

CIMT

Toy/Activity Essentials

Introduction:

In this packet is a list of toys and activities used for CIMT therapy. These activities are used with children of all ages. Each activity is used to facilitate an arrangement of motor patterns.

Below is a description of the basic toys and how they are used. Keep in mind, there are many different ways to play with a toy.

GEAR TOY



GEAR TOY:

What it is used to facilitate:

This toy is used to facilitate multiple motor movements which include gross grasp, and wrist extension while working on a vertical surface.

How to play:

Have child pick up gear from specific surface (floor, table, therapist hand, or refrigerator). Next, have child place gear onto board surface. Then have child turn on gear toy with his/her pointer, and turn off with thumb.

How to grade toy:

Level 1:

Have child sit on floor (long sitting or crisscross). Have gear board placed in front of child on the floor. Have child pick up gear off of floor, and place on gear board. Then turn on with pointer, and off with thumb.

Level 2:

Have child sit in chair or stool. Hold gear board vertical in front of child. Have child pick gear off floor or therapist hand. Then have child place gear on vertical surface. (This is more difficult because the child has to use more shoulder flexion and wrist extension to release the toy).

Level 3:

Have child stand. Place gear board on refrigerator. Place gears on magnetic surface (ex. Cookie sheet). While holding gear, have child walk across room/kitchen and place gear on gear board which is located vertically on refrigerator. (This is more difficult because the child has to maintain gross grasp while walking across room. Plus more shoulder flexion and wrist extension to release toy.)

PIANO



PIANO:

What it is used to facilitate:

Piano is used to facilitate finger isolation, beginning with pointer and then progressing to all the digits.

How to play:

Put piano in front of child. Have child press keys with whole open hand, pointer, or other digits. It is important to explain directions, and set the limits before beginning game. For example “we are going to hit three piano keys before we listen to music.” This helps the child understand the expectations of the game.

How to grade toy:

Level 1:

Have child seated on floor (long sitting or crisscross). Place piano in front of child. Have child press keys with open hand.

Level 2:

Have child seated at table in chair. Place piano on table in front of child. Have child press key with pointer. Assistance may be needed to pull other digits back while child extends pointer to push key.

Level 3:

Have child seated in chair. Hold piano in vertical plane in front of the child. Have child raise arm and press key with pointer. Assistance may be needed to pull other digits back while child extends pointer to push key. (This is more difficult because the child has to perform more shoulder flexion and wrist extension to isolate their pointer on the correct key).

PUZZLES



PUZZLES:

What it is used to facilitate:

Puzzles can be used to facilitate multiple motor movements that include gross grasp, pincer grasp, supination, and grasp release in vertical plane.

How to play:

Place puzzle piece on (floor, step stool, in therapist hand). Have child pick up puzzle piece and put in bucket. Depending on size of puzzle piece with determine what grasp to use. Use gross grasp with thumb abducted and extended for larger puzzle pieces, and pincer grasp for smaller puzzle pieces.

How to grade toy:

Level 1:

Have child sitting in floor (long sitting or crisscross). Place LARGE puzzle piece in front of child. Have child pick up puzzle piece with gross grasp (thumb on one side and fingers on the other). Have child release puzzle piece in bucket.

Level 2:

