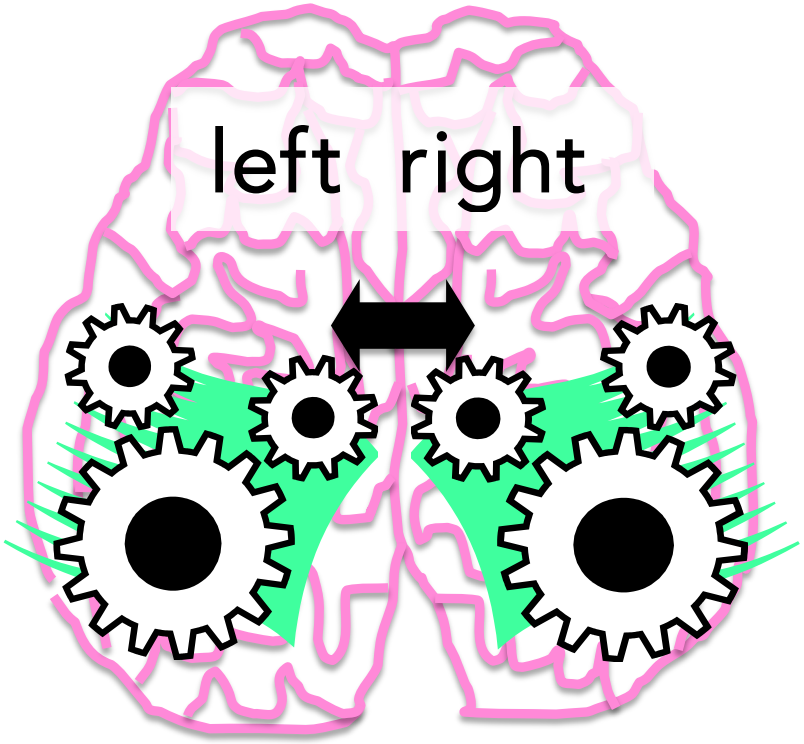
Preview of:

Working Memory, Hemisphere Integration and Attention Building Activities for Optimal Learning



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Introduction

Successful learners are fully engaged, can maintain attention and they activate both hemispheres of their brain. However, many young learners go through their daily classroom activities without being fully conscious of the task at hand. They are constantly distracted by external stimuli as well as their own internal thoughts that take them on "little trips" outside of the classroom. Although their bodies are present, their minds are elsewhere. What's more, when these students eventually become consciously involved in the classroom, many have missed important instruction and they may only be activating the dominant side of their brain. So, for example, if a student is only using the right hemisphere, reading can become a difficult task as for most people, the left hemisphere of the brain is dominant for language. For students that fall into this profile, learning can become difficult, frustrating and taxing.

What is Working Memory?

According to Google definitions, working memory is the part of short-term memory that is concerned with immediate, conscious, perceptual and linguistic processing. The development of working memory is fundamental to helping students to be present and mindful while in the classroom. It also helps them to encode information as well as perform mental manipulations.

What is Hemispheric Integration?

Hemispheric Integration is the activation of both the left and right hemispheres of the brain. When hemisphere integration is poor, there is decreased communication between the right and left sides of the brain. Electrically, the two hemispheres are not communicating, there is an imbalance between the right and left sides of the brain or one hemisphere is activated, while the other remains largely inactive. According to Stein, Stanford, and Rowland (2009) multisensory integration is essential for almost every activity that we perform because the combination of multiple sensory inputs is essential for us to comprehend our surroundings. A healthy and productive mind "emerges from a

process called integration" (Siegal, 2011). Both Dennison (2006) and Hannaford (1995) offer physical activities that integrate the brain through movement, but this publication offers quick printable activities that can also activate both hemispheres and train the brain to be mindful and present for improved memory and processing.

Why Use these Activities?

