



Your Therapy Source News

**Digital magazine for pediatric
occupational and physical therapists.**

Issue 19 - October 2010

www.YourTherapySource.com

New and Popular Products

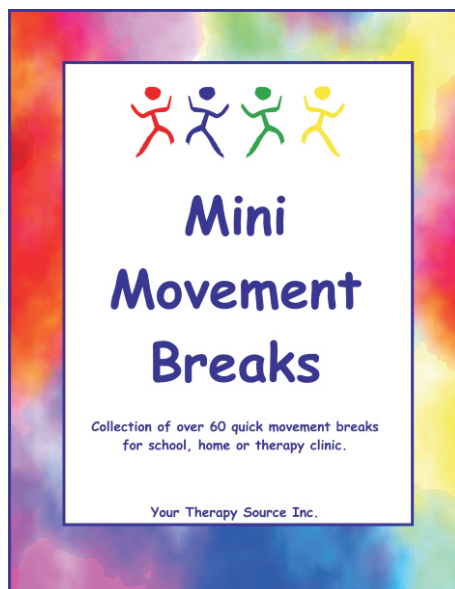


Print and Create Fine Motor Projects - Halloween

Download materials to create 10 fine motor activities with a Halloween theme.

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Positive Reinforcement



With the school year underway, teachers, parents and therapists will face so many different children and behaviors. One way to encourage compliant behavior during therapy sessions, in the classroom and home is to establish a system of positive rewards. Based on your own criteria, children are rewarded for "good" behaviors. This can be done with various simple tools. Try a sticker chart, linking paper chains, pinning up a certain number of clothes pins, etc. to promote the desired behavior. When the goal is reached of a certain number of stickers, paper chains or clothes pins give the child or group a reward. Or try our free printable from <http://www.yourtherapysource.com/> - [Therapy Bingo](#). Here are some fun, creative reward ideas for a group that are free and movement related:

1. Carnival Party: Set up different carnival stations that promote eye hand coordination skills i.e. throw bean bags at bottles, hoops over bottles, etc. The children can earn tickets as prizes. At the end of carnival, turn tickets in for coupons such as free play playground for 10 minutes.
2. Olympics: Create different stations of various Olympic activities. Give each participant a medal (print one off of computer for them to string on yarn)
3. Playground Time: How about a playground party? The children can be allowed to use the playground for 30 minutes as a reward.
4. Nature Walk: Plan a nature walk as a reward. Children love the break of fresh air during the school day. Walk around the school grounds setting an example to other classes. The kids will love to show off their reward and see other children working so hard while they get a nice break outdoors.
5. Gym Time: This can be hard to organize, but if the gym is free for a short period during the day, reward the children with free play in the gym. Provide cones, balls and hoops. This activity is sure to be a hit.
6. Therapy Time: If your school does have a therapy room, how about rewarding children with some free play in the therapy room. Therapists and teachers could collaborate to provide this reward. Kids would love some free play with all the therapist's unique toys.

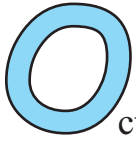


Positive Affirmation Posters and Cards for Children

More info at:

www.YourTherapySource.com/positiveaffirmation

Ideas to Celebrate PT Month 2010



October 2010 is Physical Therapy Month. The APTA is promoting physical therapists to encourage families to combat obesity with physical activity this month. They have produced a hand out entitled "Smart Moves for Families". It can be downloaded from the [APTA website](#). Print it out and send home with children at your school.

Here are 10 more suggestions to celebrate PT Month in a school or pediatric setting:

1. Think of an activity club that you could start at the school to promote quality of life, maybe an early morning or lunch time walking club. Another way to encourage long term quality of life is to improve posture. Perhaps plan a postural screening day with hand outs on proper posture available.
2. Host the Physical Therapy Olympics - invite school staff, parents and students to participate in the PT Olympics. Try relay races in wheelchairs, with walkers and therapy balls.
3. Create a PT Contest - For example - Who can take the most steps in a week (use pedometers). The largest number of steps wins a PT t-shirt.
4. Create a PT Quiz - Distribute an PT quiz with many questions regarding what PT is and how it helps children. Every person who fills out the quiz gets a small prize.
5. Do an in-service on the benefits of PT to the school staff and parents.
6. Plan a PT Month Party! - Allow the kids to vote on a party theme such as gross motor, sensory or playground. Create games around that theme.
7. Volunteer for the Career Fair at the school. Educate prospective college students on what PT is.
8. Have an Adaptive Equipment and Assistive Technology Fair - demonstrate different types of equipment that Pts recommend for students to school staff and parents.
9. Hang up a large poster in the hallway about physical therapy. Check out Awards, Certificates and Signs for School Based Therapy at www.YourTherapySource.com/awards .
10. If you do not have time for any of the above ideas here is the easiest - just ask to make an announcement over the loudspeaker of the school about PT month. Inform the school in a few sentences about physical therapy.