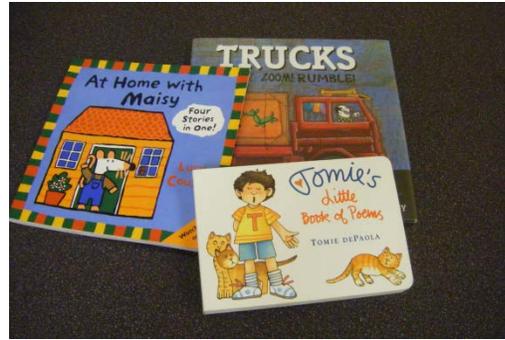
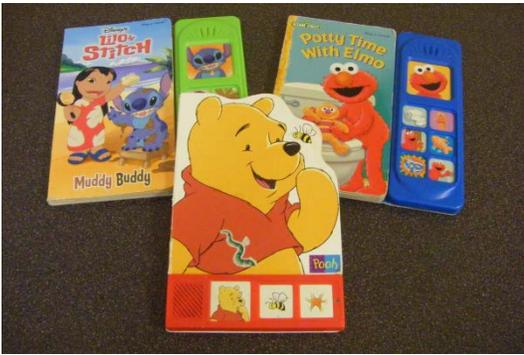
Have child seated in chair. Have puzzle piece placed on stepstool. Have child pick up LARGE puzzle piece with gross grasp (thumb on one side and fingers on the other). Have child hold puzzle piece and fit in puzzle board. Have puzzle board placed in front of child in a moderate vertical plane. (This is more difficult because the child has to hold the grasp while using shoulder flexion and elbow extension to release in the appropriate spot).

Level 3:

Have child seated in chair. Have puzzle piece placed on (stepstool or table). Have child pick up LARGE puzzle piece with gross grasp (thumb on one side and fingers on the other). Have child hold puzzle piece and walk across room where the puzzle board is located. Have child release puzzle piece in appropriate spot on puzzle. (This is more difficult because the child has to hold the grasp while walking across the room, and while using shoulder flexion and elbow extension to release).

*** Very important to remember: Pincer grasp is more difficult for many children and usually occurs after mastery of gross grasp. After success occurs with gross grasp substitute SMALLER puzzle pieces in directions above. This will be more difficult for the child and will facilitate pincer grasp (thumb and pointer).

BOOKS



BOOK:

What it is used to facilitate:

Books are used to facilitate strengthening of pointer isolation, grasp and release of digits, and turning of pages.

How to play:

Have child seated on floor (crisscross or long sitting). Hold book vertically in front of child. Have child turn page (thumb on one side and fingers on the other). While reading the book, have child point to certain objects on page with pointer.

How to grade toy:

Level 1:

Have child laying supine on the floor. Hold book vertically in front of child. Start turning the page for child. Then have child reach up (shoulder flexion) to touch page. After mastery of touching the page then have child grasp the page, and initiate turning. (Having the child lay supine will isolate only the arm. This is good when children are having difficulty dissociating arm movements from the trunk.

Level 2:

Have child seated on floor (crisscross or long sitting). Hold book vertically in front of child. Start turning the page for child. Then have child reach up (shoulder flexion) to turn page (thumb on one side and fingers on the other). Increasing the elevation of book will make it more difficult for the child because they will have to use more muscles to stabilize the shoulder while their hand manipulates the page to turn it.

Level 3:

Have child in quadruped weight bearing position. Have book vertically in front of child. Have child reach up (shoulder flexion) and turn page while they are balancing on their other extremities. This position is more difficult because the child has to hold their head up, keep their balance, and reach up to turn page (thumb on one side and fingers on the other). Because this position requires so many different tasks it may take a while to master and assistance may be needed.

BEANS



BEANS

What it is used to facilitate?

Beans are used to facilitate weight bearing, and strengthening of the upper extremity. Beans are also used as a sensory intergration activity.

How to play?

Have child seated on knees. Have beans positioned in front of child. Have child use his/her upper extremity to push beans across the floor. This step is good to facilitate weight bearing and strengthening through the affected upper extremity. After child has pushed beans to the appropriate destination. Have child open the bean lid. Have them pull down to open (thumb on one side and fingers on the other). Then have child pick up objects (balls, cartoon characters, blocks) and push into beans. This step facilitates gross grasp and release into beans while providing sensory input to the hand. This may be overwhelming at first for the child, but with more repetitions it should become easier. After child has pushed the appropriate amount of objects in beans then have child dig them out. This provides more sensory input to their hand, because they have to differentiate between the beans and the object to pull it out of the bucket.

How to grade toy?

