

**PRCA NEUROLOGICAL OUTCOME MEASURE
(CHILDREN AGED 3 YEARS AND OLDER)**

IDENTIFYING DATA

Date of assessment (yyyy-mm-dd): _____

Age of child: _____ yr _____ mo Location of Assessment: In-patient Out-patient Clinic

Neurologist Name (print): _____

INSTRUCTIONS: Check appropriate column for each item: Normal, Abnormal, or Not Done (includes items that are not age appropriate). Guidelines for Scoring are given as suggestions, and need not be viewed as absolute criteria for scoring. Assess and score severity of abnormality (1- mild; 2- moderate; 3-severe), based on your best clinical judgment.

LEVEL OF CONSCIOUSNESS

TEST ITEM	Normal	Abnormal	Notes
Level Of Consciousness			

BEHAVIOR, MENTAL STATUS

TEST ITEMS	Normal	Abnormal	Not Done	Guidelines for Scoring
Activity Level				Abnormal: Excessively quiet, shy, removed, hyperactive, fidgety, gets up, uncontrollable, spills, into everything
Interpersonal Interaction				Abnormal: Clings to parent, aloof, withdrawn, gaze avoidance, punches
Cooperation				Age-dependent
Attention				Abnormal: Short, distractible, flits, ignores, preoccupied, disorganized, inattentive
Affect				Abnormal: Extremely shy, pouts or clings excessively or cries a lot for no reason, angry, totally flat, gaze avoidance, hyperactive, no sustained attention
Serial Numbers				Up to 48 mos: Ask: "Count as high as you can" Age 4-8 years: Ask: "Start at 20 count backwards" Age 8+-13 yrs: Ask: "Start at 50 count backwards by 3's" Age 13 yrs & up: Ask: "Start at 100 count backwards by 7's"
Drawing				Ask child to draw circle, triangle, and cross, bisect vertical and horizontal lines, and draw clock on attached page (ask progressively more difficult tasks, based on performance)
Right/Left Orientation				Test in children older than 6 years age: "Show me your left hand" and "Show me your right hand"
Memory, Delayed Recall				Instructions: "I need you to memorize 3 words and will ask you to repeat them in 5 minutes. The words are " Chair ", " Candle ", " Dog " "Repeat them now to see if you have them."
Comments:				

LANGUAGE

TEST ITEMS	Normal	Abnormal	Not Done	Guidelines for Scoring
Speech Development				Describe: no words , 1-2 words, many single words, phrases, Age-appropriate sentences etc
Repetition				<i>“Stop”, “Stop and Go”, “If it rains we play inside”; “No ifs ands or buts”</i>
Naming				Show patient attached sheet with pictures: skateboard, pencil, shirt, bicycle, and clock. Children ≥6 yrs. ask to identify: pencil, eraser, bicycle seat, buttons
Comprehension				Simple Tasks: a. <i>Close your eyes</i> b. <i>Touch your nose</i> c. <i>Point to the floor and then ceiling</i> Complex 3 Step Command: ask child to listen to the complete instruction, remember it, then do all 3 activities together when prompted: <i>“Blink twice, stick out your tongue, then touch your finger to your nose”</i>
Letter Recognition / Reading				Test age 5 yrs. & up Ask patient to identify letters A, B, H
Writing				Ask patient to print first name (age 5-7) first and last name (age 8-9) or write first and last name in cursive
Comments:				

