Your Therapy Source News

Digital magazine for pediatric occupational and physical therapists.

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www.YourTherapySource.com

New and Popular Products

Print and Create Fine Motor Projects - Winter:

Download materials to create 10 fine motor projects and games.

List Price: $4.99

Sale price: $0.99 until 1/31/2011

www.YourTherapySource.com/fmwinter

Move!

List Price: $14.99 for download

Download of 16 songs created by music therapist and special educator, Margie LaBella. Her CD Move! is an original collection of participation-based songs and dances designed to spark the imagination, playfulness, and language learning (expressive, receptive, and auditory/listening) of children.

www.YourTherapySource.com/labella

Including All Kids

Adapted Physical Activity Quarterly published interesting research on children's feelings about being included. The researcher, Dr. Nancy Spencer-Cavaliere, interviewed 11 children with a range of disabilities including cerebral palsy, motor delays, DCD and more. Three themes were seen throughout the interviews regarding the children's perspective on sports, games and play:

1. Gaining entry to play - initiating play can be difficult
2. Feeling like a legitimate participant - children wanted meaningful roles in play
3. Having friends - wanted a friend they could depend on and trust so they could feel accepted

Dr. Nancy Spencer-Cavaliere also mentioned that the children never mentioned "physical education classes when discussing feeling included". She recommends when in doubt about inclusion be sure to ask the children.

In the classroom, on the playground and during recess all children should feel included. Many times pediatric therapists focus on environmental modifications. Don't forget other types of modifications as well. Each child can bring their own unique abilities to a classroom setting. Here are several ideas to ensure that all kids are included during the school day:

1. Accept each child for who they are - don't try to change a child, realize that each child has their own unique traits.

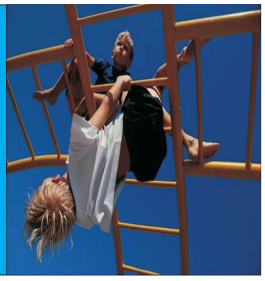
2. Encourage group participation - many parts make up a whole. We all benefit when we work together.

3. Acknowledge all efforts - make sure each child knows that their opinions and actions are valid and appreciated.

4. Promote group decision making - let all voices be heard to make a decision

5. Break up big, group projects into smaller parts - assign each child a small part that they can accomplish.

Reference: Physorg.com Feeling included -- kids with disabilities have their say in landmark study. Retrieved from the web on 12/10/2010 at http://www.physorg.com/news/2010-12-kids-disabilities-landmark.html



Free Activities from 2010

Here is a list of 20 free activities we posted on the website during 2010:

1. Winter Handwriting Activities

2. Artist Trading Cards Lesson Plan

3. Tangrams for Kids

4. Fabric Creation Lesson Plan

5. Visual Motor Exercises

6. Imagination Action Journey

7. Dressing Skills Sample Page

8. Wax String Activities Sample Pages

9. Follow the Path Sample Pages

10. Self Calming Sample Page

11. Pencil Toppers

12. Patterns, Patterns, Patterns Sample Pages

13. Leaf Animals

14. Spooky Door Hanger

15. Moon Pose Classroom Activity Poster

16. Holiday Lights

17. Fingerprint Calender Page

18. Dice Drawing - Owl

19. Therapy Session Lesson Plan Form

20. Thanksgiving Turkey Clothes Pin Mat

10 Most Popular Blog Posts from 2010

Here are the top 10 most popular blog posts during 2010:

1. Motor Planning and Graded Movement

2. Homemade Assistive Devices

3. iPhone Applications and Occupational Therapy

4. Encouraging Tummy Time Handouts

5. Social Story Resources

6. Self Regulation Activities

7. Bilateral Coordination Eye Foot

8. Handwriting Practice on the Interactive Whiteboard

9. 5 Ice Breakers for Pediatric Therapy

10. Pediatric Physical Therapy In the News

Improving Postural Control in Sitting

Physical Therapy published research that compared two interventions to improve postural control in sitting between two groups of infants with cerebral palsy. Thirty five infants were assigned to either a home program or a perceptual motor intervention. The infants on the home program has a mean age of 15.5 months and were seen 1x/week for 8 weeks. The infants who receiving the perceptual motor program had a mean age of 14.3 months and were seen for 2x/week for 8 weeks. The results indicated that both groups made gains on the Gross Motor Function Measure. With regards to center of pressure measurements in sitting, the infants who received the perceptual motor program had an advantage.