Level 1:

Have child seated crisscross. Have beans positioned in front of child. Have child open beans (thumb on one side and fingers on the other). Have objects placed on floor. Have child pick up object and put into beans. After child has pushed the appropriate amount of objects in beans have them dig them out and put into bucket.

Level 2:

Have child seated on knees. Have beans positioned in front of child. Have child open beans (thumb on one side and fingers on the other). Have objects placed on step stool. Have child pick up object and put into beans. After child has pushed the appropriate amount of objects in beans have them dig them out and put into bucket. To make it more difficult elevated the bucket, and have it positioned farther away from the child. While child is seated on their knees have them find the bucket and release toy. This is more difficult because the child has to hold their balance while their arm is extended away from their body to release toy.

Level 3:

Have child seated on their knees. Have child push beans across the floor while their cast is positioned behind their back. This step makes it more difficult because the child has to have the strength in their upper extremity to push the bucket across the floor. After child has reached the appropriate destination with the bucket have them open the lid. Then have child seated on their knees. Have the child grasp object (ball, puzzle pieces, blocks) from floor or stepstool, and place into beans. After child has pushed the appropriate amount of objects in beans have them dig them out and place into a bucket. Place the bucket away from the child therefore they

have to extend their arm away from their body to release the toy. After the child has retrieved all the objects out of the beans have them put back on the lid (thumb underneath and fingers on top). Then have them push the beans back across the floor in the same position that was stated above.

FLASH CARDS



FLASH CARDS

What it is used to facilitate?

Flash cards can be used to facilitate supination, and gross grasp.

How to play with toy?

Have child seated (floor or chair). Have child pick up flash card (thumb on one side and fingers on the other). Have child turn over flash card to look at picture on other side. Have child then release flash card into bucket.

How to grade toy?

Level 1:

Have child seated on floor (crisscross or long sitting). Hold flash card in front of child and have child grasp flashcard (thumb on one side and fingers on the other). Next have child turn card over. Supination is a difficult motion for most children to perform so assistance may be needed to complete the range of motion. After child has successfully completed range of motion have child release flash card into bucket.

Level 2:

Have child seated in chair. Place flash card on table, and have child pick up flash card from table, and turn it over. Placing the flash card on the table rather than placing it in their hand makes it more difficult for them. After child has successfully turned flash card over have them release flash card in bucket. Elevate bucket and place it in a position where the child has to extend their arm away from their body to release it.

Level 3:

Have child seated in chair. Place flash card on table, and have child pick up flash card from table to turn it over. After child has successfully turned flash card over have them get up from chair and walk across room to place flash card in bucket. Having the child walk across the room makes this task more difficult because they have to hold their grasp for a longer period of time while concentration on other objectives.

BALLS



BALLS

What it is used to facilitate?

Balls are used to facilitate gross grasp, and throwing and rolling motions.

How to play?

Have child seated on floor (crisscross or long sitting). Place ball on floor in front of the child. Have child pick up ball (thumb on one side and fingers on the other). Then have child throw ball, roll ball or place in bucket.

How to grade toy?

Level 1:

Have child seated on floor (crisscross or long sitting). Use LARGER ball and place on floor in front of child. Larger balls that are the same size of the child's hand are easier to grasp than smaller balls. Therefore start off with larger balls, and as the child has success and a level of mastery move to smaller balls. Have child pick up ball (thumb on one side and fingers on the other). After child has successfully picked up ball, have them throw the ball or place it in the bucket.

Level 2:

Have child seated in chair. Use SMALLER ball and place on (table or stepstool) in front of the child. Have child pick up smaller ball with (thumb on one side and fingers on the other). Then have child throw ball or place in bucket. This is more difficult because the child has to hold their posture up right in the chair while grasping the ball from a different surface. Ex. Table

Level 3:

Have child seated on chair. Use a very small ball and place on stepstool in front of the child. Have child pick up SMALL ball with (thumb and pointer). Pincer grasp is a more advanced grasp that usually occur after child has mastered gross grasp. After child has successfully picked up ball with (thumb and pointer) have them place it in the bucket. Again, this is more difficult because the child has to work on a different elevated surface while seated in chair as well as, use his/her pincer grasp to pick up ball.