We live in a society that is constantly bombarding children with stimuli to the point that when there is no stimulation, many kids get bored and they don't know how to think. In addition, many children do not know how to activate their own cognition and take control of their own thought processes. I created these fun, game-like activities to help students become mindfully present, develop working memory, engage both hemispheres of the brain and help learners develop the capacity to sustain attention. Many of the activities were created with the Stroop Effect in mind. The effect is named after John Ridley Stroop who first researched and published the effect in English in 1935. Later, his findings inspired a test, The Stroop Test, and these activities are considered to measure selective attention, cognitive flexibility, processing speed, and executive functions.

* Please note: At first, these activities can be challenging and mentally taxing. In a single session, begin by completing a single activity 1-2 times. Eventually, work up to doing multiple activities numerous times.

Tell Me Activities:

Overview

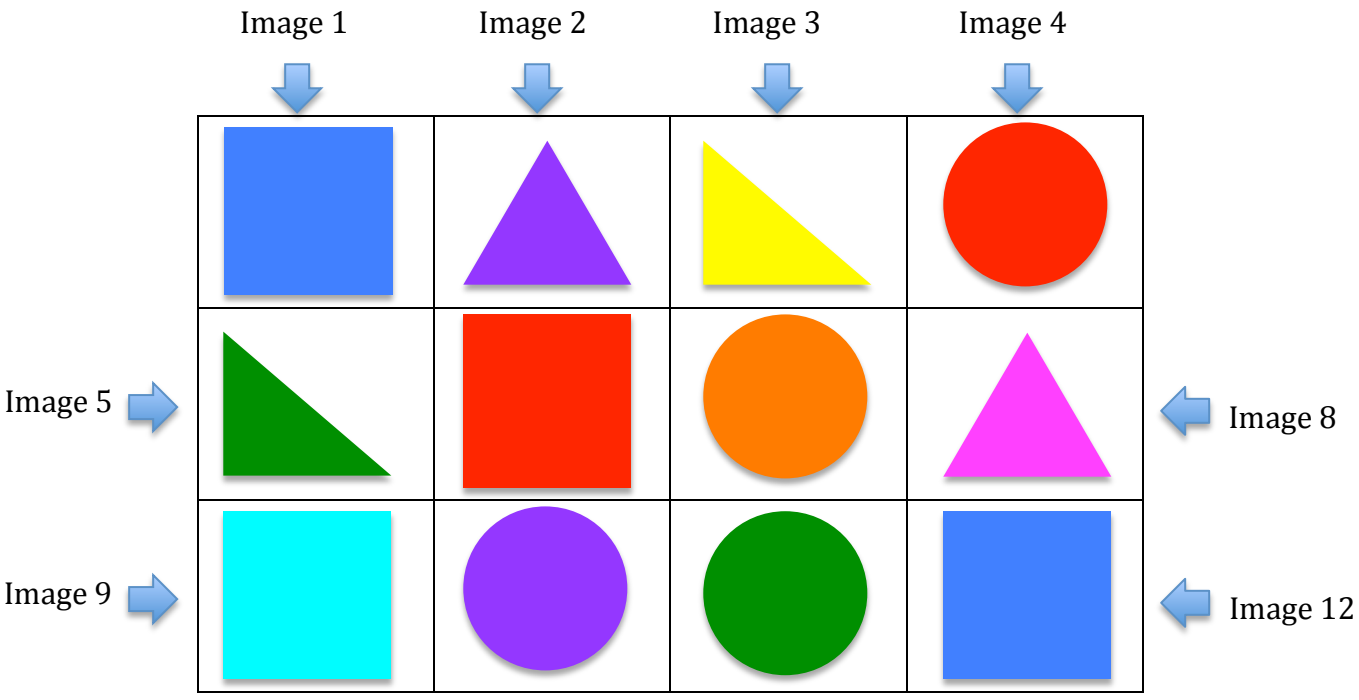
- Tell Me Activities strengthen working memory, attention, mental flexibility and integrate the brain by activating both hemispheres.
- All these activities should be done multiple times with the intention of improving speed of processing and accuracy.
- Each administration should be timed with the use of a stopwatch and the results recorded at the bottom of the activity.
- If the student does not like to be timed, evaluate their progress qualitatively.
- Once a student has improved their time and appears to work through the activity with swift proficiency, move onto another activity.
- There are a number of activities: Shapes, Animals, Puppies, Aliens, Letters, Color/Words, Letter/Number, Letter/Number/Color, Letter/Direction. Each new activity offers a sequence from beginners to more advanced exercises.