Reference: Regina T. Harbourne, Sandra Willett, Anastasia Kyvelidou, Joan Deffeyes, and Nicholas Stergion A Comparison of Interventions for Children With Cerebral Palsy to Improve Sitting Postural Control: A Clinical Trial PHYS THER December 2010 90:1881-1898; published ahead of print October 21, 2010, doi:10.2522/ptj.2010132

Hot Topics

Motor Planning in Toddlers

Child Development published research on movement planning in toddlers. Thirty five toddlers, ages 18-21 months, were observed building a tower with blocks or placing blocks into a container and kinematic measurements were taken. The kinematic measurements indicated that there was a longer decelerating phase when the hand approached the block for pick up versus putting into the container. In addition, toddlers who were more skillful at building the towers exhibited a longer deceleration phase when placing blocks on higher towers compared to toddlers who built lower towers. After one year the same tasks were repeated in 16 of the toddlers. The difference in the deceleration was still present between the two groups (skillful builders with higher towers versus toddlers who could only build lower towers).

Reference: Yu-ping Chen, Rachel Keen, Kerstin Rosander, Claes Von Hofsten. Movement Planning Reflects Skill Level and Age Changes in Toddlers Child DevelopmentVolume 81, Issue 6, pages

Knee Surgery and Arthrogryposis

The *Journal of Pediatric Orthopedics* published research on ambulation gains following surgical correction for knee flexion contractures in children with arthrogyposis. Prior to surgery at 2 through 16 years of age, 11 children were non ambulatory, 2 were household ambulators and 1 was a community ambulator with orthosis. The children underwent an average of 1.8 surgeries of mostly distal femoral extension osteotomy and/or Ilizarov external fixator. Follow ups were performed anywhere from 12 months to 112 months which indicated that: 8 children were now ambulatory with adapted equipemtn (i.e. orthoses, walkers or braces), 2 children were household ambulators, one child used a wheelchair and was independent for transfers and 2 children were non ambulatory. Knee flexion contractures varied from an average of 63.7 (+/-26.8 degrees) preoperatively, 13.2±16.7 degrees postoperatively and 34.0±24.1 degrees at latest follow up. The return of the knee flexion contractures postoperatively did not limit the ambulation gains that were achieved.

Reference: Yang, Stephen Su et al. Ambulation Gains After Knee Surgery in Children With Arthrogryposis. Journal of Pediatric Orthopaedics: December 2010 - Volume 30 - Issue 8 - p 863–869 doi: 10.1097/BPO.0b013e3181f5a0c8

Walking to School and Cognition

A recent study done in Spain found that adolescent girls who walked or biked to school had better cognitive performance. Although, it was not found to be true for boys. Even when socioeconomics, age, body weight and activities outside of school were factored in, the difference in cognitive performance in girls was still observed. In addition, girls who walked or biked more than 15 minutes had better cognitive scores than girls who walked/ biked less than 15 minutes.

Curious to see if the same results would be found if children simply exercised before school or is it the actual walking outdoors that makes the difference?

Reference: David Martinez-Gomez; Jonatan R. Ruiz; Sonia Gomez-Martinez; Palma Chillon; J. Pablo Rey-Lopez; Ligia E. Diaz; Ruth Castillo; Oscar L. Veiga; Ascension Marcos; for the AVENA Study Group Active Commuting to School and Cognitive Performance in Adolescents: The AVENA Study Arch Pediatr Adolesc Med. 2010;0(2010):archpediatrics.2010.244.

More Hot Topics

Participation of Youth with Spina Bifada

Clinical Orthopaedics and Related Research published a study on the participation of community activities for youth with spina bifada. Sixty three children with spina bifada, ages 2-5, 6-12 and 13-18, completed a participation survey (along with caregivers if necessary). The results indicated that the "older youth participated less in recreational, physical and skill based activities". The children without a shunt or recent medical problems participated more in physical and social activities. In the 6-12 year old age group. more caregivers reported bowel and bladder needs as barriers to participation when compared to the other age groups.

