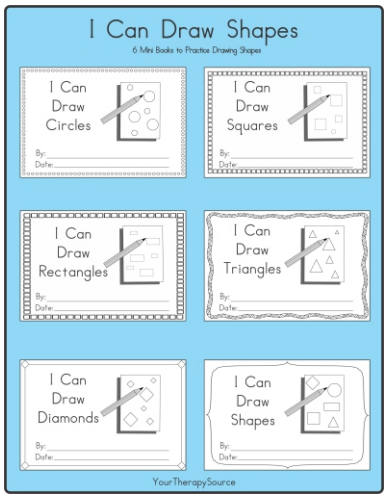
Your Therapy Source News

Digital magazine for pediatric occupational and physical therapists.

Issue 62 - May 2014

www.YourTherapySource.com

New and Sale Products

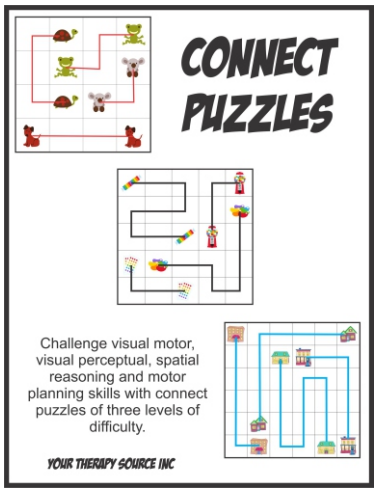


Title: I Can Draw Shapes

Summary: Download of 6 mini books plus scoring rubric to practice drawing shapes

List Price: $3.99
Sale Price until 5/31/14: $1.99

Find out more at:
www.YourTherapySource.com/drawshapes

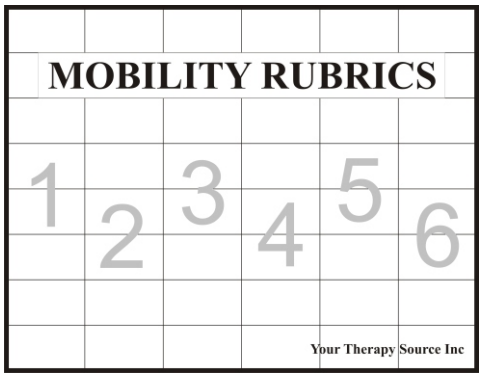


Title: Connect Puzzles

Summary: Download of 50 visual motor, visual spatial and motor planning puzzles. Print the puzzles and put in a CD case to use a wipe off board.

List Price: $3.99
Sale Price until 5/31/14: $1.99

Find out more at:
www.YourTherapySource.com/connect



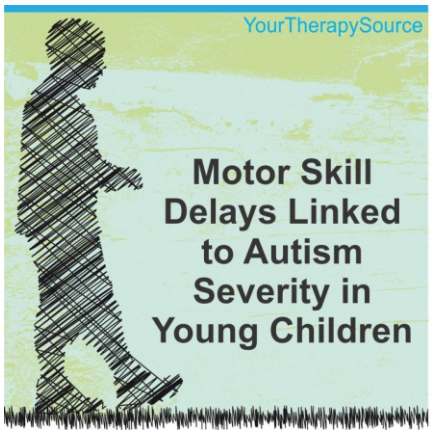
Title: Mobility Rubrics

Summary: Download of an electronic book of 11 rubrics to assess mobility skills in the school environment in PDF and Word format

List Price: $5.99
Sale Price until 5/31/14: $2.99

Find out more at:
www.YourTherapySource.com/rubricsmobility

Motor Skill Delays Linked to Autism Severity



Adapted Physical Activity Quarterly has published research on motor skill deficiencies and the severity of symptoms in 159 young children (110 with autism diagnosis) ages 12 – 33 months.

The researcher, Megan MacDonald, from Oregon State University, found the following:

1. children with autism were nearly a year behind their typical peers in fine motor skills, such as holding a spoon or grasping a small toy.

2. children with autism were about six months behind in their gross motor skills, including activities like running and jumping.

