











Your Therapy Source News

Digital magazine for pediatric occupational and physical therapists.

# lssue 10 -February 2010













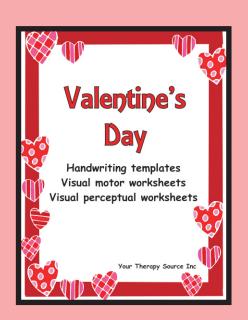


# In This Issue



New and Popular Products	3
<u>Superbowl = Movement</u>	4
Pharmacologic Treatment of CP	5
Physical Activity and School Performance	6
Handwriting and Written Assignments	7
Hot Topics	8
Assistive Technology	9
Valentine's Day Sample Pages	10

# **New and Popular Products**



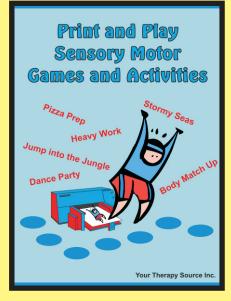
**Valentine Day Handwriting Activities** - Valentine's Day Handwriting Activities is a great collection of handwriting templates, visual motor worksheets, visual closure and visual perceptual activities. The handwriting templates are spaced 1", 1 1/2" and 2" apart with an added color blocks to mark writing spaces. This download is great for push in therapy, therapy homework or consultation services in the classroom.

Valentine's Day Handwriting activities encourage:

- handwriting skills
- visual motor skills
- visual perceptual and visual closure skills
- fine motor skills

#### LIST PRICE: \$4.99

#### www.YourTherapySource.com/valentine



#### Print and Play Sensory Motor Games and

Activities - This is an electronic book (12 pages) of 6 activities that encourage fine motor skills, gross motor skills, visual perceptual/ visual motor skills, body awareness, motor planning and proprioceptive input. These activities are excellent for physical activity breaks, preparatory activities and overall motor skill development.

As with all our products, the activities are reproducible to use over and over again with all the children that you teach.

> **LIST PRICE: \$8.99 Shipping: FREE** - once payment is made you will receive an e-mail with a link to download the book.

### www.YourTherapySource.com/printplay

# Superbowl = Movement

t is almost Superbowl time. Get kids involved by getting them to move not just watch the games. The NFL has a campaign entitled Play 60. The American Heart Association has free resources available (<u>www.americanheart.org/presenter.jhtml?identifier=3062605#generic\_resources</u>) for teachers to get kids moving for 60 minutes each day during the NFL Play60 six week challenge. Don't want to sign up for the challenge? Here are some simple physical activity ideas with a Superbowl theme.

1. Football Training: Set up an obstacle course at home or in the classroom. Set up hoops to walk through, throw the football through a hoop or into a basket, crawl low on the floor, any type of training exercise you can create.

2. Cheerleaders: Create and practice different cheers for your favorite team.

3. Football Target: Hang up a hoop from a doorway or tree. Throw a soft football or any ball through the target. Who can get the most through the hoop?

4. Flag Twirling: Create a team flag to wave during the game. Cut out a flag and tape to a small stick. Create a dance routine with the flag to perform during half time.

5. Flag Football Group Game for Outdoors: Gently tuck a streamer from the back of every child's pants except one. One person is it and has to collect as many streamers as possible by grabbing the streamers.

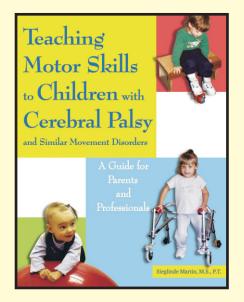
6. Football Scavenger Hunt: Write the letters F, O, O, T, B, A, L, L down the page. The children have to walk around the house, school or outdoors and find objects that start with each letter. The children write down the name of the object next to the letter. For example, if you see a flag write it down next to the F. If you find an oval picture write it down next to the O. Continue until the children have found objects for each letter.

