

Stepping Stones for Translating Cognitive Development into Educational Skills

We suggest that you use these check-lists as a guide to assessing the cognitive skill development of your student. Start at the level that the student is most successful with, checking off those skills that have been acquired. Discontinue checking off items at the level that the student does not demonstrate the majority of the skills described. Go back through the levels and see where there are 'gaps' in skills, then think of functional ways that they can be included in the student's curriculum. See the examples below for ideas.

The check-lists may also be used as a way of assessing skill acquisition. Review the lists on a regular basis, such as once a year. Make note of skills achieved, and target new ones at the appropriate level. Select skills that are reasonably attainable, and are the most functional for use in the school, home, and community.

Because individuals with multiple disabilities are often unable to volitionally control motor movements, including speech, any skill that involves motor movement more complex than non-speech vocalizations, looking, touching, or reaching has not been included in this framework.

Cognitive Skill Level One

Developmental Skill	Elementary Example	Middle/ Secondary School Example	Examples for Adults
1. Reacts to loud sounds or lights by stopping activity, briefly looking at a lighted object within visual field	At music, looks at instrument being played loudly by another student	Gazes at computer screen with bright colours	Changes facial expression when a vacuum cleaner is turned on
2. Briefly looks at people	Briefly looks at teacher saying "hi"	Briefly looks at EA saying "hi"	Briefly looks at a friend saying "hi"
3. Visually attends briefly to object within visual field	Briefly looks at a ball during gym time	Briefly looks at food item during snack or lunch	Briefly looks at object cue before going to an activity

4. Quiets to sound (more to voice than other sounds), from within 2 feet	Stops movement or vocalization when EA speaks to him/her	Stops movement or vocalization when a peer speaks directly to him/her	When an adult worker speaks directly to him/her, stops moving/vocalizing
5. Anticipates eating at the sight of food	Opens mouth at the sight of food	Vocalizes at the sight of food	Smiles at the sight of food
6. Searches for a voice with eyes: __ to R; __ to the L; __ from behind	Moves head or eyes only at the sound of EA's voice	Moves head or eyes only at sound of peer's voice	Moves head or eyes only at sound of adult worker's voice
7. Turns head to glance from one noise to another from distance of 1-2' ft	Turns head toward 2 musical instruments played by peers from 1-2'	Turns head in direction of 2 musical instruments played by peers from 1-2'	Turns head in direction of 2 musical instruments played from 1-2 feet away
8. Searches for sound with eyes from a distance of 2': __ to the R __ to the L	As above, only just eyes move	As above, only just eyes move	As above, only just eyes move
9. Visually follows a moving person/object; fixating on person/object momentarily	During lunch, tracks spoon/cup moving towards him/herself; briefly holds gaze on item	Visually follows a ball being tossed between 2 peers	Visually follows items being sorted in a recycling program
10. Recognizes faces	Smiles at EA when greeted	Smiles at homeroom teacher when greeted	Smiles at adult worker when greeted
11. Shifts gaze from 1 object to another	Shifts gaze between 2 objects shown in circle time	Shifts gaze between 2 different objects being discussed in a science class	Shifts gaze between 2 different food items being used when making dinner
12. Responds differently to a variety of sounds	Demonstrates different responses to a variety of musical instruments	Demonstrates different responses to various pieces of music played by band members	Demonstrates different responses to various types of music
13. Makes pleasure sounds	When receiving a hand or foot massage, makes happy sounds	When playing floor hockey in the gym with peers, makes happy sounds	When playing 'Twister' with friends, makes happy sounds

<p>14. Uses different cries to express different needs (request attention, express discomfort, hunger, etc.)</p>	<p>Vocalizes to request attention from EA</p>	<p>Vocalizes to express discomfort in wheelchair</p>	<p>Vocalizes to express hunger when it is near a snack or lunch time</p>
<p>15. Responds to own name by looking for the source of the voice</p>	<p>Responds to name being called at roll call by looking at teacher</p>	<p>Responds to name being called for turn in a game</p>	<p>Responds to name being called by an adult worker passing by</p>
<p>16. Begins to anticipate events through different movement, facial expressions, etc.</p>	<p>Changes in behaviour when sees jacket (e.g., smiles, increases arm movement)</p>	<p>Changes in behaviour when entering the band room</p>	<p>Changes in behaviour when entering the recreation centre</p>