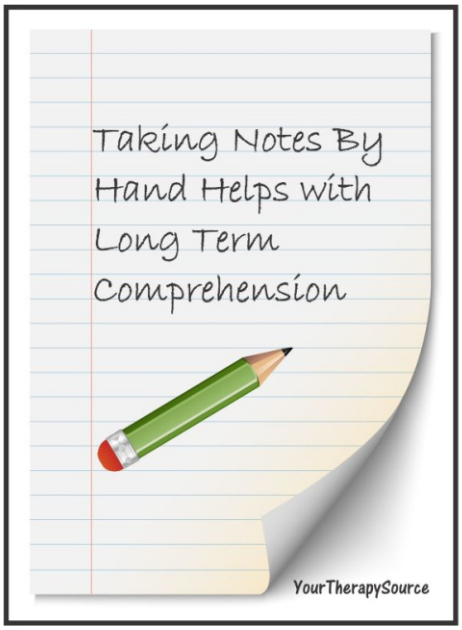
3. the motor skill deficiencies among the children with autism were not related to intellectual ability.

The researcher recommends that including fine and gross motor skill development into early interventions could help other areas of development such as social communication. In addition MacDonald states that: ”hopes the new research will help build awareness about the importance of motor skill development and the need to include adapted physical education and physical and occupational therapy in treatment plans. Future research will look at different types of motor skill interventions to see if there are some that work better than others”.

Reference: Michelle Klampe. Motor skill deficiencies linked to autism severity in new research. Retreived from the web at Oregon State University on 4/25/14 at http://oregonstate.edu/ua/ncs/archives/2014/apr/motor-skill-deficiencies-linked-autism-severity-new-research.

Handwritten Notes = Better Comprehension

A recent study on 65 college students published in Psychological Science compared handwritten notes to using a keyboard to take notes. The college students watched one of 5 TED talks and were given a laptop (disconnected from internet) or a regular notebook to take notes. Following the talks, the students were given three distractor tasks including a working memory task. Thirty minutes later, the students had to answer factual recall and conceptualization questions.



The results indicated the following:

1. the two types of note-takers performed equally well on questions that involved recalling facts but the laptop note-takers performed significantly worse on the conceptual questions.

2. the notes from laptop users contained more words and more verbatim overlap with the lecture, compared to the notes that were written by hand.

3. students who took more notes performed better, but so did those who had less verbatim overlap, suggesting that the benefit of having more content is canceled out by "mindless transcription."

4. similar results were obtained even when the researchers explicitly instructed the students to avoid taking verbatim notes.

5. longhand note takers still beat laptop note takers on recall one week later when participants were given a chance to review their notes before taking the recall test.

Reference: Association for Psychological Science. Take Notes by Hand for Better Long-Term Comprehension. Retrieved from the web on 4/25/14 at http://www.psychologicalscience.org/index.php/news/releases/take-notes-by-hand-for-better-long-term-comprehension.html

Check out handwriting activities from Your Therapy Source at http://yourtherapysource.com/handwriting.html

5 Physical Activities to Increase Power In Children

The definition of power is (force x distance) ÷ time. In other words power is the product of strength and speed over time. Many times children who receive therapy services exhibit a decrease in power. For example, perhaps a child can jump forward but does not have the power to jump forward long distances over the course of time. Obviously, use caution with power exercises – due to increase stress on certain joints power exercises may be contraindicated in some children.

Here are 5 physical activities to increase power in children:

1. Plyometric Jumps - Sometimes known as jump training, plyometric exercises have muscle exert a maximum amount of force in the shortest amount of time. The easiest plyometric to try with a child is a box jump. Have a child stand on top of a box or stool (about 12-18″ high). Jump down and perform a vertical jump as high as you can when you hit the ground.

You can vary this activity by jumping down followed by jumping forward or to increase the challenge further jump down and jump back up onto a different stool.

2. Squat Jumps – Begin starting tall. Squat down and then jump as high as you can reaching for the sky. Repeat going back into the squat position. Vary it by doing a star jump – squat and jump high and out into a star position (jumping jack position). Jump back to standing tall. Repeat.

3. High Fast Skips – Skip moving quickly lifting the knees as high as possible. This can be very difficult for younger children. Try to skip with high knees to start with a bounce in each skip.