7. Superbowl Quiz: Put 10 lines of tape on the floor each about 1 foot apart. If playing with a group create long lines for 2 children to be able to stand side by side. The child starts at one end. Ask the child a question. It could be a review question from school, something about football, etc. If the child gets it right, he/she jumps forward to the next line. Continue on until the child gets to the end of the lines to score a touchdown. To increase the difficulty, see if the child can score a touchdown in under 2 minutes.

### Pharmacologic Treatment of Spasticity in CP

*eurology* published a special article to evaluate the use of pharmacologic treatments for spasticity in children with cerebral palsy. The multidisciplinary panel reviewed articles from 1966 through 2008. The panel concluded that Botulinum toxin type A was found to be generally safe although the FDA is currently investigated the use of the drug in children. Botox was found to be effective in reducing spasticity in the upper and lower extremities but there is inconsistent evidence regarding improvement in function. The panel concluded that diazepam is effective in treating generalized spasticity along with tizanidine. There was inconclusive evidence on diazepam and tizanidine's effects on function. Regarding the use of phenol, alcohol, botox type B, dantrolene, oral baclofen, or continuous intrathecal baclofen, there was insufficient evidence to support or discredit their use.

Reference: Delgado, M. R., Hirtz, D., Aisen, M., Ashwal, S., Fehlings, D. L., McLaughlin, J., Morrison, L. A., Shrader, M. W., Tilton, A., Vargus-Adams, J.Practice Parameter: Pharmacologic treatment of spasticity in children and adolescents with cerebral palsy (an evidence-based review): Report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology SocietyNeurology 2010 74: 336-343



Teaching Motor Skills to Children with Cerebral Palsy and Similar Movement Disorders - A Guide for Parents and Professionals

Author: Sieglinde Martin M.S., P.T.

Pages: 258 pages Publisher: Woodbine House

List Price for DOWNLOAD: \$19.95

www.YourTherapySource.com/CPmotorskills

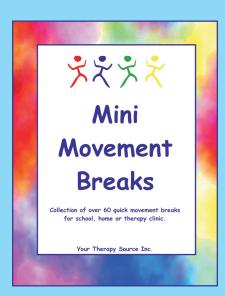
# **Physical Activity and School Performance**

he *Journal of Pediatrics* published research on 1989, 5th, 7th and 9th graders in California. Students with lower aerobic fitness and higher body mass index scored lower on standardized tests in math, reading and language. This held true even after controlling for parent education and other co variates.

More and more research has shown that increased fitness levels improve standardized test scores! Why not try to start an early morning walking club, increase recess time, increase active physical education time or start an extracurricular fitness group after school.

Want to also change a child's eating habits and behaviors in school? Perhaps try scheduling recess before lunch. There have been several studies done that indicate recess before lunch results in improved behaviors, calmer students, less trips to the school nurse and healthier eating habits. Read the full article from the New York Times at www.well.blogs.nytimes.com/2010/01/25/play-then-eat-shift-may-bring-gains-at-school/?8dpc

Reference: Christian K. Roberts, PhDabc, Benjamin Freed, BAd, William J. McCarthy, PhD Low Aerobic Fitness and Obesity Are Associated with Lower Standardized Test Scores in Children The Journal of Pediatrics Published online 1/25/10 doi:10.1016/j.jpeds.2009.11.039



Title: Mini Movement Breaks By: Your Therapy Source

Summary: Download of 60+ quick sensory motor activity cards for school, home or therapy clinic.

> Product Details: E-book - 17 pages

List Price: \$3.99

www.YourTherapySource.com/minimove

f the classrooms that you work in have an interactive whiteboard check out this cool free program entitled **Sky Writer** at <u>www.ictgames.com/sky\_writing.html</u>. You just click on the letter and the plane makes each letter in the air. The children can trace along with their fingers. It is also a fun visual for the child to see how the letter is made. Although, the plane drives a little fast for some letters and it is only lowercase letters. Another idea would be to have the child try to trace the letter before it disappears, too. Let me know what you think if you try it.