Cognitive Skill Level Two

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Responds to name called from 5-6' away, or from a background of sounds	Teacher calls out name for attendance from 5-6' away	Peer calls out name of student in gym class	Adult worker calls out person's name from 5-6' in a noisy mall
2. Looks at objects when their names are spoken; looks at them for 10 secs.	Looks at a named book for 10 seconds	Looks at named shaker being used in music class for 10 secs	Looks at named blender used in meal preparation for 10 secs
3. Uses gestures/vocalizations to regulate behavior (requests, protests), participate socially (greet, calls), & reference joint attention (commenting)	Gestures/vocalizes to request more of a song	Gestures/vocalizes in response to a greeting	Gestures/vocalizes when observing an interesting event
4. Understands nonverbal, situational cues	Reacts when shown an object cue representing an upcoming activity	Reacts when shown object cue representing upcoming activity	Reacts when shown an object cue representing an upcoming activity
5. Initiates a topic by combining glances & vocalizations	In gym, looks at ball, then at peer; gestures/vocalizes	In music, looks, vocalizes, etc. at drum being played, then at E.A.;	When bus arrives, looks, vocalizes, etc. at it, then at adult worker
6. Takes 1 or 2 turns	In music, will take a couple of turns with musical instrument	Will take a couple of turns with a peer when using the computer	Will take a couple of turns with another friend during a game
7. Responds by laughing/smiling at an unusual action made by a familiar person (e.g., waddling like a penguin, making silly faces, sticking a banana out of the mouth, making silly sounds)	Laughs/smiles when peers pretend to be different animals	Laughs/smiles when peers engage in slapstick humor	Laughs/smiles when a friend is acting silly
Understands 3-50 words			

Cognitive Skill Level Three

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Receptively identifies 10 familiar objects by looking at, reaching, etc.	Look at the book	Find your jacket	Where's the bus?
2. Receptively identifies 1 to 5 body parts by looking at, reaching, etc.	"Where's your hand?"	"Look at your toes"	"Touch your leg"
3. Begins to link object to function	Show me what wear, etc.	Which one do we read?	What do we need to cook with?
4. Understands "no"	Stops vocalizing loudly in class when hears "no"	Stops putting hand in mouth when hears "no"	Stops reaching out to grab others when hears "no"
5. Responds to verbal cues/one step directions within physical ability	Sits up, hands quiet, when hears, "Get ready" verbal cue	Activates a switch when hears verbal cue, "Hit the switch"	"Lift up your arms" (in order to get wheelchair tray on)
6. Identifies 3 different pictures by looking at, reaching, touching, etc.	"Show me computer"	"Look at the book"	"Where's the cookie (picture)?"
7. Responds to simple <i>yes/no</i> questions	When offered a non-preferred food item, & asked, "Do you want the ...?", shakes head 'no'	When offered a ball in P.E., and asked, "Do you want this ball?", shakes head 'no'	When offered a book at the library, and asked "Do you want to read this book?", reaches towards it
8. Understands concept of "more" by responding to questions and makes request for "more" of pleasurable object/activity"	Do you want <i>more</i> to drink?	During gym time, asks, by vocalizing, to be pushed around the track some <i>more</i>	During a meal, ask for <i>more</i> food by looking at food item
9. Understands that an object still exists even when it isn't in view	Looks for, gestures, etc. to request favourite book that's underneath a couple of other books	Looks for, gestures, etc. to request favourite computer program	Looks for, gestures, etc.. request favourite music tape/CD

10. Enjoys looking at picture books	Smiles/looks at picture books being read by a peer	Smiles/looks at animal books with photos	Smiles/looks at magazine of interest
11. Begins to match similar object	In math, matches objects being counted	In music, matches cymbal with other cymbal	In meal prep, matches egg with another egg
12. Distinguishes between 'you' and 'me'	Answers question, "Who's coat is this?"	Follows direction, "Give it to me"	Gestures towards self when given choice between "you" or "me"
13. Requests by pointing and vocalizing	When given a choice of 2+ objects/activities, gestures, points, vocalizes, etc. to make a choice	Gestures/points/looks etc. at something in hallway to signal a request to look at it	Gestures, points, looks, etc. to request a visible object/activity
14. Requests cessation of activity, using facial expressions, vocalizations, etc.	Frowns to signal end of exercise routine	Turns head away to signal end of computer time	Refuses to open mouth to signal end of lunch time
15. Indicates displeasure when object is removed, using facial expressions, etc.	Pouts when favourite 'fidget' toy is removed	Vocalizes in an unhappy way when juice container is put away	Becomes physically agitated when favourite video is put away
16. Begins to relate object to symbol or line drawings	When sees picture symbol for object, looks for object	When sees picture symbol for outing, looks toward door	When sees picture symbol for drink, reaches toward cup
17. Calls person's attention to objects by pointing, gesturing, vocalizing, etc.	Vocalizes, gestures, etc. to draw E.A.'s attention to visiting dog	Vocalizes, gestures, etc. to draw peer's attention to new item of clothing	Vocalizes, gestures, etc. to call adult worker's attention to object that has dropped on the floor
18. Responds to humor involving using objects in 'wrong' ways (e.g., placing a sock on a hand instead of the foot)	Smiles, etc. when E.A. uses an object the 'wrong' way	Smiles, etc. when peers use objects the 'wrong' way when performing a skit	Smiles, etc. when watching a video in which people use objects the 'wrong' way