Reference: Kelly, E. et al How Does Participation of Youth with Spina Bifada Vary with Age? Clinical Orthopaedics and Related Research DOI: 10.1007/s11999-010-1693-x

Gross Motor Skills and Psychiatric Disorders

Developmental Medicine and Child Neurology published research on the gross motor performance and physical fitness of children with psychiatric disorders. One hundred children (81 boys and 19 girls with a mean age of 9 yrs 11 months) were divided into three subgroups: emotional disorders (17 children), behavioral disorders (44 children) and pervasive developmental disorders (39 children). The children completed the Test of Gross Motor Development and Motor Performance Test. The results indicated that "the mean gross motor performance scores of the BD and PDD group were significantly ($p<0.05$) lower than the score of the emotional disorders group". In all three subgroups, physical fitness was poor. The subgroup with PDD showed a high correlation between locomotion and object control and between locomotion and physical fitness.

Reference: EMCK, C., BOSSCHER, R. J., VAN WIERINGEN, P. C., DORELEIJERS, T. and BEEK, P. J. , Gross motor performance and physical fitness in children with psychiatric disorders. Developmental Medicine & Child Neurology, no. doi: 10.1111/j.1469-8749.2010.03806.x

Botox in Upper Limbs

The *Journal of Child Neurology* published research on the use of injections of Botox A in the upper extremities of children with cerebral palsy. A retrospective study was done on 30 children (average age 9.9 years old +/-5 years) who received 1-5 treatments in various muscles of the upper limbs (pronator teres, flexor carpi radialis, biceps, flexor carpi ulnaris, opponens, and/or adductor pollicis). Following treatment, functional improvements were noted in 42 of the 56 treatments and muscle tone decreased significantly. These effects were noted for an average of 7 months (+/-3 months) post treatment.

Reference: Aviva Fattal-Valevski, Liora Sagi, and Dafna Domenievitz
Botulinum Toxin A Injections to the Upper Limbs in Children With Cerebral Palsy: Duration of Effect J Child Neurol 0883073810376446, first published on October 6, 2010
doi:10.1177/0883073810376446

On the Web...

Tips for Daily Routines

The Technical Assistance Center on Social Emotional Intervention has published informative handouts on various daily routines to help parents of children who have emotional or behavioral disorders.

There are three hand outs on:1. Naptime/ Bedtime 2. Running Errands 3. Diapering

Worth a look at TACSEI

Assessing Self Regulation

Pediatric therapists and early childhood teachers frequently assess a child's ability to self regulate. Child Trends has released an excellent document on assessing self regulation. Included in the document are several simple questionnaires to determine a child's ability to self regulate. The paper recommends that children participate in out of school programs to help improve self regulation skills. You can view the document here.

Lego Grant Available

The LEGO Children's Fund provides quarterly grants typically from $500 to $5000. Preferential consideration is given to disadvantaged youth, special projects that help children explore creativity and organizations serving Connecticut and Western Massachusetts. They are specifically looking for programs in these two areas:

"1. Early childhood education and development that is directly related to creativity
2. Technology and communication projects that advance learning opportunities "

The grant submission is due before January 15, 2011. For more information go to LEGO Children's Fund.

Permit to Drive

Much like a student driver needs driving lessons, practice and a permit before they can get on the road, a child needs similar skills to drive a motorized wheelchair. Some skills can be learned, acquired or achieved with medical intervention (i.e. glasses). To start with a child must have sufficient vision in order to drive a motorized wheelchair. They must be positioned appropriately and have a point of access to drive the chair. A child must understand certain commands and actions, stop and go being the most important. In addition, a child should understand directionality - left, right, straight and reverse.