4. Medicine Balls – Throwing and catching medicine balls can help to increase power in the upper extremities. Try rebounding a small medicine ball off a mini trampoline that is upright against the wall.

5. Partner Activities – Stand back to back with a partner. Hold a medicine ball and twist at the trunk to pass it to your partner. The partner then moves the ball to the front of the body and passes it back to you. Play catch with a lightweight medicine ball with a partner. Practice chest passes and over head passes. Have the child lay down on the floor in hook lying position holding a medicine ball, perform a sit up and throw the medicine ball to an adult. This is obviously difficult so you may need to start with the child on an incline wedge.

Play Strong is a download of 40+ activities that promote muscle strengthening in children. The activities are great for your pediatric occupational and physical therapy sessions for children with varying abilities. This is an excellent resource for pediatric therapists. Find out more information at http://yourtherapysource.com/playstrong.html

Infant Responses to Tactile Input

Psychological Science has published research on 9 month old infants reaction to tactile input. The parents sat the infant on their lap while the experimenter stroked the back of the infant's arm with a paintbrush. The experimenter varied the rate of the brushstrokes among three defined velocities: slow, medium and fast (0.3, 3, or 30 cm per second). The experimenters determined the infants' responses of attentional engagement and arousal through physiological and behavioral measures.

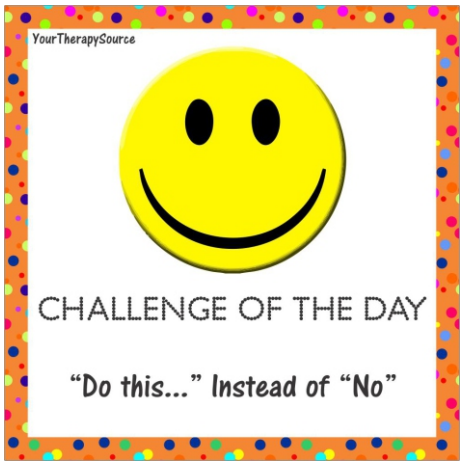
The following results were recorded:
1. the infants' heart rate slowed in response to the brushstrokes but only when the strokes were of medium velocity therefore the touch of the medium-velocity brush helped to decrease their physiological arousal.
2. The infants showed more engagement with the paintbrush during the medium-velocity brushstrokes, as measured by how long and how often they looked at the brush while they were being stroked.
3. infants' slower heart rate during medium-velocity brushstrokes was uniquely correlated with the primary caregivers' own self-reported sensitivity to touch. In other words, the more sensitive the caregiver was to touch, the more the infant's heart rate slowed in response to medium-velocity touch.

The researchers concluded that sensitivity to pleasant touch begins early in development and playing an important role in regulating human social interactions.

Reference: M. T. Fairhurst, L. Loken, T. Grossmann. Physiological and Behavioral Responses Reveal 9-Month-Old Infants' Sensitivity to Pleasant Touch. Psychological Science, 2014; DOI: 10.1177/0956797614527114

Mini Sensory Books
Summary: Download of the materials to create 7 sensory mini books, 7 charts, 7 four square strips and over 100 picture word cards.
Find out more information at http://yourtherapysource.com/minisensory.html

Challenge Yourself to Say "Yes"



Are you up for the challenge of the day? Can you go through an entire day of providing therapy only having a positive tone instead of a negative tone? How about as a parent? Try spending all day avoiding the words "no", "stop" or the phrase "don't do that!" Try replacing those phrases with positive alternatives always starting off by saying "do this" or "yes we can!"

Here are some suggestions to replace a negative tone:

Instead of saying "Do not walk on your toes." Try "Walk with your heels down."

Instead of saying "Do not start the Letter A at the bottom." Try "Start the letter A at the top."

Instead of saying "Do not get distracted." Try "Let's finish this first then we can do that."

Instead of saying "No, we can't do that." Try "Yes, we can do that but we need to do this activity first."

Instead of saying "Stop tapping your pencil on the desk." Try "Would you like a small fidget to hold on to for awhile?"

Can you accept this challenge, all day long????