<p>19. Perceives others' emotions. Uses different facial expression, body language, vocalizations when observing others expressing happiness, anger, etc.</p> <p>20. Answers "What's that?" questions by looking at, touching, etc. pictures or objects</p> <p>Understands about 300 words</p>	<p>During circle time, responds to different emotional states displayed by students through facial expression, vocalization, etc.</p> <p>When reading a story, answers a "What's that?" question by looking at picture on a picture board</p>	<p>During library time, responds to librarian expressing different emotional states when reading out loud</p> <p>In Social Studies, answers a "What's that?" question by looking at the correct object</p>	<p>In community program, responds to different emotional states expressed by other participants through facial expression, etc.</p> <p>On a community outing, answers a "What's that?" question by looking at a picture on a picture board.</p>
--	---	--	---

Cognitive Skill Level Four

Developmental Skill	Elementary School Example	Middle School Example	Examples for Adults
1. Increased interest in the names of things	In buddy reading, looks at pictures as buddy names them	In Science, looks at pictures of mammals while their named	Looks at named pictures of items needed to buy on a shopping trip
2. Associates small parts with whole bigger objects	Looks at, etc. furniture that belongs in a toy house during centre time	In Science, looks at, touches, reaches etc. parts of the body	Looks at, etc. items that are sorted into different recycling categories
3. Indicates awareness of 2-4 like objects in a group by looking at, reaching towards, pointing, etc.	In Math, looks at, etc. objects that have the same shape, when asked "Find the ones that are alike"	In Science, looks at, etc. objects that are within a specific category (e.g., aquatic animals)	Sorts laundry according to colour
4. Identifies <i>boys, girls</i> , own sex by looking, reaching towards, pointing, touching, etc.	Responds appropriately during Circle Time when teacher says, "All the <i>boys (girls)</i> close your eyes."	During Buddy Reading, answers question about whether the character is a <i>boy</i> or <i>girl</i>	During community activity, accurately follows direction, "Look at one of the <i>girls (guys)</i> to be your partner."
5. Identifies several body parts by looking, reaching towards, pointing, touching, etc.	Accurately follows direction to look at, etc. Mr. Potato Head body parts during Centre Time	In Art, locates named body parts in magazine pictures in order to do a collage	Accurately follows direction to look at body parts during personal care
6. Identifies <i>red; blue</i> by looking, reaching towards, pointing, touching, etc.	In Art, looks at, etc. the <i>blue/red</i> marker	In Gym, looks, etc. at the <i>blue/red</i> pinnies when asked to give them to different teams	Looks, etc. at <i>red/blue</i> bin to help sort items in a Recycling Program
7. Identifies 10 pictures when named by looking, reaching towards, pointing, touching, etc.	Looks at, etc. pictures of family members, pets, etc. that are part of an "All About Me" Book	Looks at, etc. pictures of objects/activities that are offered in choice making opportunities	Looks at, etc. pictures of objects that are needed to purchase on a shopping excursion