DCD and Brain Activation

A

small study was recently published in *Pediatrics* on developmental coordination disorder (DCD) and brain activation. Seven children, ages 8-12 years, with DCD and seven control subjects without DCD, performed a fine motor trail tracing task while undergoing functional MRI. The behavioral motor results of the fine motor trail tracing task were similar between the two groups. The MRI results indicated that the children with DCD used significantly more brain activation in the left inferior parietal lobule, right middle frontal gyrus, right supramarginal gyrus, right lingual gyrus, right parahippocampal gyrus, right posterior cingulate gyrus, right precentral gyrus, right superior temporal gyrus, and right cerebellar lobule VI, than the typically developing children. The researchers concluded that the children with DCD relied more on visuospatial processing to complete the fine motor activity.

Reference: Zwicker, Jill G., Missiuna, Cheryl, Harris, Susan R., Boyd, Lara A.
Brain Activation of Children With Developmental Coordination Disorder is Different Than Peers *Pediatrics* 2010 126: e678-e686

Ankle Strength and Osteogenesis Imperfecta

T

he most recent issue of *Pediatric Physical Therapy* published research on ankle strength and function in 20 children and adolescents with Type I Osteogenesis Imperfecta (OI) compared to 20 aged match controls (ages 6-18). In one evaluation session the following information was collected on each subject: strength assessment, Gillette Functional Assessment Questionnaire, Pediatric Outcome Data Collection Instrument (PODCI), and Faces Pain Scale—Revised. The results indicated muscular weakness in the ankle plantar flexors of the children with OI. Limitations were seen in function with regards to sports and physical function along with pain/comfort. The researchers recommend using the evaluation tools when setting goals for children with OI.

Reference: Caudill, Angela MPT; Flanagan, Ann PT, PCS; Hassani, Sahar MS; Graf, Adam MS; Bajorunaite, Ruta PhD; Harris, Gerald PhD; Smith, Peter MD Ankle Strength and Functional Limitations in Children and Adolescents With Type I Osteogenesis Imperfecta *Pediatric Physical Therapy*: Fall 2010 - Volume 22 - Issue 3 - p 288–295 doi: 10.1097/PEP.0b013e3181ea8b8d

PT for Young Adults with CP

Clinical Rehabilitation published a review of the literature on the effectiveness of physical therapy interventions for young adults and adults (ages 16 and up) with cerebral palsy. Initially 675 articles were found on the topic. Only 13 studies could be included for review from earliest available time through March 2009. No articles met the criteria for high methodological criteria. No articles had blinded therapists or subjects. Evidence was found of moderate quality on the use of progressive resistance strength training and gait. Following work station interventions, evidence of low quality was found on balance and strength training. In addition, low quality evidence was found for strength training effects on gross motor capacity. Finally, there was very low quality evidence found for strength training and its effects on range of motion. The researchers recommend well designed physical therapy trials for this population of adults with cerebral palsy.

Reference: Jeglinsky, J. Surakka, E. Brogren Carlberg, and I. Autti-Rämö
Evidence on physiotherapeutic interventions for adults with cerebral palsy is sparse. A systematic review Clin Rehabil September 2010 24: 771-788, first published on July 6, 2010
doi:10.1177/0269215510367969

Sitting and Developmental Delay

Pediatric Physical Therapy has published research on the relationship between the ability to sit upright and developmental delay. Sixty-five infants were evaluated when the babies were learning to sit. The amount and variability of the center of pressure (COP) of sitting was measured and data was collected. After data analysis, the results indicated that the variability of the center of pressure when learning to sit could "discriminate between infants with developmental delay and cerebral palsy". The researchers concluded that the center of pressure is an objective tool to be used to help to identify sitting postures and motor delays.

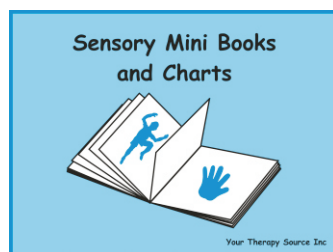
Reference: Kyvelidou, Anastasia; Harbourne, Regina T.; Stergiou, Nicholas. Severity and Characteristics of Developmental Delay Can Be Assessed Using Variability Measures of Sitting Posture Pediatric Physical Therapy. 22(3):259-266, Fall 2010. doi: 10.1097/PEP.0b013e3181ea75f1

Social Stories and Visual Schedules



Many children benefit from the use of social stories to help to familiarize them with different social situations and to improve behavioral responses. A recent study followed 3 autistic children in kindergarten through 5th grade. Social stories were written to target specific behaviors for each child. The results indicated that following the use of the social stories, modest improvements were noted in on task behaviors. Further improvements in on task behaviors were seen when the social story was followed up with a complimentary visual schedule.