Positive Affirmation Cards and Posters:

This is an electronic book of 25 positive affirmation posters (8.5″ x 11″) and smaller cards of the posters (4.25″ x 2.75″). Empower children to realize all of their talents. All too often, children with special needs are told what they are unable to do, how about teach them what they can do! Positive affirmations help children to believe in themselves. The posters include simple text, animal pictures that compliment the text and colorful backgrounds. Hang them up around the house, class or therapy room and provide the child with the small cards to carry around to reinforce the concept. Find out more information at http://yourtherapysource.com/positiveaffirmation.html.

5 Ways to Modify Baseball to Include All Children

With baseball season upon us, therapists can play a role in assisting PE teachers, coaches, after care and recess staff with modifying the game of baseball to include all children. Here are some suggestions:

1. When teaching the basics of baseball, you may need to provide simple, step by step directions regarding throwing, catching and hitting. For teaching the rules, you may want to provide written instructions with picture prompts if necessary. Pre teach skills if possible.

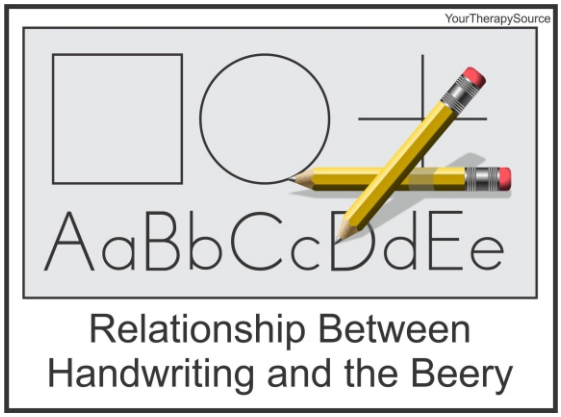
2. Change up the rules if necessary. Instead of three strikes you are out how about 10 pitches? Or perhaps you are at bat until you make contact with the ball? Maybe instead of three outs per inning you can play that everyone bats is one inning.

3. Modify the equipment. Try a larger bat, lighter bat, hit off of a tee or different sized ball. Do the bases need to be larger (i.e. Circle around base for wheelchair users)? For visually impaired children use a beeping ball.

4. Change the environment if necessary. Make sure the lines are clearly marked. Do the bases need to be closer together? Can the pitching mound be moved forward?

5. Be flexible. Remember to have fun and don't always worry about winning or losing.

Relationship Between Handwriting and the Beery



The *Australian Occupational Therapy Journal* published research on 240 grade 2 children. The researchers wanted to determine whether the three subtests of the Beery Buktenica developmental test of visuomotor integration predicted quality of handwriting across and within groups of boys and girls classified as proficient, at risk or non-proficient writers according to the Concise Assessment Scale for Children's Handwriting. The following results were recorded:

1. proficient writers scored better on the visuomotor integration subtest than non-proficient writers

2. proficient and at risk writers scored better than non-proficient writers on the motor coordination subtest

3. no differences were found on the visual perception subtest

4. girls were more often classified as proficient writers than boys

5. girls scored better than boys on the motor coordination subtest

6. statistical analysis indicated that gender and both the visuomotor integration subtest and the motor coordination subtest were significant predictors for the quality of handwriting

The researchers concluded that the visuomotor integration subtest (and to a lesser extent the motor coordination subtest) but not the visual perception subtest significant relates to quality of children's handwriting although, the relatively little variance explained also points to other abilities and/or task constraints that underlie quality of handwriting.

Reference: Duiser, I. H. F., van der Kamp, J., Ledebt, A. and Savelsbergh, G. J. P. (2014), Relationship between the quality of children's handwriting and the Beery Buktenica developmental test of visuomotor integration after one year of writing tuition. Australian Occupational Therapy Journal, 61: 76–82. doi: 10.1111/1440-1630.12064

Need visual motor and handwriting activity ideas? Check out Your Therapy Source at http://yourtherapysource.com/handwriting.html

5 Tips for Sensory Seekers During Group Activities

Here are 5 suggestions to help group therapy sessions go smoothly for sensory seekers. These tips are great for classroom teachers as well for during circle time or large group instruction.

