

# VB-MAPP

## Verbal Behavior Milestones Assessment and Placement Program

This Protocol is designed to accompany the VB-MAPP Guide (Sundberg, 2008, 2014). The Guide contains the general instructions and scoring criteria for completing the VB-MAPP Protocol. The Guide also provides placement recommendations for each of the 170 milestones along with suggestions for IEP goals. In addition, the Guide contains a brief description of the basic components of a behavioral approach to language, and definitions and examples of the skills and barriers assessed in the VB-MAPP (i.e., mand, tact, intraverbal, scrolling). In order to gain the maximum benefit from the VB-MAPP, it is essential that the assessor use the VB-MAPP Guide. In addition, it is important that the assessor be familiar with behavior analysis, and a behavioral approach to language.

The VB-MAPP is based on B.F. Skinner's (1957) analysis of verbal behavior, developmental milestones, and field-test data from typically developing children, children with autism, and children with other developmental disabilities. Over the course of several years, speech pathologists, behavior analysts, psychologists, special education teachers, occupational therapists, and parents of children with special needs have provided additional input.

There are five components of the VB-MAPP<sup>1</sup>. The first part is the VB-MAPP Milestones Assessment, which constitutes the core of the program. It is designed to provide a representative sample of a child's existing verbal and related skills. The Milestones Assessment contains 170 measurable Milestones that are balanced across 16 skill areas, and 3 developmental levels (0-18 months, 18-30 months, and 30-48 months). The second part is the VB-MAPP Barriers Assessment, which provides an assessment of 24 learning and language acquisition barriers often faced by children with language delays. The third part is the VB-MAPP Transition Assessment, which provides an overall summary assessment of a child's readiness to move to a less restrictive educational setting. The fourth part is the VB-MAPP Task Analysis and Supporting Skills. The task analysis skills are directly related to the target milestones and represent earlier steps in reaching those milestones. The supporting skills supplement the milestones with language, learning, and social skills that should be developed along with the milestones. The supporting skills are not necessarily prerequisites for a specific milestone, or need to be worked on in the exact order that they are presented. Nonetheless, the supporting skills contained in this section of the Protocol are an essential part of any intervention program. The supporting skills are identified in this section of the Protocol with an asterisk (\*).

The final component of the overall program is the VB-MAPP Placement and IEP Goals, which is not contained in the Protocol, but is contained in the VB-MAPP Guide. Once a child's skills and barriers have been identified and analyzed, IEP goals can be written and an intervention program can be designed and implemented to meet those goals. Supplemental materials for the VB-MAPP can be found at [www.avbpress.com](http://www.avbpress.com).

### References

- Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton-Century-Crofts.
- Sundberg, M. L. (2008). *The verbal behavior milestones assessment and placement program: The VB-MAPP guide*. Concord, CA: AVB Press.
- Sundberg, M. L. (2014). *The verbal behavior milestones assessment and placement program: The VB-MAPP guide, (2<sup>nd</sup> ed.)* Concord, CA: AVB Press.

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<sup>1</sup> For ease of reading, the male gender is used as a pronoun for the child being assessed throughout the VB-MAPP, and sign language can be used as a substitute for speech in all sections.

**Figure 2-1**

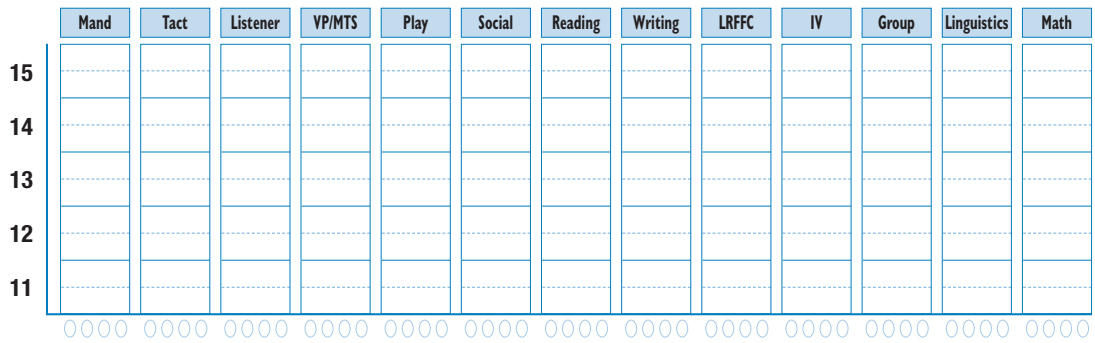
A filled-out sample of the Milestones Master Scoring Form.