Directions

For each activity there is grid of rows and columns. Students should work their way through the grid from image 1, to image 2 and so forth, across the row to the next row, while applying the rule for that activity. For example, see the sample below:

See how quickly you can name the color (image 1) and the shape (image 2). A student would verbalize the following: "blue, triangle, yellow, circle…" This continues across all the rows until the last image on the last row.

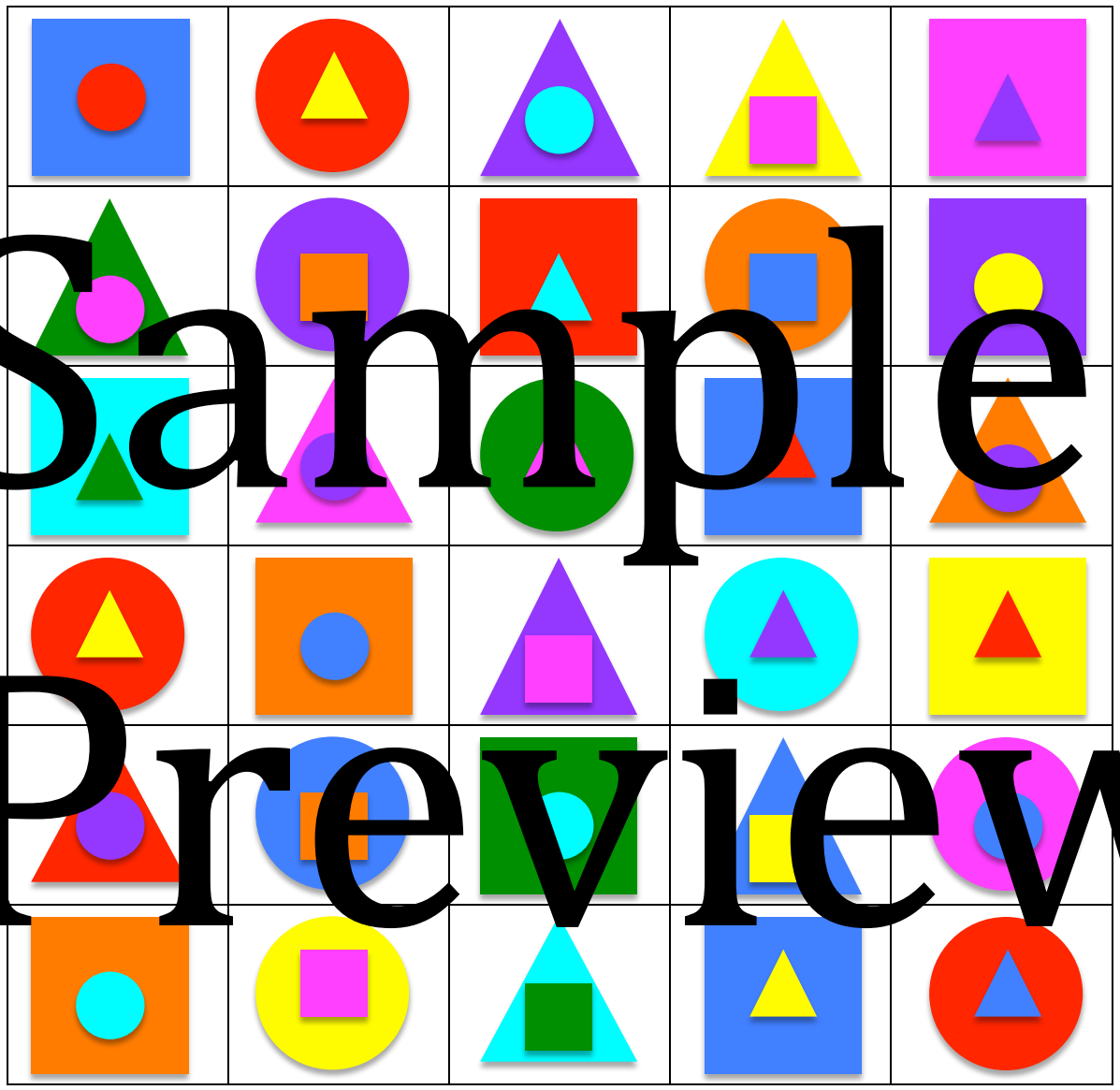
SAMPLE: **Repeat Rule:** 1. Color 2. Shape