1. Begin the activity with a movement warm up. Depending upon your group of students you many need some whole body activities, crossing midline activities or simple stretches. When in doubt, proprioceptive activities always work wonders. Try Proprioceptive Poems at http://yourtherapysource.com/proprioceptivepoems.html

2. Mix up how and where the students are seated during group time. For example, can they stand to to complete the activity, prone prop on the floor, sit on a therapy ball, etc?

3. Use visual cues for personal space. During listening tasks, can each student sit on a carpet square or perhaps inside a hula hoop? Put painter's tape on the floor around the student's desk to indicate personal space.

4. Take a break half way through for an additional movement activity. Try to incorporate movement into the academic or motor skill task to allow for a quick movement sensory break. Need easy ideas? Check out Monster Movement Transition Cards at http://yourtherapysource.com/monstermovements.html or pick a Mini Movement Break at http://yourtherapysource.com/minimove.html

5. Establish a routine that you stick to each group session. Every time you are leading a group try and keep the same routine. Over time, the students will know exactly what the expectations are helping to reduce negative behaviors.

Core Stability Training Versus Task Oriented Training

Clinical Rehabilitation published research comparing core stability training versus task oriented training in improving motor proficiency in 22 children with developmental coordination disorder (DCD), ages 6-9 years old. The intervention consisted of one time per week for 8 weeks, face to face sessions of either core stability exercises or task oriented training. Children in both groups also were asked to carry out home exercise programs daily.

For assessment, the Short Form of the Bruininks-Oseretsky Test of Motor Proficiency (Second Edition) and Sensory Organization Test were utilized pre- and post-intervention with the following results recorded:

1. Intention-to-treat analysis revealed no significant between-group difference in the change of motor proficiency standard score and composite equilibrium score on the Sensory Organization Test

2. change after the intervention indicated significant improvement in motor proficiency in both the core stability and task-oriented training groups.

3. the composite equilibrium score was significantly increased in the task-oriented training group, but not in the core stability group.

4. with the task-oriented training group, compliance with the home program was positively correlated with change in motor proficiency and composite equilibrium score.

The researchers concluded that the core stability exercise program was as effective as task-oriented training in improving motor proficiency among children with DCD.

Reference: Mei K Au et al. Core stability exercise is as effective as task-oriented motor training in improving motor proficiency in children with developmental coordination disorder: a randomized controlled pilot study. Published online before print March 25, 2014, doi: 10.1177/0269215514527596 Clin Rehabil March 25, 2014 0269215514527596.

Play Strong: Activities to Promote Muscle Strengthening in Children Through Play
Summary: Download of electronic book with activities to promote muscle strengthening in children. Find out more information at http://yourtherapysource.com/playstrong.html

Hot Topics

Aerobic Fitness and Language Processing

Brain and Cognition published research on event-related brain potentials (ERPs) in children to determine the relationship between aerobic fitness and language processing. ERPs were recorded while children read normal sentences and those containing semantic or syntactic violations.The following results were found:

1. higher aerobically fit children exhibited greater amplitude when processing semantic information and shorter latency across all sentence types.

2. higher fit children exhibited a larger effect for syntactic violations.

The researchers concluded that higher fitness may be associated with a richer network of words and their meanings, and a greater ability to detect and/or repair syntactic errors.

Reference: Scudder, M et al. The association between aerobic fitness and language processing in children: Implications for academic achievement. Brain and Cognition. Volume 87, May 2014, Pages 140–152. http://dx.doi.org/10.1016/j.bandc.2014.03.016

Fine Motor and Cognitive Skills in Down Syndrome

The *International Journal of Disability, Development and Education* has published research on 12 adolescents with Down syndrome. Each individual participated in the Corsi-Block tapping test (e.g., visual working memory), the Auditory Memory span test (e.g., verbal working memory) and the Tower of London test (e.g., cognitive planning), and motor control, measured by the Purdue Pegboard (e.g., fine motor control). The results indicated the following:

- individuals with Down syndrome who had better performance in fine manual dexterity had better performance in cognitive planning and verbal working memory abilities.

The researchers suggest that individuals with Down syndrome will obtain benefits in cognitive control by participating in motor interventions.