For more information and tips on getting a child ready for a motorized wheelchair read this article entitled, Pre-Mobility Training Guidelines, written by Michelle Lange OTR

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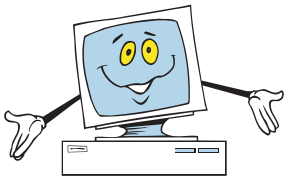

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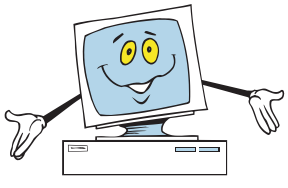
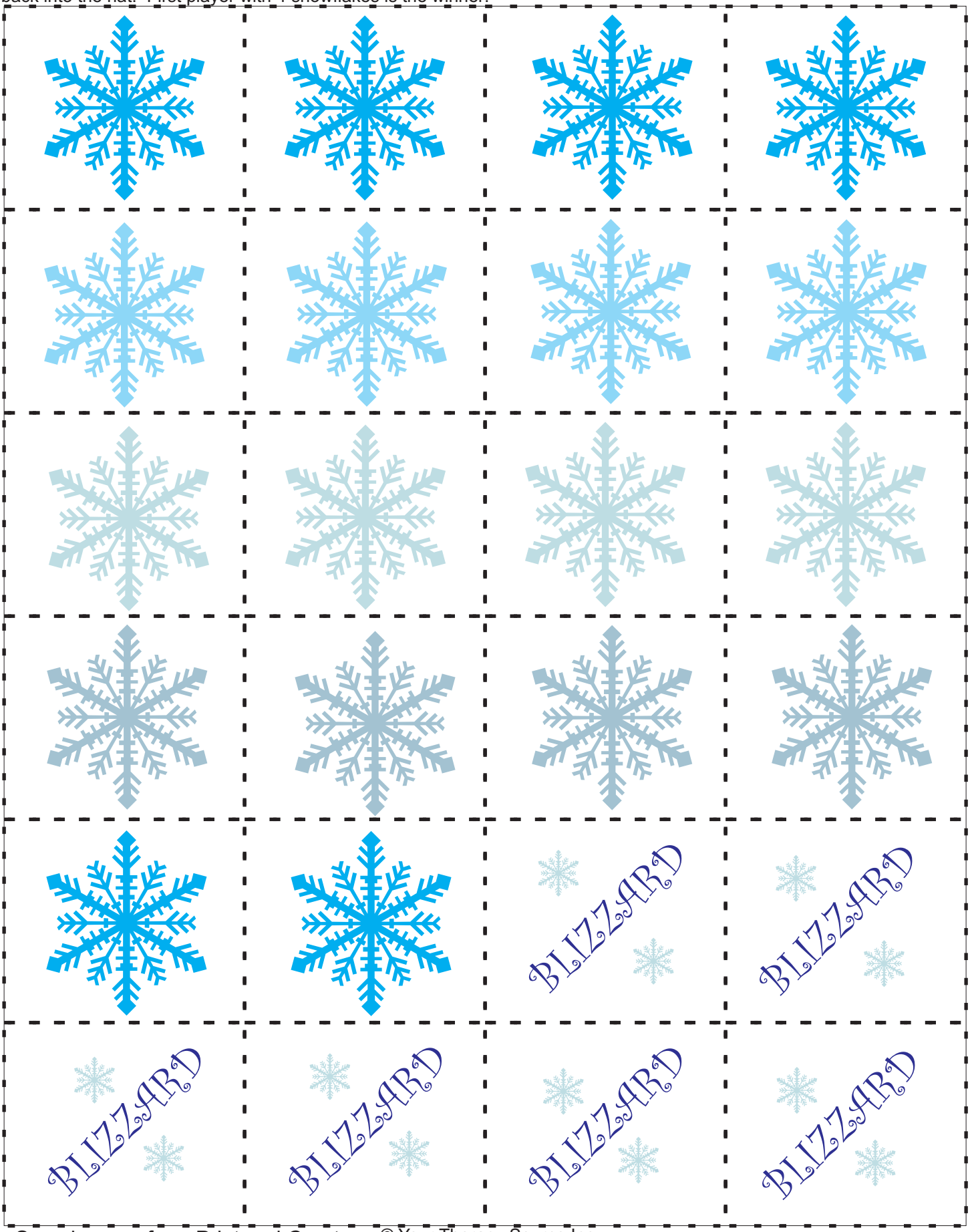


BLIZZARD CARD GAME

Directions: Cut apart the cards below. Using your first two fingers and thumb, roll up each card into a small "snowball". Place all the cards into a winter hat. Player one takes a turn by reaching into the hat to pull out a "snowball". Open up the ball, if it is a snowflake keep it. If it is a blizzard card, you must put all your cards back into the hat. First player with 4 snowflakes is the winner!



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