Tell Me 2: Name: _____

Shapes: See how quickly you can name the big shape (image 1) and the little shape (image 2). Continue this pattern until you reach the end of a row. Then proceed across all the rows until you reach the last image in the last row. Note your time and try to beat your score.

Repeat Rule: 1. Big 2. Little



Record your times here:

1st time: _____	Date: _____	6th time: _____	Date: _____
2nd time: _____	Date: _____	7th time: _____	Date: _____
3rd time: _____	Date: _____	8th time: _____	Date: _____
4th time: _____	Date: _____	9th time: _____	Date: _____
5th time: _____	Date: _____	10th time: _____	Date: _____

Tell Me 14: Name: _____

Colors/Words: See how quickly you can name the color of the square (image 1), the word in the square (image 2), and the color of the word (image 3). Continue in this sequence until you reach the end of a row. Then proceed across all the rows until you reach the last image in the last row. Note your time and try to beat your score.

Repeat Rule: 1. Color of the square 2. Word in the square 3. Color of the word

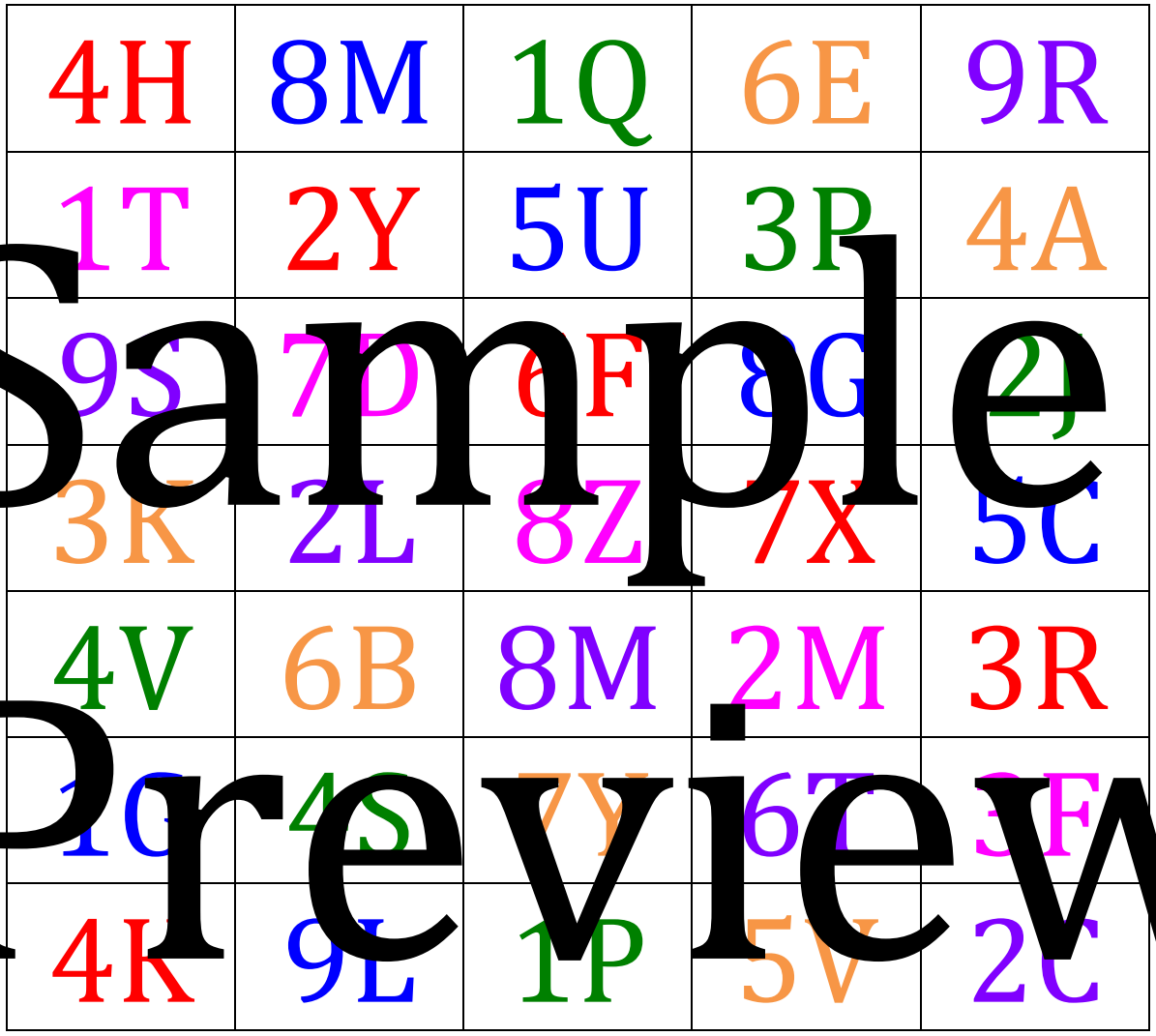
Record your times here:

1st time: _____	Date: _____	6th time: _____	Date: _____
2nd time: _____	Date: _____	7th time: _____	Date: _____
3rd time: _____	Date: _____	8th time: _____	Date: _____
4th time: _____	Date: _____	9th time: _____	Date: _____
5th time: _____	Date: _____	10th time: _____	Date: _____

Tell Me 21: Name: _____

Letters/Numbers: See how quickly you can name the next letter - *if the letter is R, the answer would be S* (image 1) and the next number - *if the number is 4, the answer would be 5* (image 2). Continue in this sequence until you reach the end of a row. Then proceed across all the rows until you reach the last image in the last row. Note your time and try to beat your score.

Repeat Rule: 1. Next letter 2. Next number



Record your times here:

1st time: _____ Date: _____
2nd time: _____ Date: _____
3rd time: _____ Date: _____
4th time: _____ Date: _____
5th time: _____ Date: _____
6th time: _____ Date: _____
7th time: _____ Date: _____
8th time: _____ Date: _____
9th time: _____ Date: _____
10th time: _____ Date: _____