CRANIAL NERVES

TEST ITEMS		Normal	Abnormal	Not Done	Guidelines for Scoring and Notes (Describe Abnormalities)
Visual Fields	Right				Facing patient at 2 – 3 ft encourage to stare at your eyes and tell when they see object come into view from side (or note gaze shifting toward object)
	Left				
Pupillary Light Reflex	Right				Direct and Consensual
	Left				
Fundoscopy	Right				Note Abnormalities:
	Left				
Ocular Motility	Right				Move pen or red object or light smoothly from right to left and back testing full range. Watch for nystagmus or dysconjugate eye movements
	Left				
Facial Sensation	Right				Touch each side with light touch and cold object asking if child can feel or for older, ‘is it the same on both sides’ comparing forehead, cheek and chin R / L
	Left				
Facial Movements	Right				Ask patient to smile, count to 10 watching mouth symmetry Maximal eye closure strength <i>“Squeeze eyes shut as tightly as you can”</i>
	Left				
Hearing	Right				Finger rub for infants or whisper at 2-3 feet away. For older have child repeat letters/numbers
	Left				
Swallow					
Palate and gag	Right				Observe during open mouth crying or Demonstrate with tongue protruded <i>‘Say ‘ahhhhh.’</i> Listen to voice quality
	Left				
Trapezius Strength	Right				Test Shoulder Shrug
	Left				
Tongue Movements Side-To-Side	Right				
	Left				

MOTOR EXAM

		POWER AND TONE				INVOLUNTARY MOVEMENTS*	
		Normal	Abnormal	Not Tested	Comments	Normal (None)	Abnormal (Present)
Neck/Trunk Muscles							
Right Arm	Proximal						
	Distal						
Left Arm	Proximal						
	Distal						
Right Leg	Proximal						
	Distal						
Left Leg	Proximal						
	Distal						

***Type of Involuntary Movements Seen**

Check all that are present

TYPE	Details
Tremor	
Myoclonus	
Choreoathetosis	
Dystonic Posturing	
Tics	

TENDON REFLEXES

TEST ITEMS		Normal	Abnormal	Not Done	Comments
Biceps	Left				
	Right				
Brachioradialis	Left				
	Right				
Triceps	Left				
	Right				
Quadriceps	Left				
	Right				
Ankle Jerk	Left				
	Right				
Babinski	Left				
	Right				
Elicited ankle clonus	Left				
	Right				

FINE MOTOR COORDINATION

TEST ITEMS		Normal	Abnormal	Not Done	Guidelines for Scoring
Pincer Grasp	Left				Encourage to pick up small 2–3 mm. ball of rolled up paper
	Right				
Rapid Sequential Finger Movements	Left				Demonstrate: thumb touches tip of individual fingers back and forth 5 times <i>"As fast as you can"</i>
	Right				
Rapid Index Finger Tap	Left				Demonstrate: seated, finger taps table top or own thigh X 20 times, <i>"As fast as you can"</i>
	Right				
Finger To Nose Testing	Left				
	Right				
Heel To Shin Testing	Left				
	Right				
Rapid Foot Tap	Left				Demonstrate: feet flat on floor, foot taps floor X 20 <i>"As fast as you can"</i>
	Right				
Sitting/ Standing Balance					
Comments:					

SENSORY

TEST ITEMS		Normal	Abnormal	Not Done	Guidelines for Scoring
Light Touch	Left				Use cotton swab and ask: <i>"Is it the same on both sides?"</i>
	Right				
Pin Prick Or Cold Sensation	Left				Use cool metal from tuning fork or reflex hammer
	Right				
Proprioception	Left				Great Toe up and down with eyes closed (ask: <i>"up or down?"</i>)
	Right				
Graphesthesia/ Stereognosis	Left				Test >6 yrs: Eyes closed, draw number in palm & foot dorsum with closed pen tip
	Right				
Comments:					

GAIT

TEST ITEMS		Normal	Abnormal	Not Done	Guidelines for Scoring
Gait Walking					By \geq 16 mos.
Gait Running					By 2 yrs age
Gait on Heels					
Gait on Toes					10 steps
Tandem Gait					Heel to toe: test > age 6 yrs; walk on line forward (10 steps)
Jump on 2 Feet					By \geq 36 mos.
Hop on Foot repetitively	Left				25 x (<i>age 7 yrs to 9 yrs.</i>) 50 x (<i>age 9 yrs or older</i>)
	Right				
Station on one leg sustained	Left				Test age 7 and up. Count seconds out loud and compare stability.
	Right				
Romberg's Sign					<i>"Eyes closed, feet together, arms stretched forward"</i> .
Comments:					