Reference: Chih-Chia (JJ) Chen, Shannon D.R. Ringenbach, Andrew Albert, Keith Semken . Fine Motor Control is Related to Cognitive Control in Adolescents with Down Syndrome. International Journal of Disability, Development and Education. Vol. 61, Iss. 1, 2014

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Clay Marble Mazes

Clay marble mazes is a great activity to encourage hand strengthening, eye hand coordination, visual tracking skills and more.

Here is what we did:

1. Cover a recycled, clean styrofoam tray with tin foil. Use a small tray if you have a little bit of clay and large tray if you have a lot of clay (or want the maze to be bigger).

2. Push the clay flat on the tray to cover the entire tray if possible.

3. First use a pen cap or pointed tool to draw a path for the maze.

4. Go over the maze that was drawn using a marble pushing with your fingers. Retrace the path many times so that it creates a slight tunnel for the marble. You could use a larger marble to make the path.

5. It is ready to use. Hold the tray with two hands and see if you can navigate the marble through the maze.

6. Another option is to create and trace letters in the clay and then track the marbles with your fingers.

7. When done, just flatten out the clay and make a new one next time!

Clay Play Mats: This is a collection of 6 clay play mats that encourage: muscle strengthening of the hands, fine motor skills, visual memory, counting and number identification. Find out more at http://www.yourtherapysource.com/clayplaymats.html

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5 Free Printables to Practice Scissor Skills

Here are 5 FREE printables to practice scissor skills, visual perceptual skills and motor planning skills:

1. Step By Step Puppy – cut out the simple shapes and follow the step by step directions. You can download it here http://yourtherapysource.com/stepsample.html

2. Cutting Cards – Practice cutting skills on these smaller 3×5″ cards. Download a few sample pages at http://yourtherapysource.com/cuttingcardsfree.html

3. Speed Match – Cut apart the rectangles or simple shapes to test your visual perceptual skills. Download the free sample page at http://yourtherapysource.com/speedmatchfreebie.html

4. Cut and Paste Pig Puzzle – Cut apart the puzzle, mix it up and glue it back together. Download some additional free sample pages at http://yourtherapysource.com/cutpastefree.html

5. Shape Stationary – Cut and fold this stationary to send a nice note to a friend or family member. Practice cutting skills, fine motor skills and handwriting all in one! Download this freebie at http://yourtherapysource.com/files/cutfoldfreesample.pdf

Check out all of our freebies at http://yourtherapysource.com/freestuff.html

Bunny Garland

Download this bunny garland freebie to encourage eye hand coordination, fine motor skills and hand strengthening.

You can get the freebie from Your Therapy Source at http://yourtherapysource.com/freebunnies.html

Coloring Shape Stencils

How cool is this project? It reminds me of a zentangle which I always find very calming to do. There are two ways to complete this activity to encourage visual motor skills, grading of movements and visual spatial skills.

1. Doodle Shape Stencils – Draw any random doodle all over a piece of paper with black marker. The paper should not be too large. Using stencils, trace a few shapes over the doodle. Now color in the doodle inside the shape.

2. Printed Paper Shape Stencils – Print out a page from Geometric Patterns and Shapes Coloring Book or print out the freebie. Using stencils, trace a few shapes over the page. Only color inside the shapes.

Want to make it easier? Perhaps try these suggestions: outline each shape with dark marker so the child can clearly see the boundary lines or just color inside the entire shape instead of each intricate smaller doodle or shape.

Want to change it up? Use letter stencils and write a name instead of shape stencils.

Geometric Shapes and Patterns Coloring Book: This download is a collection of 60 different geometric patterns and shapes to color. Challenge children's visual and fine motor skills while creating works of colorful art. Find out more information at http://yourtherapysource.com/geometric.html