Cross Out Activities

Overview

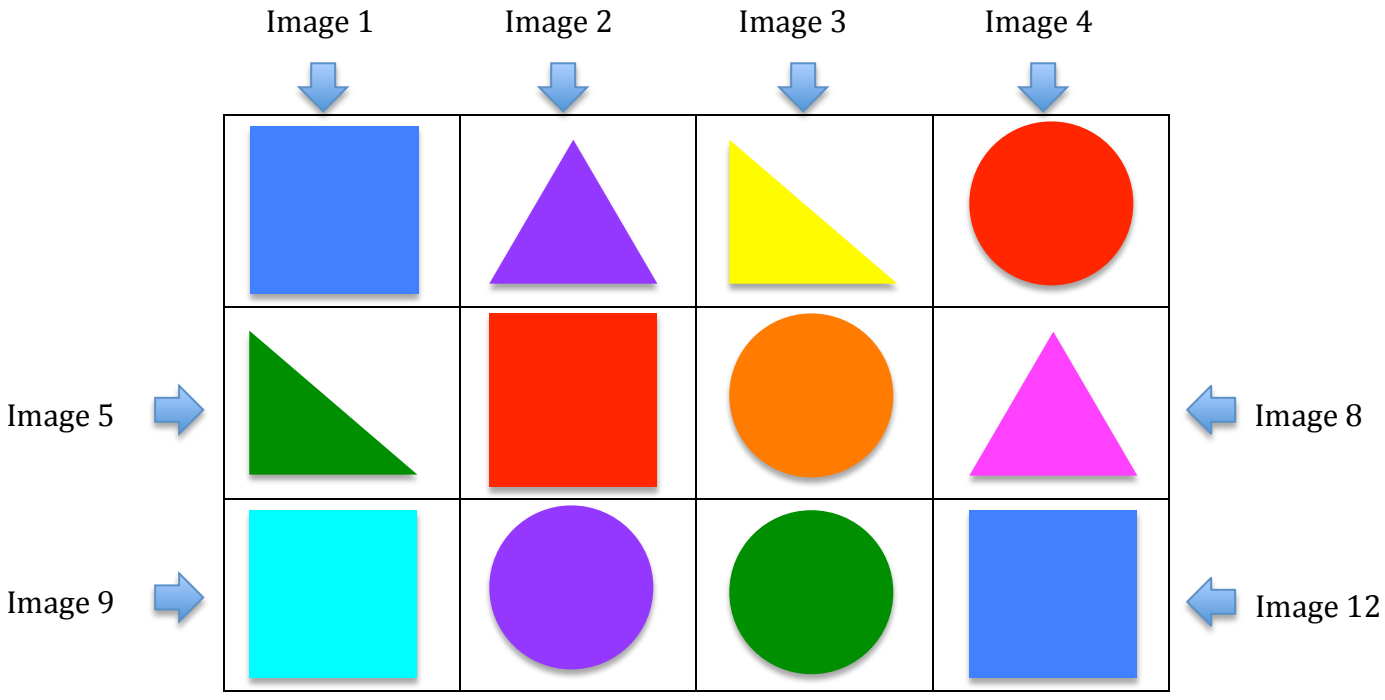
- Cross Out Activities integrates a tactile or fine motor component to the working memory, attention and hemispheric integration activities.
- All these activities should be done multiple times with the intention of improving speed and accuracy of processing.
- Each administration should be timed with the use of a stopwatch and the results recorded at the bottom of the activity.
- Once a student has improved their time and appears to work through the activity with swift proficiency, move onto another activity.
- If the student does not like to be timed, evaluate their progress qualitatively.
- The order of the activities can be changed based on the student's current needs as well as the application to classwork.

Directions

For each activity you will see a grid of rows and columns. Students work their way through the grid from image 1, to image 2 and so forth, while applying the rule for that activity. For example, see the sample below:

Look through each row in sequence and see how quickly you can cross out (x) the squares, draw a slash through the circles, and place a dot in the middle of the triangles. Students place marks on the images as directed. This continues across the rows until the last image on the last row.

SAMPLE: **Rule:** 1. ✖ squares 2. / circles 3. • in triangles



Cross Out 6: Name: _____

Look through each row in sequence and see how quickly you can circle the pair of characters when a number comes first and cross out the pair of characters (x) when the letter comes first. Continue until you reach the last image on the last row. Note your time and try to beat your record.

