word; First Spelling; Proofed; Final Correct; %Correct on First Try; %Correct on Second Try; Number of Words; Number Practiced.
 - *Rationale* This task is intended for students in Rancho Levels VII and above and requires the ability to attend to an auditory stimulus, analyze the sound segments, hold this analysis in memory, and perform a motor response.
- *Applications* This game is appropriate for children and adults learning to read and spell. This game can also help develop pronunciation skills for speakers of English as a second language.





Match Ups! Spelling Test on Friday Words

Six Cards; Twelve Cards; Twenty-four Cards; Forty Cards

Objective The student will "turn over" two cards on each turn to find matching word pairs. The student will use verbal rehearsal to provide auditory and visual stimuli to support memory and recall of the pairs.

- *How to Play* The clinician assists the student in choosing one of the four levels. The student then turns over one card by clicking on it with the mouse. The student hears the card labelled, observes the word or listens to the sound on the card, and tries to recall where he has seen, or heard, a matching card. When the student clicks on his choice the card will turn over. If the cards match they will disappear from the screen after two seconds. If they do not match they will be turned over when the student chooses the next card or clicks on the arrow key at the bottom left corner of the screen. The student may hear the card labelled again by clicking on the card. The student will then be given the option of choosing a skill level and playing another game. The cards will be automatically reshuffled unless the student chooses to play the same game over by clicking on the *Replay* button.
- **Response Options** Click on a card with the mouse to turn it over. After a card is turned over, you can listen to the sound again by clicking on the card. (If you are using a touchscreen, touch the card to turn it over.) You can repeat the last game by clicking on the *Replay* Button. If the cards don't match, they can be turned over by clicking on the button that has a right-facing arrow on it. Or you can click on a new card. If no cards are turned over, you can turn all of the cards over by clicking on the button that has a right arrow on it. *Note that some cards have no sound and some cards have no picture -- just sound.* The up arrow key or the *up arrow* on the *volume* button increases the volume and the *down arrow* decreases the volume. *H* takes you to the *Help* screen. *X* allows a quick exit from the program. Refer to *I Like Keys* for more keyboard shortcuts.

Options The *Game Card Options* allow great flexibility in this game.

Card 1	Card 2
Show word and say word	Show word and say word
Show word	Say word
Show word	Say spelling
Say word	Say spelling
Show word	Show word
Say word	Say word

Display Cards After Error/Turn Cards Over After Error, Remove Cards After Correct/Continue to Display Cards After Correct, Choose Card Backs, Choose Font.

Display Cards After Error/Turn Cards Over After Error: The default option is to have the game pause when two cards that do not match are turned over. If this option is turned off, the cards will be turned so that the backs are visible after three seconds.

Remove Cards When Correct /Continue to Display Cards When Correct: The default option is to have the game pause for two seconds when two cards that match are turned over, then remove them from the screen. If this option is turned off, the cards will remain face up through the duration of the game. *Choose Card Backs:* Change the card backs from the default pattern to one of 16 choices.

Choose Font: Choose from 18 different font styles.

Game Results By Trial: Level, Seconds, Moves, Completion Status.

- *Rationale* This task is intended for students in Ranch Levels VII and above. This is a task of psychomotor performance and is intended to provide practice in instant word recognition, auditory processing, and spelling.
- *Applications* This game is appropriate for children and adults learning to read and spell. Individuals with auditory/visual short-term memory deficits would benefit from playing this game.





Commands common on all Level Selection Screens

"O" go to the "**O**ptions" screen "F" **F**inish the current activity in the program "?" go to the Help Screen TAB choose the level for the practice session RETURN start or continue the practice session **without resetting** the counter or the random number generator SPACEBAR start the practice session and **reset** counters and the random number generator

Results Screen

"F" Finish the program
"M" return to the Game Menu Screen
"?" go to the Help Screen
"H" go to the Help Screen
"P" Page setup
"Option" and "P" Print the results page

Options Screen

"Option" and "R" toggle between random and sequential "Option" and "H" toggle between displaying the word and hiding it "Option" and "N" go to the Enter Names Screen "Option" and "H" go to the Help Screen

"D" or RETURN return to main menu

Help Screen

"D" or RETURN return to main menu

Names Screen

TAB toggle between names fields RETURN record the names and return to main menu





Commands common on all Main Screens

- \rightarrow (right arrow) go to the next word
- \leftarrow (left arrow) go to the previous word
- \uparrow (up arrow) increase the sound volume
- \checkmark (down arrow) decrease the sound volume