## VB-MAPP Milestones Master Scoring Form

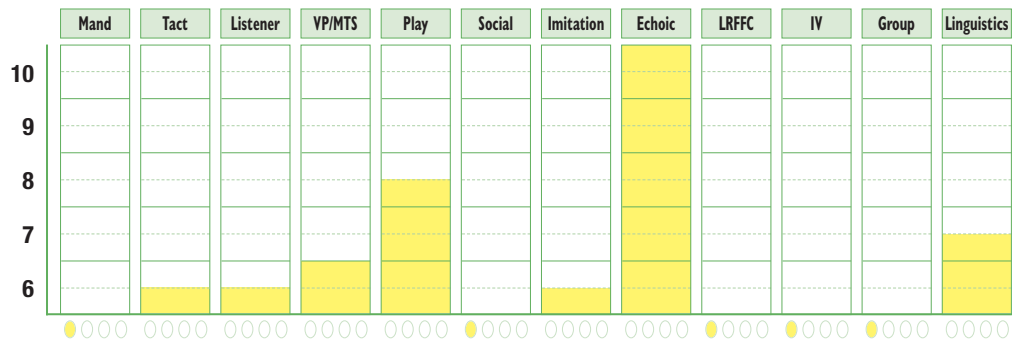
Child's name:	Elizabeth
Date of birth:	6/30/05
Age at testing:	1 3 yrs. 2 3 4

Key:	Score	Date	Color	Tester
1ST TEST:	52	6/1/08		MS
2ND TEST:				
3RD TEST:				
4TH TEST:				

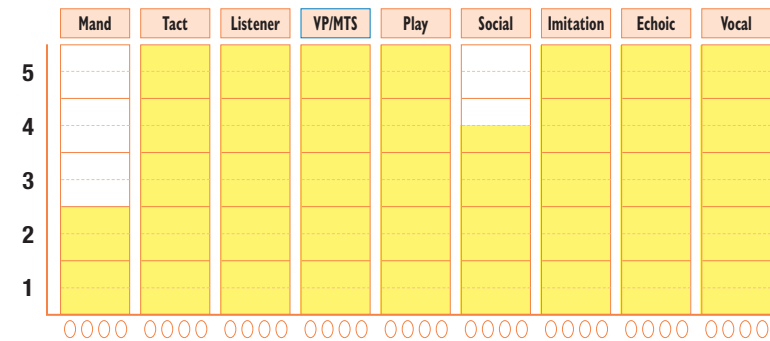
### LEVEL 3



### LEVEL 2



### LEVEL 1



# Milestones Assessment: LEVEL I (0-18 MONTHS)

(T) = Direct testing; (O) = Observation; (E) = Either testing or observation; (TO) = Timed observation

## MAND

TOTAL SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

### Does the child use words, signs, or icons to ask for desired items or activities?

1ST	2ND	3RD	4TH

1. Emits 2 words, signs, or icon selections, but may require echoic, imitative, or other prompts, but no physical prompts (e.g., *cracker, book*) (E)

1ST	2ND	3RD	4TH

2. Emits 4 different mands without prompts (except *What do you want?*) — the desired item can be present (e.g., *music, slinky, ball*) (T)

1ST	2ND	3RD	4TH

3. Generalizes 6 mands across 2 people, 2 settings, and 2 different examples of a reinforcer (e.g., mands *bubbles* from mom and dad, inside and outside, a red bottle and a blue bottle) (E)

1ST	2ND	3RD	4TH

4. Spontaneously emits (no verbal prompts) 5 mands — the desired item can be present (TO: 60 min.)

1ST	2ND	3RD	4TH

5. Emits 10 different mands without prompts (except, *What do you want?*) — the desired item can be present (e.g., *apple, swing, car, juice*) (E)

Comments/notes:

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## TACT

TOTAL SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

### Does the child tact people, objects, body parts, or pictures?

1ST	2ND	3RD	4TH

1. Tacts 2 items with echoic or imitative prompts (e.g., people, pets, characters, or favorite objects) (T)

1ST	2ND	3RD	4TH

2. Tacts any 4 items without echoic or imitative prompts (e.g., people, pets, characters, or other objects) (T)

1ST	2ND	3RD	4TH

3. Tacts 6 non-reinforcing items (e.g., *shoe, hat, spoon, car, cup, bed*) (T)

1ST	2ND	3RD	4TH

4. Spontaneously tacts (no verbal prompts) 2 different items (TO: 60 min.)

1ST	2ND	3RD	4TH

5. Tacts 10 items (e.g., common objects, people, body parts, or pictures) (T)

Comments/notes:

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# Milestones Assessment: LEVEL 2 (18-30 MONTHS)

(T) = Direct testing; (O) = Observation; (E) = Either testing or observation; (TO) = Timed observation

## MAND

TOTAL SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

Does the child demonstrate frequent and spontaneous manding primarily controlled by motivation (MOs)?