Reference: Naomi Schneider and Howard Goldstein Using Social Stories and Visual Schedules to Improve Socially Appropriate Behaviors in Children With Autism Journal of Positive Behavior Interventions July 2010 12: 149-160



Sensory Mini Books and Charts

Download of the materials to create 7 sensory mini books, 7 charts, 7 four square strips and over 100 picture word cards.

For more information go to
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Cut and Paste Sensory Diet



Cut and Paste Sensory Diet

Download of the materials to create 2 sensory diet books, one for home and one for school with over 150 picture word cards.

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Hot Topics

Type 1 Diabetes and Fine Motor Skills

A recent study in *Pediatric Diabetes* examined the neurocognitive functioning of 68 preschool children, 36 with Type 1 diabetes and 32 without any chronic illness. The two groups were administered a number of tools to assess cognitive, language and fine motor skills. The results indicated that the children in both groups performed similarly with skills in the average range. The children with Type 1 diabetes with poor glycemic control scored lower on cognitive skills and receptive language and had slower fine motor speed.

Reference: Patiño-Fernández AM et al. Neurocognitive functioning in preschool-age children with type 1 diabetes mellitus. *Pediatr Diabetes*. 2010 Sep;11(6):424-30. Epub 2010 Apr 23

Drooling and Botox

The *Archives of Otolaryngol - Head and Neck Surgery* published research on the use of Botox injections to control drooling. One hundred thirty-one children with cerebral palsy or other neurological condition with moderate to severe drooling received an injection of Botox to the submandibular glands. Following the injections, 46.6% of the children responded to the treatment. This was demonstrated by a significant mean reduction in the drooling quotient dropping from 29 to 15 at after 2 months and from 29 to 19 after 8 months. In addition, a visual analog scale rated by the caretakers showed decreased scores from 83 to 53 after 2 months and increased back up to 66 at 8 months. An analysis showed that after a mean of 22 weeks a relapse occurred in the patients who initially showed a response to the treatment.

Reference: Arthur R. T. Scheffer, MD; Corrie Erasmus, MD; Karen van Hulst, BSc; Jacques van Limbeek, MD, PhD; Peter H. Jongerius, MD, PhD; Frank J. A. van den Hoogen, MD, PhD Efficacy and Duration of Botulinum Toxin Treatment for Drooling in 131 Children *Arch Otolaryngol Head Neck Surg*. 2010;136(9):873-877. doi:10.1001/archoto.2010.147

Exercise Programs in Males Versus Females with Cystic Fibrosis

An interesting study was published in *The Journal of Pediatrics* comparing the fitness levels of males and females with cystic fibrosis. A 6 week inpatient rehabilitation program was conducted with 158 females and 186 males subjects (ages 12-43 years) with cystic fibrosis. Lung function, peak oxygen uptake, peak workload, and peak heart rate were measured. The results indicated the following: lower lung function in males; lower aerobic capacity in females; the same training effects were seen in males and females for peak oxygen uptake and peak heart rate but not in peak work load; and individuals who were less fit at the start of the program showed the most improvement.

The researchers concluded that fitness level and not lung function determined the improvements following the 6 week rehabilitation program.

Reference: Wolfgang Gruber, MSc, PhDa, David M. Orenstein, MD^b, Klaus Michael Braumann, MD^c, Karl Paul, MD^d, Gerd Hüls, MD^e Effects of an Exercise Program in Children with Cystic Fibrosis: Are There Differences between Females and Males? *The Journal of Pediatrics* Abstract September 2010 doi:10.1016/j.jpeds.2010.07.033

On the Web...

Free AT Tool for Studying, Reading and Writing

My Study Bar is an open source applications that can assist students with reading, studying and writing. There are six areas of My Study Bar: reading, writing, studying, vision, voice and help. You can download My Study Bar for free onto your computer or a USB stick. The benefit to the USB stick is that you can provide it to students to use on any computer (home or school). There are organization tools, word prediction, speech to text app, text to audio and more. These are all for free! Check it out at My Study Bar - <http://www.rsc-ne-scotland.ac.uk/eduapps/mystudybar.php>

Free Online Typing Games

Learning to type can be boring after awhile and monotonous. How about trying some games to motivate children to learn how to type? Here are a few suggested websites with free online typing games:

Simple, basic typing skills: Sense-Lang.org Typing games at <http://www.sense-lang.org/typing/games/index.php?lang=EN>

Easy, Medium and Difficult Typing Games:
Typing Web at <http://www.typingweb.com/tutor/games/>

A video game approach to learning to type at FreeTypingGames.net at <http://www.freetypinggame.net/play.asp>