GLOBAL Assessment Score

Derived from PSOM: Pediatric Stroke Outcome Measure-Neuro. Exam. Children's Stroke Program, Hospital for Sick Children, Toronto, Canada. G. deVeber, D. MacGregor, R. Curtis, T. Soman, R. Ichord et al. Version October 2003, revised Mar 2007

Summarize and grade your impressions in the following categories: Circle the score in each category that best represents your final impression of your exam findings:

A. Sensorimotor Deficit (score each side separately)

	<u>A1. Left side</u>	<u>A2. Right side</u>
None	0	0
Mild but no impact on function	1	1
Moderate with some functional limitations	2	2
Severe or Profound with missing function	3	3

For items scored in Category A1 and A2, identify all the types of Sensorimotor Deficits that you observed:

- Abnormality of tone
 Quadripareisis
 Hemiparesis
 Sensory deficit
 Global delay in gross motor skill attainment
 Global delay in fine motor skill attainment

B. Other motor or sensory deficit (includes cranial nerve deficits)

None	0
Mild but no impact on function	1
Moderate with some functional limitations	2
Severe or Profound with missing function	3

For items scored in Category B, identify all the of the types of Other Sensorimotor Deficits that you observed:

- Vision Impairment
 Difficulty with drinking, chewing or swallowing
 Ataxia
 Movement disorder
 Other, describe: _____

C. Language Deficit – Production (exclude dysarthria)

None	0
Mild but no impact on function	1
Moderate with some functional limitations	2
Severe or Profound with missing function	3

D. Language Deficit - Comprehension

None	0
Mild but no impact on function	1
Moderate with some functional limitations	2
Severe or Profound with missing function	3

E. Cognitive Deficit

None	0
Mild	1
Moderate	2
Severe or Profound with missing function	3

F. Behavioural Deficit

None	0
Mild, no impact on academic or social function	1
Moderate with some functional limitations	2
Severe or Profound with missing function	3

For Categories E and F, describe the Cognitive or Behavioral Deficits that you observed:

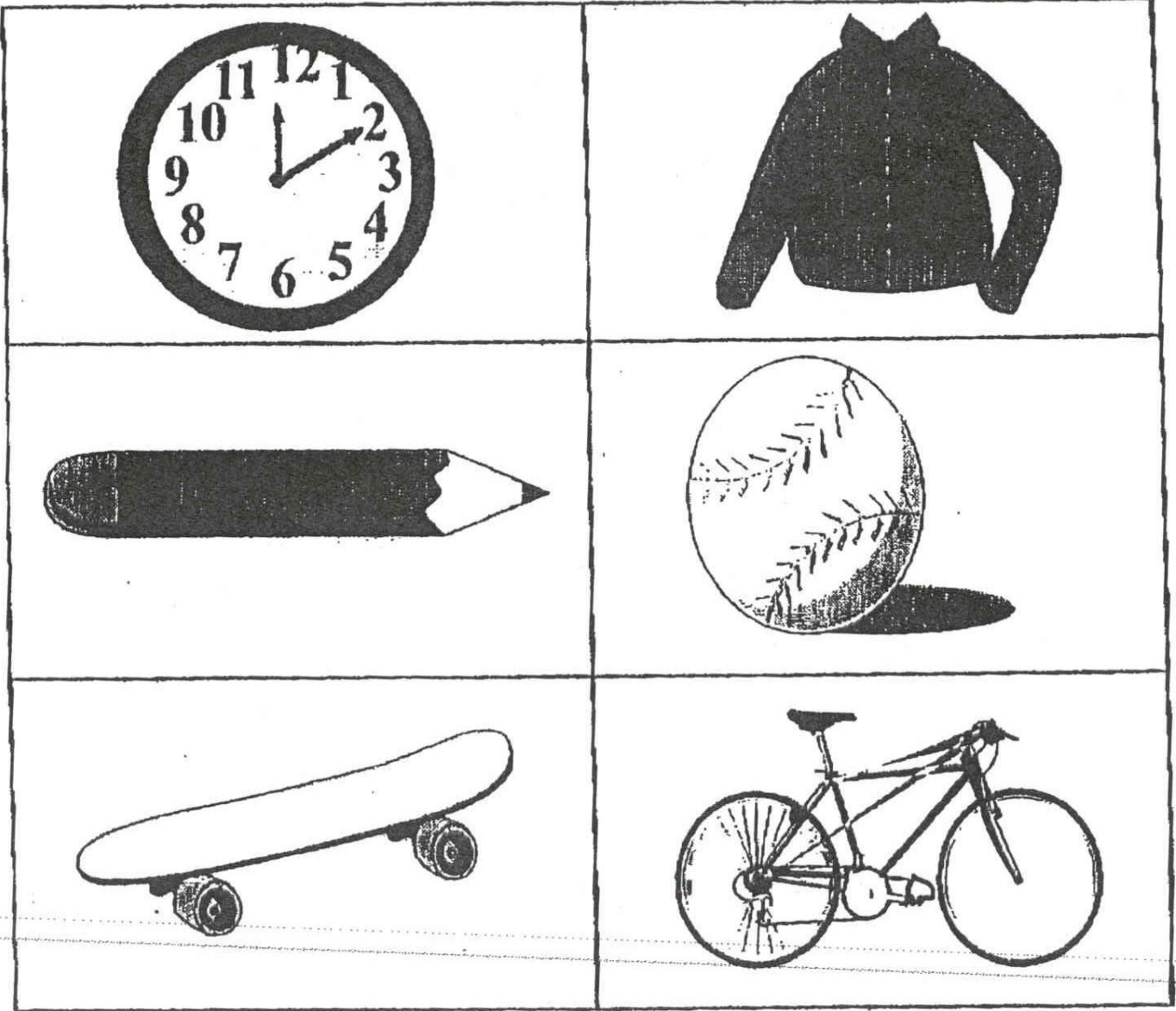
Other Comments Regarding Scoring:

TOTAL SCORING: _____/21

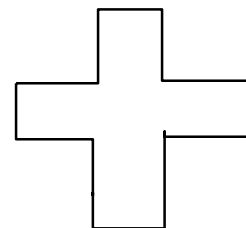
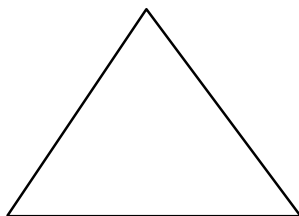
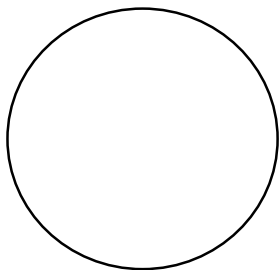
PICTURES TO ASSESS 'NAMING' (see Language on Page 1)

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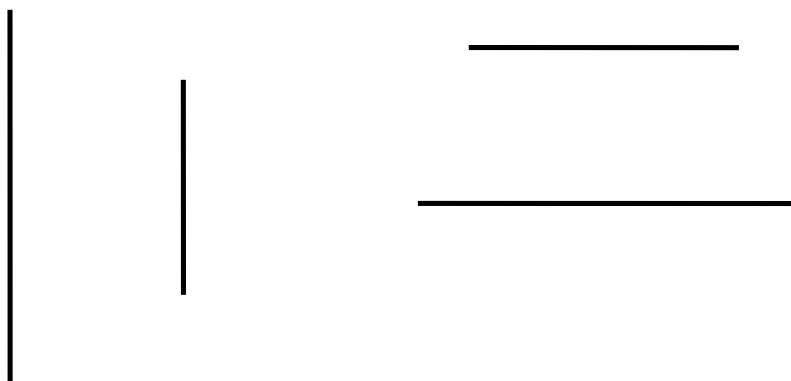
Ask patient to identify:



WORKSHEET FOR DRAWING: DRAWING Copy the Following Shapes



Place an 'X' at the middle of each of the 4 lines below



*Children > 12 yrs.: Draw a Clock and put the numbers on it (use back of this page if needed):