1ST	2ND	3RD	4TH

6. Mands for 20 different missing items without prompts (except, e.g., *What do you need?*) (e.g., mands for paper when given a crayon) (E)

1ST	2ND	3RD	4TH

7. Mands for others to emit 5 different actions needed to enjoy a desired activity (e.g., *open* to get outside, *push* when on a swing) (E)

1ST	2ND	3RD	4TH

8. Emits 5 different mands that contain 2 or more words (not including, *I want*) (e.g., *Go fast. My turn. Pour juice.*) (TO: 60 min.)

1ST	2ND	3RD	4TH

9. Spontaneously emits 15 different mands (e.g., *Let's play. Open. I want book.*) (TO: 30 min.)

1ST	2ND	3RD	4TH

10. Emits 10 new mands without specific mand training (e.g., spontaneously says *Where kitty go?* without formal mand training) (O)

Comments/notes:

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## TACT

TOTAL SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

Does the child tact nouns and verbs?

1ST	2ND	3RD	4TH

6. Tacts 25 items when asked, *What's that?* (e.g., *book, shoe, car, dog, hat*) (T)

1ST	2ND	3RD	4TH

7. Generalizes tacts across 3 examples of 50 items, tested or from a list of known generalizations (e.g., tacts 3 different cars) (T)

1ST	2ND	3RD	4TH

8. Tacts 10 actions when asked, for example, *What am I doing?* (e.g., *jumping, sleeping, eating*) (T)

1ST	2ND	3RD	4TH

9. Tacts 50 two-component verb-noun and/or noun-verb combinations, tested or from a list of known two-component tacts (e.g., *washing face, Joe swinging, baby sleeping*) (T)

1ST	2ND	3RD	4TH

10. Tacts a total of 200 nouns and/or verbs (or other parts of speech), tested or from an accumulated list of known tacts (T)

Comments/notes:

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# Milestones Assessment: LEVEL 3 (30-48 MONTHS)

(T) = Direct testing; (O) = Observation; (E) = Either testing or observation; (TO) = Timed observation

## MAND

TOTAL SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

Does the child mand for information, mand with different parts of speech, and give directions to others?

1ST	2ND	3RD	4TH

11. Spontaneously mands for different verbal information using a WH question word 5 times (e.g., *What's your name? Where do I go?*) (TO: 60 min.)

1ST	2ND	3RD	4TH

12. Politely mands to stop an undesirable activity, or remove any aversive MO under 5 different circumstances (e.g., *Please stop pushing me. No thank you. Excuse me, can you move?*) (E)

1ST	2ND	3RD	4TH

13. Mands with 10 different adjectives, prepositions, or adverbs (e.g., *My crayon is broken. Don't take it out. Go fast.*) (TO: 60 min.)

1ST	2ND	3RD	4TH

14. Gives directions, instructions, or explanations as to how to do something or how to participate in an activity 5 times (e.g., *You put the glue on first, then stick it. You sit here while I get a book.*) (O)

1ST	2ND	3RD	4TH

15. Mands for others to attend to his own intraverbal behavior 5 times (e.g., *Listen to me... I'll tell you... Here's what happened... I'm telling the story...*) (O)

Comments/notes:

## TACT

TOTAL SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

Does the child emit a wide variety of tacts, and do they contain several different parts of speech?

1ST	2ND	3RD	4TH

11. Tacts the color, shape, and function of 5 objects (15 trials) when each object and question is presented in a mixed order (e.g., *What color is the refrigerator? What shape is the valentine? What do you do with the ball?*) (This is part tact and part intraverbal.) (T)

1ST	2ND	3RD	4TH

12. Tacts 4 different prepositions (e.g., *in, out, on, under*) and 4 pronouns (e.g., *I, you, me, mine*) (E)

1ST	2ND	3RD	4TH

13. Tacts 4 different adjectives, excluding colors and shapes (e.g., *big, little, long, short*) and 4 adverbs (e.g., *fast, slow, quietly, gently*) (E)

1ST	2ND	3RD	4TH

14. Tacts with complete sentences containing 4 or more words, 20 times (E)

1ST	2ND	3RD	4TH

15. Has a tact vocabulary of 1000 words (nouns, verbs, adjectives, etc.), tested or from an accumulated list of known tacts (T)

Comments/notes:

# VB-MAPP Barriers Assessment

0 = No problem; 1 = Occasional problem; 2 = Moderate problem; 3 = Persistent problem; 4 = Severe problem

## 1. Negative Behaviors

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

0. Does not demonstrate any significant negative behaviors
1. Engages in some minor negative behaviors weekly, but recovery is quick
2. Emits a variety of minor negative behaviors daily (e.g., crying, verbal refusal, falling to the floor)
3. Emits more severe negative behavior daily (e.g., tantrums, throwing things, property destruction)
4. Often emits severe negative behavior that is a danger to himself or others (e.g., aggression, self-injury)