8. Identifies action in pictures (e.g., eating, sleeping, bathing, reading) by looking, reaching, touching, etc.	Looks at, etc. pictures of common actions depicted in story books during Buddy Reading Time	During Drama class, looks at pictures of common actions for peers to act them out	Looks, etc. at pictures of common actions from magazines
9. Demonstrates understanding of <i>on/in/under/beside</i> through looking, reaching towards, pointing, etc.	Using math manipulatives, puts items ' <i>in/on/under/beside</i>	In gym time, places balls <i>in/on/under/beside</i>	During meal preparation, places ingredients/ utensils <i>in/on/under/beside</i>
10. Matches objects with pictures of objects by looking, etc.	Looks, points, etc. to objects that match picture in a story book	In cooking, matches food items to pictures of food items	Matches recycling materials to pictures of recycling materials
11. Interest in listening to rhymes, songs, jingles	Attends to rhymes, songs, etc. during circle time	Attends to songs, jingles, etc. during music time	Attends to songs, jingles etc. on television
12. Listens to a 10-20 minute story	Attends to story read by a big buddy - 10-20 min	Attends to story read by a peer - 10-20 min	Attends to story read by an adult worker - 10-20 min
13. Follows 2-related simple directions within his/her physical capability	"Look at Mr. Smith and give him the message on the Step-by-Step"	"Look at your sandwich and your yogurt"	"Pull your arm out of the sleeve and hold onto the jacket
14. Groups objects by category; Sorts by colour and shape	Groups animals into different categories (farm, wild, etc.)	In Math, sorts different shapes (round, square, etc.)	Sorts items by category in the recycling program
15. Has concepts of <i>one, two</i> and <i>all</i>	In Math activities with objects, looks, touches, etc. " <i>one,</i> " " <i>two,</i> " or " <i>all</i> " on request	Answers by looking, touching, etc., "Do you want <i>one, two,</i> or <i>all</i> of them?"	When grocery shopping, follows directions " <i>Get one,</i> " " <i>Get two,</i> " or " <i>Get all</i> " of something
16. Responds to verbal jokes involving misnaming (e.g., calling a dog a kitty)	Smiles, laughs, etc. when E.A. calls body parts by their wrong names	Smiles, laughs, etc. during drama when students doing skits misname things	Smiles, laughs, etc. when E.A. calls clothing items by their wrong names
17. Recognizes objects from their sounds (e.g., phone ringing) or touch	At music time, looks at musical instrument making a sound	In P.E., looks towards a ball being bounced on the gym floor	Looks at appliance making a sound (e.g., blender) during meal preparation

18. Remembers objects/pictures	Following question, "What did you see?", looks at, touches, etc. picture or object that corresponds to something seen on a class outing	Following question, "What did you see?", looks at, touches picture or object that corresponds to something seen in an illustrated book	Following question, "What did you see?, looks at, touches picture or object that corresponds to something seen when grocery shopping.
19. Answers "what doing" questions	Looks at, points, etc. to a picture in a story book when asked a "What doing?" question	Looks at, points, etc. to an action picture relating to a video being viewed, when asked a "What doing?" question	Looks at, points, etc. to an action picture relating to an activity during meal prep, when asked a "What doing?" question.
20. Answers "who" questions	Looks at, points, to, etc. classmates when asked a "who" question	Looks at, points, etc. to picture in an illustrated story when asked a "who" question	Looks at, points to, etc. to a person when asked a "who" question when out in the community
21. Answers "where" questions	At circle time, looks, etc. at object when asked a "where" question	When going down the hall, looks at, etc. a specific object or location when asked a "where" question	During recycling, looks, etc. at on object when asked a "where" question
22. Can introduce a topic	Uses a Step-by-Step Communicator to give parents news from school	Uses a Step-by-Step Communicator to tell classmates a joke at recess time	Uses a picture board to initiate a conversation with a volunteer in the disabled riding program
23. Plays make-believe with dolls, animals, and people	Participates in make-believe activities at centres,	Participates in drama activities involving make believe	Participates in skits in community program
Knows about 500+ words			