"F" return to the main screen"?" go to the Help Screen"H" go to the Help Screen"Q" or "X" exit, quit the program

Commands common on all Main Screens if the feature is present

"Option" and "R" toggle between random and sequential "Option" and "H" toggle between displaying the text and hiding it "Option" and "P" print the picture and homework "Option" and "C" toggle between pause on correct and continue on correct

"R" record the word "S" stop recording the word "P" play back the word

"C" score the pronunciation as correct "D" score the pronunciation as distorted "E" or "I" score the pronunciation as incorrect (error)

Commands common on all Clinical Log Screens

"Option" and "T" toggle between allowing/not allowing keyboard shortcuts

"G" return to main menu

"F" Finished

"P" Print Results page

Note: If the shortcut says "Option" and "key" then the "Option" key is acting like the shift key. Press the "Option" key and while holding it down, press the other key in the command. (Windows users should press the Control Key.)





Main Screen Commands that vary by game

Read My Lips

"Option" and "C" toggle between continuous play and stopping after an action

ABC

"W" or "1" play the sound for the word

Put Same with Same

- "A" Show Answer
- "C" Check Answer
- "R" Repeat the screen (turn off highlights and replay)
- "T" Repeat the sound (leave the screen alone and replay the sound)

Option" and "C" toggle between stopping and continuing after correct answer

Option" and "V" Visual Cue Only Option" and "A" Auditory Cue Only Option" and "B" Both Auditory and Visual Cue

"Option" and 1" set the fade time to Fast "Option" and 2" set the fade time to Regular "Option" and 3" set the fade time to Slow "Option" and 0" set the fade time to Never

Patterns

"A" Show Answer

"C" Check Answer

"R" Repeat the screen (turn off highlights and replay)

"T" Repeat the sound (leave the screen alone and replay the sound)

"1" put the card from choice box 1 into the next spot in the pattern

"2" put the card from choice box 2 into the next spot in the pattern

"3" put the card from choice box 3 into the next spot in the pattern

"4" put the card from choice box 4 into the next spot in the pattern

Cut Ups!





Main Screen Commands that vary by game

"W" play the sound for the word

"B" play the sound for the blended word

"L" play the sound for the letters

" \emptyset " move the pieces back to their original positions

To move pieces with the keyboard:

Type the number of the piece you want to move and then the number of the empty space where you want it to go. If you want to move a piece back to the top set of blocks, type the number of the space holding the piece you want to move, then \emptyset to move it to its starting position.

And a One, Two, Three

"1" move felt 1 down to the line

- "2" move felt 2 down to the line
- "3" move felt 3 down to the line
- "4" move felt 4 down to the line
- "5" move felt 5 down to the line
- "6" move felt 6 down to the line
- " \emptyset " move the felts back to their original positions

"A" Check Answer

"L" Show Answer (put the felts on the Line)

"W" play the sound for the Word

"Y" play the syllables (spelling)

"Z" play the syllables (pronunciation)

MatchUps

"A" Show Answer (turn all of the cards face up)

"R" Repeat the screen (turn all of the cards face down)

This key also works on the menu screen to replay the last game.





Main Screen Commands that vary by game

Rules! Rules! Rules!

- \rightarrow (right arrow) go to the next set of words on the main menu
- \leftarrow (left arrow) go to the previous set oF words on the main menu

For game screens with just the sound

- "1" Say the Sound
- "2" Name the Letter
- "3" Show the Capital Letter
- "4" Play "Find the Sound"
- "5" What's the Rule?

For game screens with single or multi-syllable words

- "1" Find the vowel(s)
- "2" Sound it out/Say the Syllables
- "3" Say the Word
- "4" Spell the Word
- "5" What's the Rule?

Spelling Test on Friday!

"P Choose to play the Practice level

- "T" Choose to play the Test level
- \rightarrow (right arrow) go to the next set of words on the main menu
- \leftarrow (left arrow) go to the previous set oF words on the main menu

RETURN continue to the next word after spelling the word Option" and "W" Say the word Option" and "S" Spell the word Option" and "P" Print the spelling list

MatchUps: Spelling Test on Friday Words

- \rightarrow (right arrow) go to the next set of words on the main menu
- \leftarrow (left arrow) go to the previous set oF words on the main menu

"A" Show Answer (turn all of the cards face up)

"R" Repeat the screen (turn all of the cards face down)

This key also works on the menu screen to replay the last game.