Students can also watch letter formation at <u>www.literacycenter.net</u> as well. This is much more exact in the letter formation.

If you need to evaluate a student's needs for writing check out this comprehensive website for evaluating a student's needs for writing. The Montgomery County Public Schools of Rockville, MD has developed a Written Productivity Profile (WPP). All of the forms and directions are on the website to evaluate a student's handwriting versus typing abilities. There are also tools to evaluate spelling. Check it out at www.montgomeryschoolsmd.org/departments/hiat/resources/wpp.shtm

Here are some suggestions for alternatives to written assignments. Voice Thread is a tool to talk about pictures, documents or videos. For those children who have difficulty with written assignments, why not try using voice thread. The child can record his/her voice to go along with pictures or videos. There are so many ideas of how to use Voice Thread on their website at <u>www.voicethread.com/#home</u>. A basic account is free for educators.

Want to do more with recorded voice? Check out Blabberize at <u>www.blabberize.com</u>. Take any picture and make it talk. It is also very simple and free to use. Kids will get a kick out of this one.

### **Seasonal Handwriting Activities CD Collection**

Get 9 electronic books to practice handwriting skills, visual perceptual skills and visual motor skills during the holidays and seasons throughout the year.

Retail Price: \$33.50 with free shipping

www.YourTherapySource.com/CDHandwriting

# **Hot Topics**

#### The Mozart Effect on Weight Gain in Preterm Infants

The most recent issue of Pediatrics reports on 20 healthy preterm infants that were exposed to a 30 minute period of Mozart music for 2 consecutive days. The resting energy expenditure of the infants was significantly lower during the 10 to 30 minute period of listening to the music. There was no difference in resting energy expenditure during the first 10 minutes of listening. The researchers conclude that listening to Mozart music lowers the resting energy expenditure which may explain why listening to music improves weight gain in infants. So simple and so interesting! Very small sample size but it can not hurt to try.

Reference: Lubetzky, Ronit, Mimouni, Francis B., Dollberg, Shaul, Reifen, Ram, Ashbel, Gina, Mandel, Dror Effect of Music by Mozart on Energy Expenditure in Growing Preterm Infants Pediatrics 2010 125: e24-e28

#### Treadmill Training, SMO's and Down Syndrome

Physical Therapy published research on the use of supramalleolar orthosis (SMO) and treadmill training in infants with Down Syndrome. Seventeen infants were assigned to treadmill training with SMO's or treadmill training without SMO's. The infants received 3 minutes of treadmill training until the infant was able to take 3 steps independently. One month following the motor skill acquisition of independently taking 3 steps the Gross Motor Function Measure was administered. The infants who did the treadmill training without the SMO's had higher scores on the Gross Motor Function Measure in standing, walking, running and jumping. The researchers concluded that the use of orthosis may have a "detrimental effect of overall gross motor development".

Reference: Looper, Julia, Ulrich, Dale A. Effect of Treadmill Training and Supramalleolar Orthosis Use on Motor Skill Development in Infants With Down Syndrome PHYS THER 2010 0: ptj.20090021

#### **Exercise and Juvenile Idiopathic Arthritis**

Current Opinion in Rheumatology recently published a review on the use of exercise therapy in the management of juvenile idiopathic arthritis (JIA). Previous studies indicate that children with JIA have significantly impaired aerobic and anaerobic exercise capacity. This can result in deconditioning and disability. Girls with polyarticular rhematoid factor positive subtype are at the great risk for disability. The authors state that

"Recent trials suggest that structured aerobic training or low-intensity programs do not exacerbate arthritis and can lead to improved physical fitness, quality of life and functional abilities in children and adolescents with JIA".