Cognitive Skill Level Five

Developmental Skill	Elementary School Example	Middle School Example	Examples for Adults
1. Identifies 2-10 objects by function (e.g., Which one do you sleep in?; Which one do you read?; Find the one that can ...)	Answers questions by looking, touching etc. about functions of objects, related to theme (e.g, fall)	Answers questions by looking, touching, etc. about functions of objects in sewing	Answers questions by looking, touching etc, about functions of objects used in meal preparation
2. Identifies adjectives: <i>Big/little; Long/short; Happy/sad; Hard/soft Rough/smooth; front/back</i>	Answers storybook questions with a description (<i>big/little; happy/sad, long/short</i>)	Answers questions about textures felt in sewing (e.g., <i>hard/soft; rough/smooth; front/back</i>)	Answers questions about how concert music sounded (<i>fast/slow; loud/soft, long/short</i>)
3. Identifies or expresses verbs: (e.g., open/close)	Tells peers to “stop” or “go” in gym activity	Expresses what to do in cooking (e.g., stir, pour)	Asks someone to open or close the door for them
4. Identifies or expresses colour <i>yellow</i>	Answers question about finding a <i>yellow</i> object in an illustration	Finds <i>yellow</i> paint in Art Class	Finds <i>yellow</i> objects on an outing
5. Understands concepts “in front of” and “behind”	When lining up, looks at person “in front of” or “behind” him/her	In P.E., follows directions for placing ball “in front of” or “behind” a peer	When grocery shopping, follows direction for placing foods “in front of” or “behind” other foods
6. Understands time concepts: <i>now, soon, later</i>	Responds with anticipation when told that activity is going to happen <i>now</i>	Stops asking to go home, when told that will happen <i>later</i>	Settles down when told that a favourite activity is going to happen <i>soon</i>
7. Identifies parts of a whole, such as a leg is part of a body	Identifies different parts of animals	Identifies different props needed for a skit	Identifies food items needed to make a smoothie
8. Identifies shapes: <i>circle, square, triangle</i>	Follows directions to give peers either a <i>circle, square, or triangle</i>	Follows directions in art to choose a <i>circle, square, or triangle</i> template for sponge painting	Follows directions to place clothes in the drawer with a <i>circle, square, or triangle</i> shape

<p>9. Follows directions involving 2 objects or 2 characteristics</p>	<p>At calendar time, follows direction, "Show me which one is big and round."</p>	<p>In woodworking, follows direction, "Where's the big, square block?"</p>	<p>During personal care, follows direction, "turn on the tap and put your hands under the water"</p>
<p>10. Begins using language for fantasies, jokes, and teasing</p>	<p>Uses AAC device to tell a joke to peers at recess</p>	<p>Plays a trick on his/her assistant</p>	<p>Uses a picture board to tease adult worker</p>
<p>11. Makes predictions</p>	<p>When reading a book with a peer, uses picture board to answer, "What will happen next?"</p>	<p>In cooking, answers question, "Do you think it's ready to take out of the oven?"</p>	<p>When watching a sports event, answers question, "Who's going to win?"</p>
<p>12. Recognizes language absurdities, such as "The dog says meow"; responds to silly sound play (I taut I taw a putty tat) and words used in nonsensical combinations (e.g., I like your peanut butter pants)</p>	<p>Responds by laughing/smiling etc. when listening to funny poems, Dr. Seuss stories, etc.</p>	<p>Responds by laughing/smiling etc. when involved in comic skits in drama</p>	<p>Responds by laughing/smiling etc. when watching a comedy show</p>
<p>13. Understands complex questions, such as "why"</p>	<p>Answers "why" questions when reading a story book</p>	<p>Answers "why" question about emotional state (e.g., "Why are you crying?"</p>	<p>Answers "Why" question about behaviour (e.g., "Why are you wearing a hat?")</p>
<p>14. Answers "how many" for number concepts 1 & 2</p>	<p>At math time, answers questions about whether there are 1 or 2 items in a picture or 1 or 2 objects present</p>	<p>In cooking, answers question about <i>how many</i> eggs are being used (1 or 2)</p>	<p>In library, answers question, "<i>how many</i> books to you want?" (1 or 2)</p>
<p>Understands 900-2000+ words</p>			

Cognitive Skill Level Six

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Understands number concepts up to 3	In Math, answers question, "How many are there?", for 1-3 items	In Cooking, answers questions about number/quantity from 1-3	When grocery shopping, helps to select from 1 to 3 items
2. Identifies spatial concepts: <i>between, above, below, top, bottom</i>	In Lang Arts, answers questions about where items are located	In Art, answers questions about where to paint	At group home, identifies where to place ornaments after dusting t
3. Attends to activities for 5-15 minutes	Attends quietly to circle time activity for up to 15 minutes	Attends to assembly activities for 5-15 minutes	Attends to television for 5-15 minutes
4. Recognizes and names 1-3 colours	Identifies 3 different colors when doing an art project	Identifies 3 different colors when painting a woodworking project	Identifies 3 different colors when sorting laundry
5. Understands the concept of counting; knows a few numbers	At Calendar time, identifies first 10 days of month	In P.E. answers question about how many balls does s/he want	At disabled riding, directs the horse to numbers around the ring
6. Understands number concepts: <i>more, less, bigger</i>	In Math, identifies which group of objects is <i>more, less, or bigger</i>	In Cooking, identifies which pile of cookies is <i>more, less, or bigger</i>	Identifies which pile of recycled cans is <i>more, less, or bigger</i>
7. Understands <i>same/different</i>	Shows which objects used in a pet theme are the <i>same or different</i>	In P.E., identifies which balls are the <i>same or different</i>	At a trip to a car show, shows which cars are the <i>same or different</i>
8. Understands words that relate one idea to another: <i>if, why, when</i>	Answers <i>why</i> question relating to a story being read	Follows direction, "When Jo says 'action', you hit your switch"	Follows direction, "If you touch the movie pic, I'll start the DVD"
9. Listens to short, simple stories	Attends quietly when book is being to class at library time	Attends quietly to peers giving class presentations	Attends quietly when adult worker reads a book out loud
10. Begins to grasp that pictures or symbols can represent real objects	Makes a choice for an activity using a picture symbol	Answers a question using a picture symbol	Comments on what s/he sees by pointing to a picture symbol