SHAVING CREAM



SHAVE CREAM

What it is used to facilitate?

Shaving cream is used for sensory input to the affected arm.

How to play?

There are many ways to play with shaving cream. Number 1: Have child standing at window. Spray shaving cream on window and have child make letters and symbols in the shaving cream while standing at the window. Number 2: Have child standing at sink. Spray shaving cream in sink, and place objects in shaving cream for the child to retrieve. Have the child dig through the shaving cream to find the specific objects (balls, cartoon characters). After retrieval of objects have child place in bucket.

How to grade?

Level 1:

Have child seated in chair at table. Have objects (balls, cartoon characters) in bucket covered with shaving cream. Have child dig for object. After successful retrieval have them release it in empty bucket. The sensory input caused by shaving cream can be overwhelming to the child at first, but after repetition it should become easier. *Each child reacts different, and it takes some longer than others.

Level 2:

Have child standing at window. Have child spray shaving cream onto window. Try to spray shaving cream at child's eye level, because this reinforces them to look up. Next have child draw (letters, numbers, objects) on to window. After the appropriate number of objects have been drawn next have child rinse hands and wash window. This is more difficult because they have to stand up while there arm is drawing objects. Also having the child spray shaving cream onto window helps strengthen pointer and other digits. Secondly having them clean the window provides more gross motor movements that help build strength of the upper extremity.

BLOCKS



BLOCKS

What it is used to facilitate?

Blocks are used to facilitate gross grasp and release.

How to play?

Have child seated on floor or stepstool. Have child grasp block (thumb on one side and fingers on the other). Have child release block into bucket or have child build something. The main goal with blocks is for the child to pick them up with their thumb abducted. Many children have difficulty with keeping their thumb abducted and extended when picking up objects.

How to grade toy?

Level 1:

Have child seated on floor (long sitting or crisscross). Have child grasp block (thumb on one side and fingers on the other) out of therapist hand. The therapist is able to manipulate the block in the child's hand which helps make the child more successful with the task. This also makes the task easier for the child. As the child becomes more successful have the child pick up blocks from different surface without the therapist assistance.

Level 2:

Have child seated in chair. Have block placed on stepstool or table. Have child grasp block (thumb on one side and fingers on the other). Placing the block on stepstool makes it more difficult, because the child has to manipulate the block correctly without assistance from the therapist. Next, have child release block into bucket. Place bucket away from child, therefore they have to extend their arm away from their body while keeping their balance.

Level 3:

Have child standing. Place block on floor. Have child squat down to pick up block. After the child has successfully picked up block with (thumb abducted and extended). Then have child walk across room to release block into bucket. This is more difficult for the child, because they have to keep their balance and manipulate their hand to perform the task. Having the child walk across the room helps promote gross grasp strength and endurance.

BUBBLES



BUBBLES

What it is used to facilitate?

This activity is used to facilitate trunk strengthening, and active range of motion strengthening.

How to play?

Have child lay down, sit in chair or stand. Then blow bubbles and have child reach out with their hand to pop the bubble.

How to grade toy?

Level 1:

Have child laying supine. Blow bubbles and have them reach up to pop them. It is important to work in all planes (shoulder flexion, shoulder abduction, horizontal shoulder adduction, and abduction).

Level 2:

Have child seated on stepstool. Blow bubbles, and have child reach arm out away from their body to pop bubbles while maintaining their balance on the step stool. This makes it more difficult, because the child has to be aware of their balance and body in space while performing the task with their hand.

Level 3:

Have child in crawling position (quadruped). Blow bubbles, and have child stabilize themselves with other extremities while their affected hand reaches out to pop bubbles. This makes it more difficult, because they have to concentrate on balancing while performing the task with their hand. To perform at this level takes a lot of trunk strength and coordination.

