



## PARENT AND TEACHER INFORMATION: PROPRIOCEPTION



### **What is proprioception?**

Proprioception is the sensory information we receive from our muscles and joints about the position, force and movement of our body parts. It allows us to know where our body is in space, without looking.

### **Why is proprioception important?**

Proprioception is required to carry out motor tasks in a controlled way. It is important in terms of emotional security as when we trust our bodies we feel safe and secure. A child who has difficulty processing sensory information may:

- ★ Apply too much or too little pressure when engaging in everyday tasks such as writing.
- ★ Watch their body during movement tasks.
- ★ Bump or crash into other people or objects.
- ★ Have difficulty maintaining appropriate personal space.

Proprioception can also help children to regulate their level of arousal or wakefulness. It can help to alert children when they are 'low' or calm children when they are 'high' and can therefore help children to concentrate.

### **How can I help my child develop their proprioceptive awareness?**

Experiencing and repeating movements within fun and functional activities helps children to learn body awareness, particularly if these activities provide strong feedback to our muscles and joints. Body awareness can also be related to language development and developing an understanding of direction and location. It is beneficial to create opportunities for the following within movement tasks:

- ★ Give qualities to movements for example encourage your child to move slowly.
- ★ Talk about how the movement felt after the tasks for example "was that heavy or light?"
- ★ Complete activities blind folded so that the child cannot rely on visual feedback.
- ★ Incorporate movement activities that are completed against resistance for example: weight bearing activities, under water activities and uphill activities.

### **Incorporating opportunities for proprioception activities into your daily routines:**

- ★ Carrying appropriately weighted objects such as shopping bags or a school bag.

- ★ Completing daily activities such as brushing their hair blind folded.
- ★ Complete a movement such as animal walks from the car to the front door.

**Activities:**

- ★ **Dancing** to music.
- ★ **Crawling** forwards, backwards and sideways to complete an obstacle course. Ensure your child maintains a straight back. You can place a small bean bag on the child's back to promote this posture and provide additional feedback.
- ★ **Jumping** on the ground or on a trampoline. You can make it harder by asking the child to jump in patterns for example along a line or in a zig zag pattern.
- ★ **Throwing and catching** a weighted ball or bean bag. A child can play on their own by dropping with one hand and catching with the other. You can make it harder by increasing the distance the ball is thrown from and decreasing the weight of the ball.
- ★ **Wheel barrow walk** to complete an obstacle course or to move between rooms in the house. The child walks on their hands when held by the hips, knees or feet. The further back you hold the harder it is for the child. Ensure that the child is keeping their back straight and gradually increase the distance the child is travelling.
- ★ **Animal walks** such as a frog jump, bunny hop, bear stomp or crab scuttle. This provides a great opportunity to reflect on how heavy/light, fast/slow they are moving.
- ★ **Play ground equipment** including monkey bars and climbing frames.
- ★ **Tug of war** using a towel to play with a partner. Place something soft behind each child to crash in case they fall.
- ★ **Pulling a wagon** full of toys without the toys falling out. Encourage the child to explore pushing to fast/slow and to hard/soft and reflect on what they notice.
- ★ **Hammering** activities such as hammering/patting playdough or cookie dough as well as hammer toys. Experiment with how fast/slow and hard/soft.
- ★ **Helping mum and dad with chores** such as washing the car, wiping down the table, sweeping the floor and watering the garden.
- ★ **Playing a variety of team sports.**
- ★ **Relay races.** You can make it harder (and more exciting) by having the child hold an egg on a spoon or keep a balloon between their legs.
- ★ **Rolling a therapy ball over the child.** Ask the child to lie on the ground on their stomach or back with an adult rolling the therapy ball over the child's body with firm pressure. You can pretend the ball is waves crashing over the child, or

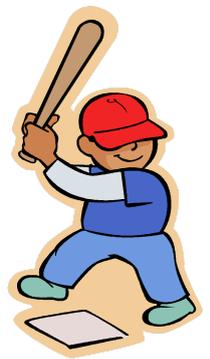


that you are making a sandwich with various ingredients. Be mindful when rolling the ball over the child's stomach and lungs.

- ★ **Mirroring games** such as follow the leader and Simon says.
- ★ **Digging and pouring sand** to make sand castles at the beach or park.

#### **Activities that can be used within the classroom:**

- ★ Pushing in chairs or stack chairs at the end of the day.
- ★ Pushing against the wall to try and "make the room bigger".
- ★ Carrying appropriately weighted items such as a school bag or a box with stationery.
- ★ Handing out papers or tools to the class room.
- ★ Wiping down the board or desks at the start or end of the day.
- ★ Playing active games or sports during recess and lunch times.
- ★ Sharpening pencils with a manual sharpener.
- ★ Pushing or pulling doors open for others.
- ★ Squeezing toys such as a koosh ball or putty.
- ★ Colouring in or playing games whilst sitting against a wall, lying on his stomach or sitting in a bean bag.
- ★ Speak to your child's occupational therapist about tools that may be useful within the classroom setting.



As with home activity ideas, these are best when fitting within the school routine throughout the day and used on a whole class level.

#### **Comments:**

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**Disclaimer:** The purpose of the hand out is to provide information for parents wanting to carry over occupational therapy activities within the home environment. The information does not replace therapy or medical care provided by a qualified health care provider. If you have any concerns or difficulties persist speak to a qualified Occupational Therapist.

#### **Resources:**

The Out-of-Sync Child Has Fun by Carol Kranowitz (2003).

Take Five! Staying Alert at Home and School by Mary Sue Williams and Sherry Shellenberger (2001).