<p>12. Responds to visual jokes (e.g., drawing cat ears and cat tail on a picture of a dog)</p> <p>Understands 2800+ words</p>	<p>Smiles at nonsense pictures</p>	<p>In art class, smiles at class-mates drawings that contain visual jokes</p>	<p>On outing to art gallery, laughs at paintings that contain visual jokes</p>
--	------------------------------------	---	--

Cognitive Level Seven

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Answers questions about time concepts	Answers questions about story being read (e.g, What happened first, next, last, etc.)	In Cooking, answers questions about order of ingredients	Answers questions about order of daily activities
2. Answers "where", "when", "why", "how many", "what do you do" "Why do we" questions	Answers questions during circle time	In Drama, answers questions	Answers questions as part of conversation with others
3. Completes 3 step directions	Follows a direction during Language Arts, such as, "Look at the board, find the picture of the eagle, then find the matching eagle picture in your book"	In P.E., follow a direction such as, "Go to the equipment cupboard, find the bin with the medium size balls, and bring me a blue medium size ball."	At mealtime, follows a direction such as, "Go into the bathroom, and wash your hands, then come to the table for dinner."
4. Talks about personal experiences	At circle time, uses picture board or voice output device to talk about weekend activities	At lunch time, uses picture board or voice output device to talk about personal experiences with peers	Uses picture board or voice output device to have a conversation with friends
5. Listens to experiences & feelings shared by others	At circle time, attends quietly while others share their feelings and experiences	At break time, listens with interest while others express their feelings and experiences	At coffee time, listens with interest while others express their feelings and experiences
6. Counts 10+ objects	In Math, counts 10+ manipulatives	In P.E., counts off 10+ balls needed for an activity	On an outing, counts 10+ dogs
7. Names at least 4 colours	Names at least 4 colours during an Art activity	In sewing, names at least 4 colours when looking at different material	When doing the laundry, names at least 4 colours

<p>8. Understand opposites</p>	<p>During language arts, answers questions, such as, "What is the opposite of day?"</p>	<p>In Drama, follows directions such as, "Show me opposite of looking happy"</p>	<p>Uses opposites appropriately during activities (e.g., on/off; back/front; come/go)</p>
<p>9. Identifies letters & initial sounds in words</p>	<p>During language arts, finds the named letter on an alphabet board</p>	<p>When reading with a peer, uses an alphabet board to answer a question, such as, "What sound does the word 'bear' start with?"</p>	<p>Participates in computer games with matching the picture with the letter of the initial sound in the word</p>
<p>10. Creates messages, using pictures, symbols, letters and words</p>	<p>Uses picture boards, letter boards, etc to send message</p>	<p>Uses voice output device to create a message</p>	<p>Uses a computer to send an email</p>
<p>11. Comprehends irony from voice intonation. Sees humour in incongruity of action, appearance, wording (includes slapstick), or impossible event</p>	<p>Smiles, etc. when watching video that contains incongruities of action, appearance, or wording</p>	<p>In Drama, smiles, etc. when watching skit that contains incongruities of action, appearance, or wording</p>	<p>Smiles, etc. when adult worker's voice intonation implies irony</p>
<p>12. Knows about things used every day in the home (money, food, appliances)</p> <p>Understands 13,000+ words</p>	<p>Answers questions about everyday things</p>	<p>Understands what appliances are for in cooking</p>	<p>Understands how to use money</p>