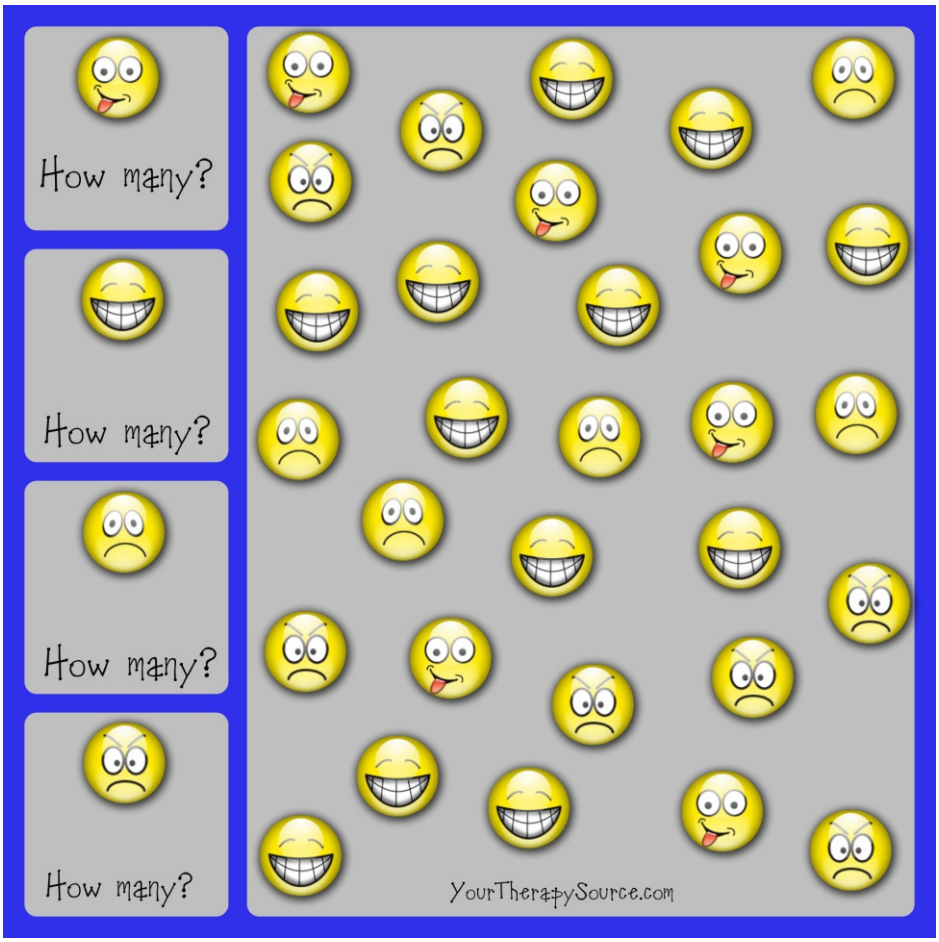
Magnetic Cars on the Whiteboard

Here is a quick, simple visual motor activity for any of those car loving kids – magnetic cars on the whiteboard. Glue a magnet to the underside of a toy car. Place on whiteboard. That's it, the activity is all set. Here are some ideas to do with the magnetic cars to encourage visual motor skills:

1. Draw a figure 8 racetrack and child can work on crossing midline while driving the car.
2. Draw parking spots and see if the child can follow verbal directions i.e. – drive the red car to the green parking spot.
3. Draw a maze for the car to drive on.
4. Trace letters of the alphabet by driving the cars in the proper form.
5. Have the child draw a road for the car to follow.

Need more visual motor skills check out Visual Motor Workbook at http://www.yourtherapysource.com/visualmotorworkbook.html

Free Visual Discrimination Puzzle



Download and print this free puzzle to test your visual discrimination skills. How many of each smile face can you find?

You can get the freebie at
http://yourtherapysource.com/freesmilefaces.html

Bottle Cap Words

I love this recycled project to encourage fine motor skills, visual discrimination skills and letter recognition. It is inexpensive. Just save some bottle caps (these are all water bottle caps) and you need white circle stickers. Just make some word strips and match up the letters. This is a great make and take activity to send home with a student.

Check out the **Letter Hunt** ebook which includes 26 hunt and find puzzles. For each letter of the alphabet you find and circle 13 upper case letters and 13 lower case letters. Use a pencil to circle the letters, small stickers, dot markers and color in the picture when completed. The ebook is in black and white. Find out more information at http://yourtherapysource.com/letterhunt.html

Cut, Sequence, Paste and Draw: a is for ant

Directions: Cut out the 6 pictures at the bottom of the page. Paste in the proper sequence. Now try to follow the step by step drawings to draw the picture yourself.