MARKERS/PAPER



MARKERS

What it is used to facilitate?

This activity is used to facilitate fine motors skills such as pincer grasp, tripod grasp, and bilateral work.

How to play?

Have child pull out picture that they want to draw. This is good for grasp strengthening. Then have child pull marker top off of marker. This is also good for grasp strengthening.

With Cast On:

Hold paper for child. Have child pick up marker from table. Depending on the child's progress or level determines what grasp will be needed. For example some kids start out at gross grasp then progress to tripod. Tripod grasp is the most advanced, and requires the most finger hand manipulation. Plus the child must have supination present for tripod grasp to be successful.

With Cast Off:

Have child hold paper with one hand, and pick up marker from table. This activity is such a good two handed activity. Again, depending on the child's performance level will determine which grasp will be needed (gross grasp, tripod). Then have child color picture.

How to grade toy?

Level 1:

Have child seated at table. Place paper in front of child on table. Have child pick up marker or crayon with gross grasp. Have child make marks on paper. For example, vertical lines and horizontal lines. At this level the therapist may give a lot of hand over hand assistance to help perform the task. The important thing to remember is that you want the child to feel successful.

Level 2:

Have child seated at table. Place paper in front of child on table. Have child pick up marker or crayon with gross grasp. Have child take off lid of marker. The therapist will need to hold one end of marker while the child pulls the cap off. This is a really good task to strengthening grasp. Next have child color picture. After child has successfully colored picture have child put lid back on marker. Therapist will need to hold one end while the child uses his strength to push the top on.

Level 3:

Have child seated at table. Have child pull picture out of coloring book and place on table. Next have child pick up marker. At this level you want the child to move to tripod grasp. The therapist may need to give assistance to get correct tripod hand position. Then have child color picture using tripod grasp. Remember this is a more

advanced grasp so hand over hand assistance may be needed at first. After child has successful colored picture have them put lid back on marker. Having the child use a tripod grasp makes this task more difficult.

*This activity is also a bilateral activity. If cast is off then have child hold paper with one hand while other hand is manipulating marker. Each child is different so adjust appropriately.

RECREATIONAL BALLS



RECREATIONAL BALLS

What it is used to facilitate?

These are used to facilitate bilateral hand work, and upper extremity strengthening.

How to play?

Have child pick up ball off of floor or table. Have child throw ball, roll ball, or put in bucket/hoop.

How to grade toy?

Level 1:

Have child seated on floor. Place ball in child's hands. Assist child to throw ball, roll ball or put in bucket. Depending on the child's level will determine what assistance is needed. Remember you want the "just right challenge". You want them to feel successful, but you also want them to gain strength and endurance.

Level 2:

Have child seated in chair. Place ball on floor in front of child. Have child bend down to pick up ball with two hands. Depending on the child's level will determine what assistance is needed. Next have child throw ball, roll ball, or put in bucket. By having the child sit in the chair makes the task more difficult, because they have to control their balance while their hands manipulate the ball that is on the ground.

Level 3:

Have child standing. Place ball to the left or right side of the child on the floor. Have child reach across their body to pick up with two hands. At this point you would like the child to do this independently. After the child has successfully picked up ball, have them throw it to you. This is very difficult for some children, because many children have trouble making their two hands work together.

MAGNETS



MAGNETS

What it is used to facilitate?

Magnets are used to facilitate gross grasp strengthening.

How to play?

Have child place or pick up magnets off of refrigerator. You may also have child pick up letters from floor or table and put on magnetic surface Ex. cookie sheet.

How to grade toy?

Level 1:

Have child seated on floor. Have child open hand while therapist positions the magnet with (thumb on one side and fingers on the other). Have magnet board or cookie sheet placed on floor in front of child. Have child release magnet onto cookie sheet. This is the most basic level to perform this task, because the child is only working on grasp and release.