Reference: Long, Amy R; Rouster-Stevens, Kelly A The role of exercise therapy in the management of juvenile idiopathic arthritis Current Opinion in Rheumatology 2010 doi: 10.1097/BOR.0b013e328335d1a2

These pages are not intended to provide medical advice or physician/therapist instruction. Information provided should not be used for diagnostic or training purposes. Consult a therapist or physician regarding specific diagnoses or medical advice.

# **Assistive Technology**

#### Assistive Technology Comes Out On Top

The current issue of the *American Journal of Occupational Therapy* reports on a small study done in a Virginia school district on the benefits of assistive technology. Thirteen students were followed regarding the benefits of assistive technology in reaching IEP goals compared to 9 other interventions including related services, tutoring, curriculum changes and more. According to the Student Performance Profile Measure, assistive technology was a better intervention strategy for IEP goal improvement than the other interventions.

Reference: Anne H. Watson-PhD, OT/L, Max Ito-OTR/L, Roger O. Smith-PhD, OT, FAOTA, Lori T. Anderson-EdD, OTR/L, FAOTA Research Scholars Initiative-- Effect of Assistive Technology in a Public School Setting January/February 2010 Volume 64 / Number 1

#### Tele-Rehabilitation for Hemiparesis in Teens

A recent case study report of three teens with cerebral palsy (hemiplegia) and the use of remotely monitored in home video games was published in *Archives of Physical Medicine and Rehabilitation* January 2010. The three teens used a specially fitted sensor glove linked to a video game at home for 30 minutes a day, 5 times a week for 3 months. The video games played were specifically designed to improve hand function. After the three month training, all three teens showed improved hand function, brain activity changes on functional MRI's and 2/3 teens showed increased radial bone mineral content. Specifically, occupational therapy testing improved, finger range of motion improved and an increased ability to lift objects. All of this was tested remotely.

Reference: Golomb MR, McDonald BC, Warden SJ, Yonkman J, Saykin AJ, Shirley B, Huber M, Rabin B, AbdelBaky M, Nwosu ME, Barkat-Masih M, Burdea GC. In-home virtual reality videogame telerehabilitation in adolescents with hemiplegic cerebral palsy. Archives of Physical Medicine and Rehabilitation Volume 91, Issue 1, Pages 1-8.e1 (January 2010)

#### Do you check for comfort?

A review in Developmental Medicine and Child Neurology reported on the use of assistive devices and technology in people with cerebral palsy. Twenty four studies were found and each study had less than 10 participants. Computer task performance was tested although only three groups studied ease and comfort of use. The researchers recommend that more research be done on ease and comfort of use, performance and design features.

As teacher, parent or therapist, do you check for ease and comfort of use with the client for any assistive technology that you suggest? This is a question that needs to be asked over and over again. Children grow and change so rapidly. Comfort and ease of use for any device (be it a computer, stander, wheelchair, adapted toilet, etc) needs to be constantly assessed. Remember not to just ask the parent, teacher or caregiver but check with the clients themselves.