1	2	3
4	5	6

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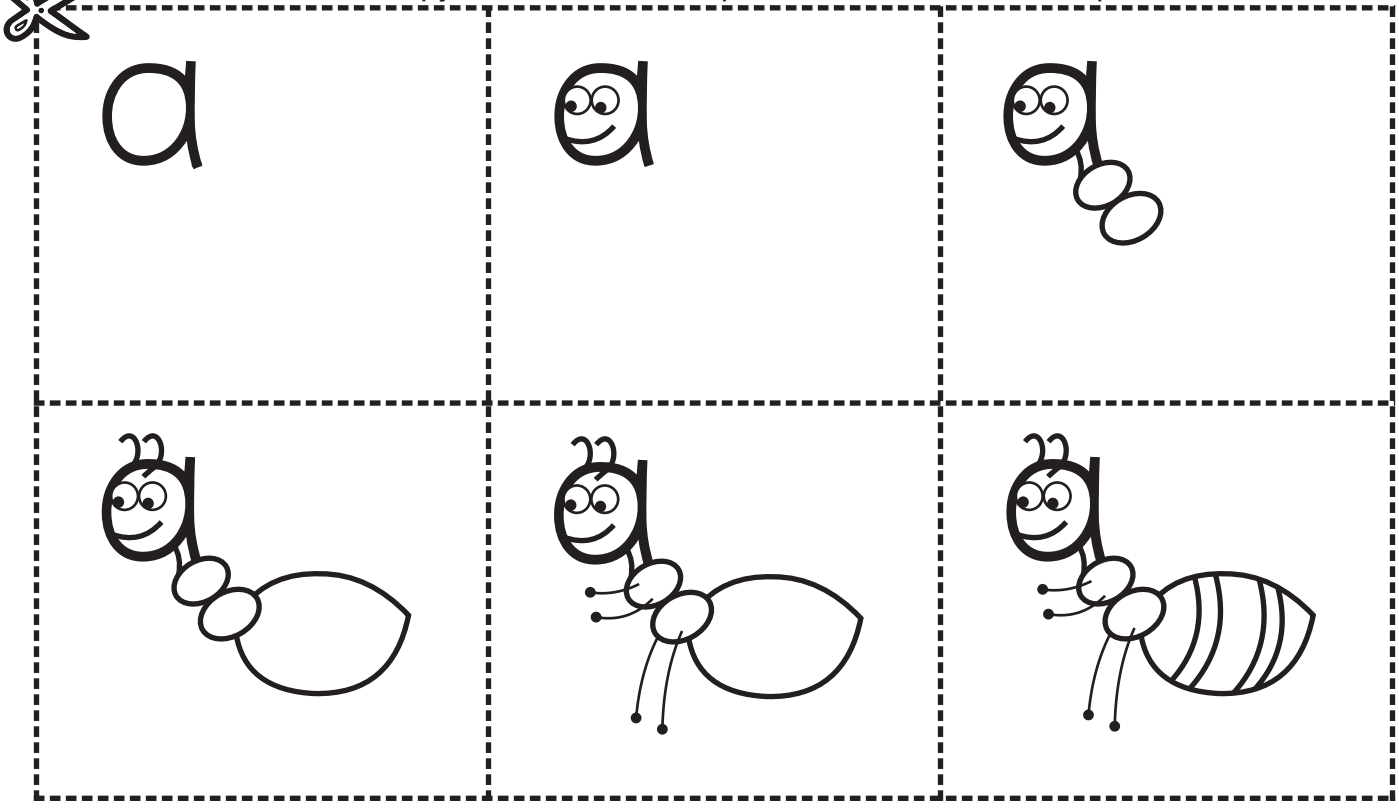
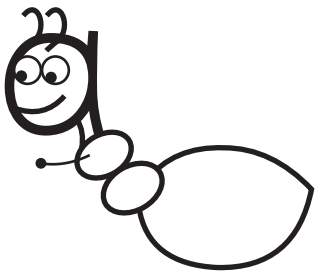
Go to www.YourTherapySource.com/cutsequencedrawaz for the complete download.





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