Good animation with this spider typing game (thanks @OTKate from Twitter for finding this one) - http://funschool.kaboose.com/fun-blaster/games/game_super_hyper_spider_typer.html

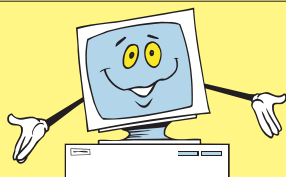
Thanks also to a blog reader who suggested Dance Mat Typing at <http://www.bbc.co.uk/schools/typing/>

Finish Line Grants

Finish Line Youth Foundation is offering grants to programs for youth athletic programs and camps for children under 18 years of age. They are particularly interested in helping camps for disadvantaged children and children with special needs. If you would like to submit a grant proposal there is a quick eligibility quiz you can take to see if your organization qualifies. In general, the grants range from \$1000 - \$5000. You can find out more information at the [Finish Line Youth Foundation](#).

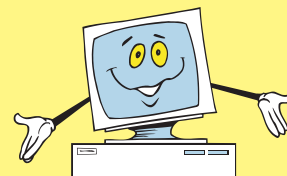
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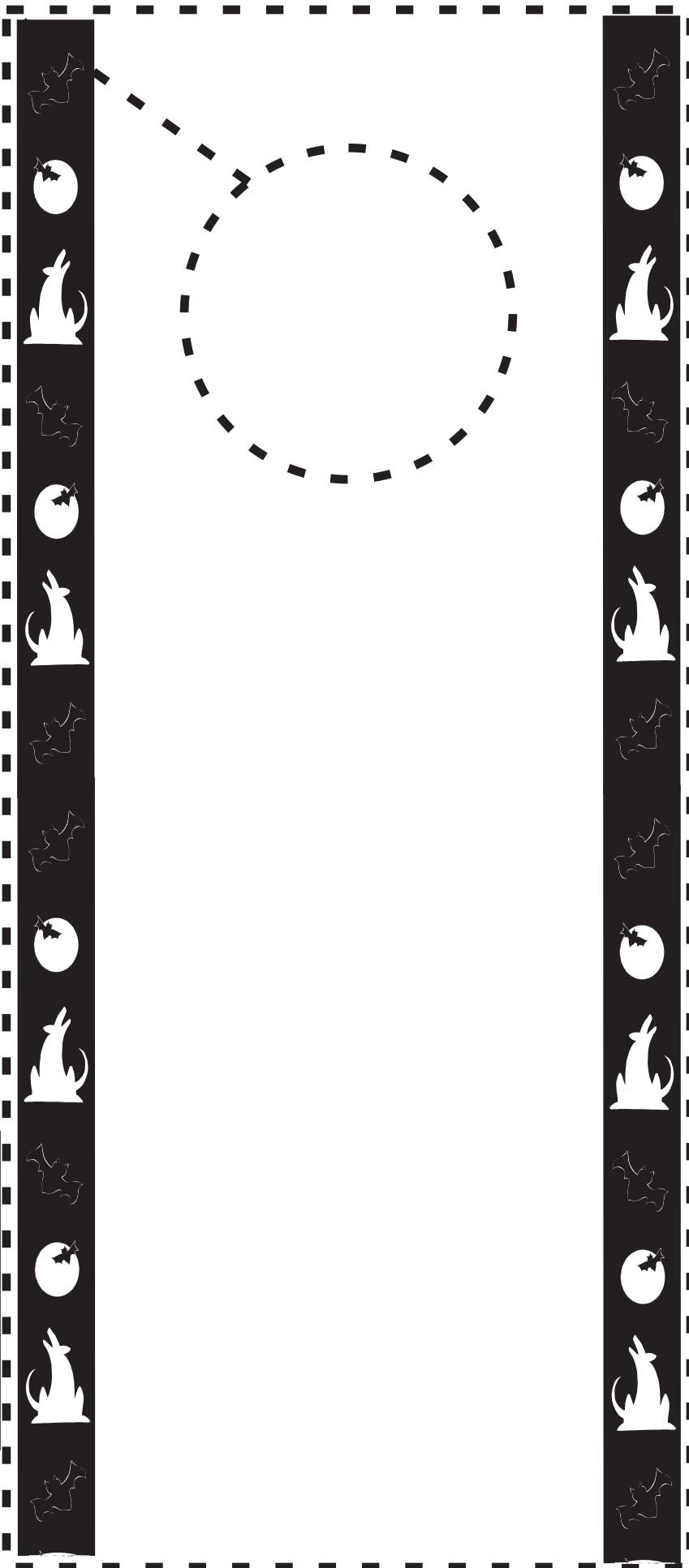
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Spooky Door Hanger

Directions: Print on cardstock paper. Cut out around outside of door hanger along dotted lines and into circle. Cut out and glue the decorations on the door hanger.

Enter IF
You Dare



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