Cognitive Level Eight

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Remembers Information	During circle time, answers questions about what happened on the weekend	Remembers to tell E.A. information from home	Remembers how to cook a simple meal (e.g., pancakes)
2. Connect new experiences & information with prior knowledge &/or life experiences	On a field trip, uses pictures, AAC device, etc. to relate previous knowledge with present experience	In Science class, uses pictures, etc. to show how much s/he already knows about topic	When going to a new recreation centre, can independently get ready for swimming, based on prior experience
3. Understands left and right	Follows directions to turn head to left or right to see something	Follows directions to lift up right or left leg	Follows direction to look to a person on the right or left
4. Understands most time concepts	Answers questions about time during Calendar	Understands when events occur during the day	Understands weekly schedule of events
5. Adds/subtracts one-digit whole numbers	In Math, adds/subtracts one-digit whole numbers	In Cooking, adds one digit whole numbers (e.g., 1 tbs. + 3 tbs)	Adds one digit whole numbers when figuring out spending money (\$1 + \$8)
6. Retells a known story in sequence, identifying characters, settings, & key events	Uses pictures, etc. to retell favourite story	In Drama, retells a favourite story using pictures etc.	Tells adult worker about a favourite tv show, using pictures, etc.
7. Naming items by exclusion	Answers questions, such as "Show me something that can ..., but is not"	In Science, answers questions, such as, "Name an animal that is not a mammal"	When recycling, names items that cannot be recycled
8 Asks questions to make sense of experiences	During a field trip, asks questions about experiences	Asks questions about a new project in woodworking	Asks questions about experiences at a concert

<p>9. Share feelings/moods evoked by stories</p>	<p>Uses facial expressions, pictures, AAC device, etc. to communicate about moods/feelings, etc. conveyed in a story</p>	<p>Uses pictures, AAC device etc., to communicate about moods/feelings, etc. conveyed in a video</p>	<p>Uses pictures, AAC device, etc. to communicate about moods/feelings, etc. conveyed on a tv show</p>
<p>10. Makes predictions</p>	<p>Answers questions about a story being read at library time, such as "What will happen if ...?"</p>	<p>In Science, makes predictions about what will happen</p>	<p>In discussing Personal Safety, answers questions about what may happen in potentially dangerous situations</p>
<p>11. Uses onset & rhyme to create new words that include blends</p>	<p>In Language Arts, names rhyming words</p>	<p>In Language Arts, names words with the same onset</p>	<p>Helps to write birthday poems that have rhyming words</p>
<p>11. Hears & identifies medial & final sounds in words</p>	<p>In Language Arts, identifies the medial and final sounds in words</p>	<p>In Language Arts, identifies the medial and final sounds in words when composing a poem</p>	<p>When helping to write a shopping list, identifies the medial and final sounds in words</p>
<p>12. Develops a reading vocabulary of 300-500 words, including sight reading words & 1-2 syllable words</p>	<p>Independently reads simple books</p>	<p>Independently reads a recipe in Cooking</p>	<p>Independently reads high interest, low vocabulary books</p>
<p>13. Spells high frequency words</p>	<p>Uses alphabet board, AAC device, etc. to spell high frequency words</p>	<p>Uses alphabet board, etc. to spell messages to send home</p>	<p>Uses alphabet board, etc. to help write shopping list</p>
<p>14. Writes short passages (e.g., journal entries, lists, poems)</p>	<p>Uses alphabet board, etc. to write in a daily journal</p>	<p>Uses alphabet board, etc. to write a poem</p>	<p>Uses alphabet board, etc. to write "to do" list</p>
<p>15. Responds to jokes that involve double meanings of words or sentences (e.g., Why did the lion stop eating the clown? Because he tasted funny.)</p>	<p>Uses voice output device to give jokes that contain double word meanings</p>	<p>Responds to jokes in drama that have double word meanings</p>	<p>Responds to humour on comedy show that involves double word meanings</p>
<p>Understands 20,000 words</p>			

Cognitive Level Nine

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Identifies the main characters in a story	Answers "who" questions about the main characters in a story	Identifies the main characters in a play	Identifies the main characters on a tv show
2. Identifies the beginning, middle and end of stories	Answers questions about what happened at the beginning, middle, and end of stories	Answers questions about what happened at the beginning, middle, and end of a science experiment	Answers questions about what happened at the beginning, middle, and end of an outing
3. Reads books independently	Reads a book on own (e.g., reads a book on-line)	Reads book on own (including on-line books)	Reads book on own (including on-line books)
4. Performs basic operations of whole numbers	Adds, subtracts, multiplies, and divides whole numbers	Performs basic operations of whole numbers when adjusting a cooking recipe	Performs basic operations of whole numbers when figuring out spending money