Level 2:

Have child seated on floor. Have child pick up magnet off of floor or stepstool. This is more difficult, because they have to get their thumb abducted and extended to pick up the magnet. Assistance may be needed at the beginning to help facilitate the “just right challenge”. After they have successfully picked up magnet have them place it on cookie sheet. The cookie sheet is good to use, because it allows the therapist to manipulate the plane the child will be releasing the magnet onto. The more vertical the plane is in front of the child the more difficult.

Level 3:

Have child standing at refrigerator. Have magnets placed on refrigerator. Start with placing the magnets at the child’s eye level, and then to make more difficult place them higher or lower. Have child pick up magnet off of refrigerator. Remember you want them to grasp the object *not rake it. Assistance may be needed at first to help the child feel successful, and learn the proper technique. After child has successfully removed magnet, have them walk across the room to drop it into a bucket. The more steps you include in an activity the more difficult it will be for the child.

BOTTLE TOPS



BOTTLE TOPS

What it is used to facilitate?

Bottle tops are used to increase gross grasp strengthening.

How to play?

Have child turn bottle top or lift bottle top. This is a huge functional skill that is very difficult for most children.

How to grade toy?

Level 1:

Have the child seated on floor. Have bottle placed in front of child. Start off with bottle tops that flip up (playdoh, tubeware, or milk cartons). The child then has to get their thumb abducted and extended underneath the top to push it off.

Level 2:

Have the child seated in chair. Have bottle placed in front of child. At this level use bottle tops that allow the child to grasp the top with thumb on one side and fingers on the other. This helps them learn the concept of grasping while making a turning motion. The picture above of the clear bottle with a white top would be perfect for this level.

Level 3:

Have child seated in chair or floor. Have bottle placed in front of child. At this level use bottle tops that have to be screwed on and off. These tops are the most difficult, because the thumb and fingers work in opposite directions to remove the top. Have child place fingers on one side and thumb on the other to unscrew top. Again, this is a challenging task that most children have difficulty with so hand over hand assistance will be needed to teach the concept and motor pattern.

DRESSING

DRESSING

What it is used to facilitate?

Dressing is such a functional skill, and requires multiple motor movements. Dressing is also a procedural task that requires timing and organizational skills.

How to play?

- **Shirt OFF:** Have child use their hand to hold the sleeve of the right hand and pull right hand/arm out of the shirt. Have child use both hands to push the shirt over head. Have child use right hand to push the shirt over left arm.
- **Pants OFF:** Have child use both hands to push the waistband of pants down and then pull over feet. Make sure child gets both thumbs inside the waistband. “thumb on one side and fingers on the other. Consistency is important with dressing because there is so many steps. Next, have child sit down on the step stool and push the pants off of each foot with two hands. Try to cue “right hand push down right side, and left hand push down left side”.
- **Shirt ON:** Use two hands to pull over head. Push right arm through the sleeve, then push left hand through the sleeve. Use two hand to pull down over belly button.
- **Pants ON:** Have child sit on a step stool and use two hands to hold the waistband to pull right leg through the leg hole. Have child use both hands to pull the pants as far as they can while seated. Then repeat it with left foot. After the pants are over both feet have child stand up and pull pants up with right hand on right side and left hand on left side.
- **Sock ON:** Start with the most affected foot first. We start by putting the sock over the child’s toes and then let child pull sock over the heel of their foot. Make sure that both of the child’s hands are on the inside of his sock. “thumb on one side, and finger on the other.” The best cuing we found for this is “Squeeze and pull, and make it snap.”

How to grade activity?

The best way to grade this activity is the assistance giving during the task. When teaching dressing to a child it is important to teach sequencing and organization first. After the child has demonstrated understanding of sequence the next step is to reduce assistance level. The less assistance you give the more difficult it will be for them. Remember you want the “just right challenge”. You want them to improve each time, but you want it to be an enjoyable experience that they will try again.