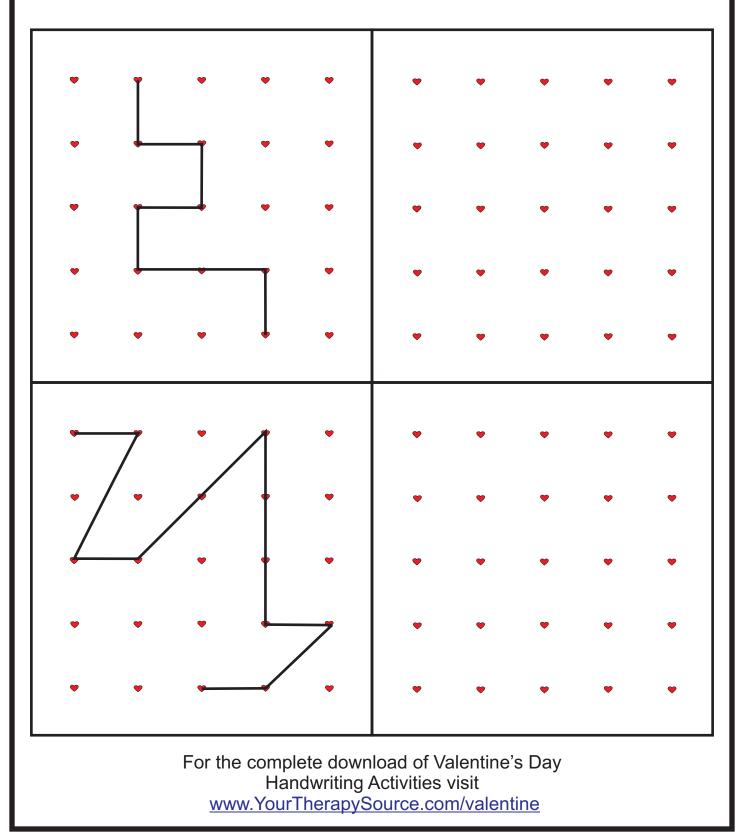
Reference: Claire DAVIES, SUZIE MUDGE, SHANTHI AMERATUNGA and N Susan STOTT Enabling self-directed computer use for individuals with cerebral palsy: a systematic review of assistive devices and technologies. Development Medicine and Child Neurology Published online 1/5/10. DOI 10.1111/j.1469-8749.2009.03564.x

Follow us on Facebook www.Facebook.com/YourTherapySource Follow our blog at www.YourTherapySource.blogspot.com



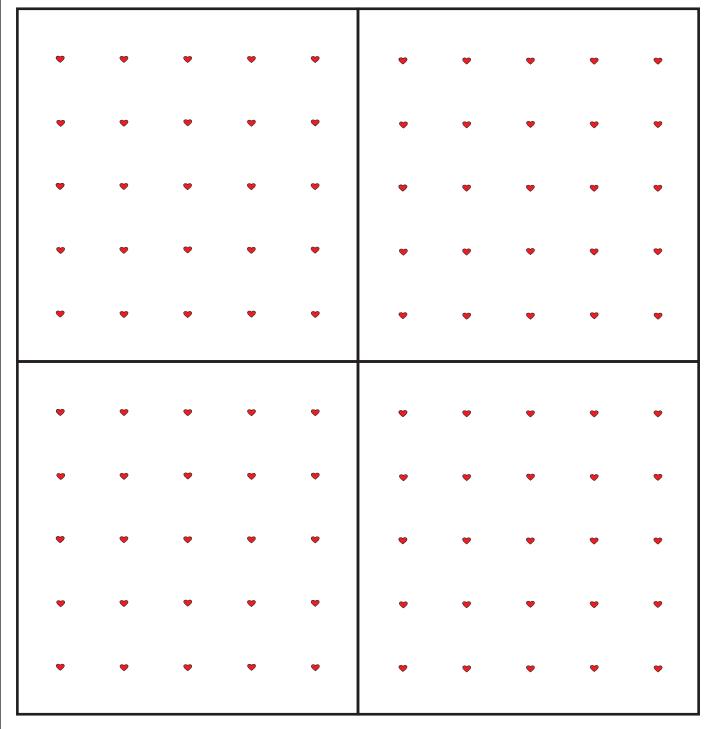
# Valentine Copy

Directions: Copy the drawing exactly on the left in the boxes on the right.



# Valentine Copy

Directions: Player one draws a pattern in the boxes on the left. Player two copies the pattern exactly in the boxes on the right.



For the complete download of Valentine's Day Handwriting Activities visit <u>www.YourTherapySource.com/valentine</u>

# Your Therapy Source Inc.



www.YourTherapySource.com

# Visit <u>www.YourTherapySource.com</u>

for a full list of our products including:

- documentation forms
- sensory motor activity ideas
- sensory processing resources
- visual perceptual activities
- music downloads

We ship digital items worldwide for FREE!

Visit our website for FREE hand-outs, articles, free newsletter, recent pediatric research and more!