Cognitive Level 10

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Listens attentively in group situations	Attends to group instruction, discussions, etc.	Attends to presentations during Assembly	Attends to presentation in community
2. Makes predictions	Answers questions, such as, "Where will ...?; What will happen if ...?; Why will...?"	Answers questions, such as, "Where will ...?; What will happen if ...?; Why will...?"	Answers questions, such as, "Where will ...?; What will happen if ...?; Why will...?"
3. Justifies a decision	Answers questions, such as "Why would/wouldn't you?"	Answers questions, such as "Why would/wouldn't you....?"	Answers questions, such as "Why would/wouldn't you?"
4. Identifies the causes of an event	Answers questions, such as, "What made it happen?"	Answers questions, such as, "What made it happen?"	Answers questions, such as, "What made it happen?"
5. Formulates a solution	Answers a question, such as "What could you do?"	Answers a question, such as "What could you do?"	Answers a question, such as "What could you do?"
6. Identifies a means to a goal	Answers a question, such as "What could we use?"	Answers a question, such as "What could we use?"	Answers a question, such as "What could we use?"
7. Reads chapter books	Reads chapter books on-line	Reads chapter books on-line	Reads chapter books on-line
8. Comprehends sarcasm, using voice intonation & contextual cues	Responds appropriately to a sarcastic comment	Responds appropriately to a sarcastic comment	Responds appropriately to a sarcastic comment
9. Identifies sequences of events	Identifies sequences of events, such as, "Put these events in order of when they happened"	Identifies sequences of events, such as, "Put these events in order of when they happened"	Identifies sequences of events, such as, "Put these events in order of when they happened"

Cognitive Level Eleven

Developmental Skill	Elementary School Example	Middle/Secondary School Example	Examples for Adults
1. Identifies obstacles to an action	Answers questions, such as, "Why can't we ...?"	Answers questions, such as, "Why can't we ...?"	Answers questions, such as, "Why can't we ...?"
2. Forms opinions based on evidence	Answers questions, such as, "What do you think about...?"	Answers questions, such as, "What do you think about...?"	Answers questions, such as, "What do you think about...?"
3. Understands some figurative language	Answers questions that involve metaphors, similes, symbolism, irony, personification, etc.	Answers questions that involve metaphors, similes, symbolism, irony, personification, etc.	Answers questions that involve metaphors, similes, symbolism, irony, personification, etc
4. Listens & Draws conclusions in subject learning activities	Answers "how" and "why" questions that demonstrate ability to draw conclusions	Answers "how" and "why" questions that demonstrate ability to draw conclusions	Answers "how" and "why" questions that demonstrate ability to draw conclusions
5. Understands fractions	Identifies proper fractions	Identifies proper fractions	Identifies proper fractions

References

American Speech, Language, and Hearing Association (www.asha.org/public/speech/development/)

Developmental Milestones (www.earlyinterventioncanada.com/pdf/Developmental_Milestones.pdf)

Ed Chapman's Speech and Developmental Delays Page (<http://edchapman.tripod.com/ParentLinks.html>)

Holdnack, J.A. Defining the Role of Intellectual and Cognitive Assessment in Special Education (http://harcourtassessment.ca/hai/pdf/wisciv/definingthe_role.pdf)

Kangas, K. & Lloyd, L. (1988) Early Cognitive Skills as Prerequisite to Augmentative and Alternative Communication Use: What Are We Waiting For?" Augmentative and Alternative Communication, 211-221.

Key Concepts in the Curriculum: Overview of Mathematics K to 12 and English Language Arts K to 12. British Columbia Ministry of Education, Fall 2006.

Reichle, J. & Yoder, D. (1985) Communication board use in severely handicapped learners. Language, Speech, and Hearing Services in Schools. 16, 1-11.

Romski, M.A., Sevcik, R., and Pate, J.L. (1988) The establishment of symbolic communication in persons with severe mental retardation. Journal of Speech and Hearing Disorders. 53, 7-107.

Seattle Developmental Stages of Reading (http://www.seattleschools.org/area/acastan/stan/read/dev_stg_read.xml)

Stages of Intellectual Development in Children and Teenagers (<http://www.childdevelopmentinfo.com/development/piaget/shtml>)

The Whole Child - ABCs of Child Care - Cognitive (<http://www.pbs.org/wholechild/abc/cognitive.html>)

Western and Northern Canada Protocol Site (<http://wncp.ca>)