Rule: 1. O when the number comes first 2. ✖ when the letter comes first

3K	L2	Z9	7X	C5
4V	6B	N8	M2	1R
9S	D7	6F	G8	3J
4H	M8	Q1	6E	R9
1T	Y2	5U	3P	A4
G1	4S	Y7	6R	3F
K4	L9	1P	5V	C2

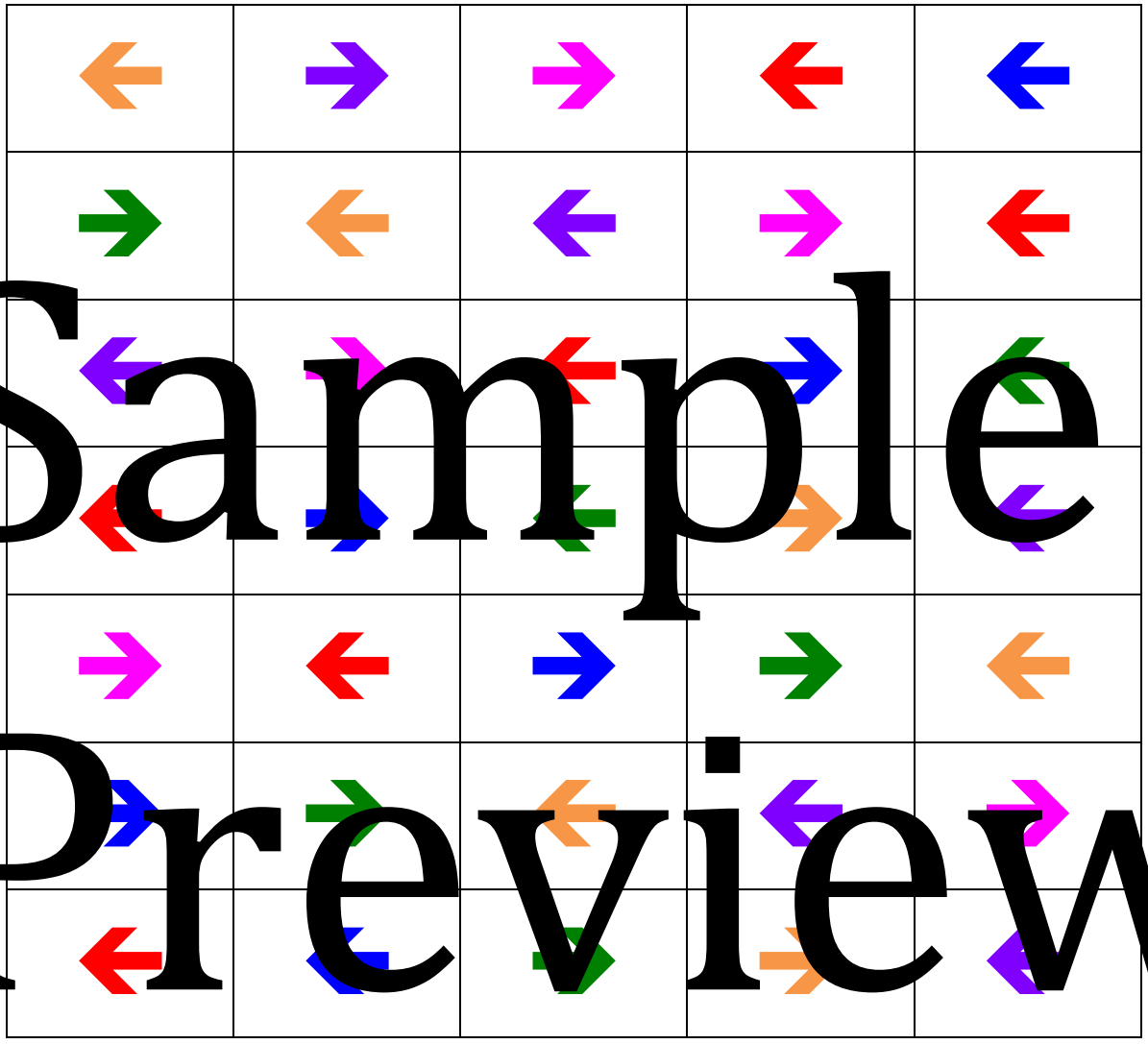
Record your times here:

1st time: _____	Date: _____	6th time: _____	Date: _____
2nd time: _____	Date: _____	7th time: _____	Date: _____
3rd time: _____	Date: _____	8th time: _____	Date: _____
4th time: _____	Date: _____	9th time: _____	Date: _____
5th time: _____	Date: _____	10th time: _____	Date: _____

Cross Out 10: Name: _____

Look through each row in sequence and see how quickly you can circle the left arrows and cross out (x) the rights arrows. Continue until you reach the last image on the last row. Note your time and try to beat your record.

Rule: 1. O left arrow 2. ✖ right arrow



Record your times here:

1st time: _____	Date: _____	6th time: _____	Date: _____
2nd time: _____	Date: _____	7th time: _____	Date: _____
3rd time: _____	Date: _____	8th time: _____	Date: _____
4th time: _____	Date: _____	9th time: _____	Date: _____
5th time: _____	Date: _____	10th time: _____	Date: _____

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About Dr. Erica Warren

Dr. Warren has always aspired to empower the spirit of those who struggle with learning. So after finishing a bachelor's degree in fine arts, Dr. Warren tailored a special degree program that combined course-work and research in Educational Psychology, Special Education, School Psychology, and Adult Education. In 1999, Dr. Warren opened the doors of Learning to Learn in Ossining NY. What started as a private practice to help individual students maximize their learning potential and find joy in the learning process, blossomed into a place where students, parents, teachers and schools can receive educational support, materials, training and advice. Her website, www.learningtolearn.biz offers an ever-growing wealth of information, links, materials and support. Learning to Learn now offers:

- One to one educational support
- Teacher training and workshops
- Educational materials
- Cognitive therapy
- School consultations
- Learning profiles and reports
- Technology & software referrals
- Student advocacy

Most recently, Dr. Warren unveiled Good Sensory Learning www.goodsensorylearning.com and www.dyslexiamaterials.com where student-inspired, fun, multisensory teaching tools are created and available to the public. Some of her most popular publications include:

- Reversing Reversals Primary: Remedial Activities for Students with Dyslexia
- Reversing Reversals: Remedial Activities for Students with Dyslexia
- Reversing Reversals 2: Remedial Activities for Students with Dyslexia
- Main Idea and Detail Game - Hey, What's the Big Idea?
- Place Value Golf, Hockey, Bowling, Shuffleboard & Stair Toss Games
- Figurative Language Literary Term and Grammar Game - Word Shuffle
- Inferences Activities and Games: Learning the Fun and Easy Way
- Planning, Time Management and Organization for Success
- Reading Games: For Orton-Gillingham and Phonics Based Programs
- Reading Board Games: For Orton-Gillingham and Phonics Based Programs
- Reading Games 2: For Orton-Gillingham and Phonics Based Programs
- Vowel Combinations Made Easy
- Compound Word Puzzle Games: Making Connections
- Eclectic Teaching Approach – Understanding/Accommodating 12 Ways of Learning
- Following Directions the Fun and Easy Way - Beginners
- Following Directions - Intermediate
- Helping Students Who Struggle with Executive Functioning
- Multisensory Multiplication and Division to Melodies CD: MMDM
- 5 Ws Detectives: A Fabulously Fun Writing Game
- Prepositions are a Blast with Preppy the Preposition Penguin
- Measurement Memory Strategies Power Point
- Angles Instruction, Memory Strategies and Activities Power Point
- Show, Don't Tell Writing Game
- My Pet PEMDAS: Order of Operations Instruction and Mobile