## 2. Instructional Control (Escape and Avoidance of Instructional Demands)

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

0. Typically cooperative with adult instructions and demands
1. Some demands will evoke minor noncompliant behavior, but recovery is quick
2. Emits noncompliant behavior a few times a day, with minor tantrums, or other minor behaviors
3. Emits noncompliant behavior several times a day, with longer tantrums and more severe behaviors
4. Noncompliant behavior dominates the child's day, negative behaviors can be severe and dangerous

## 3. Absent, Weak, or Impaired Mand Repertoire

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

0. The mand repertoire is growing consistently and is in proportion with the other Milestones
1. Mands occur, echoics are strong, but the tact and listener skills (LDs) Milestone scores are higher than the mand
2. Mands are limited to a small set of consumable reinforcers, despite strong tacts, LDs, and echoic skills
3. Mands are very limited, are prompt bound, are rote, scrolling occurs, responses do not match the motivating operations (MOs), negative behaviors function as mands, excessive or inappropriate mands occur
4. No effective mands, associated negative behaviors, same problems in #3 above may occur

## 4. Absent, Weak, or Impaired Tact Repertoire

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

0. The tact repertoire is growing consistently and is in proportion with the other Milestones
1. Tacts occur, echoics are strong, but listener skills (LDs) markedly outnumber tacts
2. Tact errors occur, strong echoic and LDs, tacts are prompt bound or scrolled, maintenance required
3. Many tact errors occur, echoic and LDs are strong, stuck at nouns and verbs, rote tacts, single word tacts despite multiple-word LDs, no spontaneity, fails to generalize
4. Minimal tact skills despite strong echoic and LDs, many failed attempts at teaching tacts

## 5. Absent, Weak, or Impaired Motor Imitation

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

0. The motor imitation repertoire is growing consistently and is in proportion with the other Milestones
1. Motor imitation occurs, but the scores are lower than those on the other Milestone skills
2. Imitation doesn't easily generalize, is inappropriate, or there is a dependence on imitative prompts
3. Imitation is prompt bound physically or verbally, weak MOs to imitate, has abilities in other areas
4. Has no imitation skills, or does have imitation skills but they never occur in any functional way

# VB-MAPP Transition Assessment

Rate the Child on a Scale of 1 to 5 for Each Area

## 6. Works Independently on Academic Tasks

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

1. Works independently on academic tasks for at least 30 seconds with no more than 1 adult prompt
2. Works independently on academic tasks for at least 1 minute with no more than 1 adult prompt
3. Works independently on academic tasks for at least 2 minutes without adult prompting to stay on task
4. Works independently on academic tasks for at least 5 minutes without adult prompting to stay on task
5. Works independently on academic tasks for at least 10 minutes without adult prompting to stay on task

## 7. Generalization of Skills Across Time, Settings, Behaviors, Materials, and People

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

1. Generalizes a few skills to different people and across time, but not easily across materials
2. Generalizes to new materials, but only after extensive generalization (multiple exemplar) training
3. Demonstrates spontaneous stimulus generalization in the natural environment on 10 occasions
4. Demonstrates spontaneous response generalization in the natural environment on 10 occasions
5. Consistently demonstrates both stimulus and response generalization on the first or second trial

## 8. Range of Items and Events that Function as Reinforcers

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

1. Reinforcers are frequent and mainly edibles, liquids, and physical contact (unlearned motivators)
2. Reinforcers are tangible, sensory, or manipulative such as toys, cause-and-effect objects, music, dolls
3. Reinforcers are social (e.g., attention), peer mediated (e.g., games), related to specific places (e.g., parks, stores), and less frequent; it is these learned reinforcers that are mainly used for teaching
4. Reinforcers are intermittent, social, automatic, and involve a wide range of items and activities
5. Reinforcers are intermittent, social, age appropriate, varied, and involve verbal information and change frequently

## 9. Rate of Acquisition of New Skills

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

1. Typically requires two or more weeks of training sessions and hundreds of trials to acquire a new skill
2. Requires at least one week of training sessions and 100 or more trials to acquire a new target skill
3. Acquires several new target skills a week averaging less than 50 training trials
4. Acquires several new target skills a week averaging less than 25 training trials
5. Consistently acquires new target skills daily averaging 5 trials or less

## 10. Retention of New Skills

SCORE:

ASSESSMENT			
1ST	2ND	3RD	4TH

1. Retains a new skill for at least 10 minutes after it has been scored as correct in a teaching session
2. Retains a new skill for at least 1 hour after it has been scored as correct in a teaching session
3. Retains a new skill for 24 hours after it has been scored as correct with 5 or less maintenance trials
4. Retains acquired skills after a 24-hour period without maintenance trials
5. Typically retains acquired skills for at least 1 week without maintenance trials



# Task Analysis and Supporting Skills: LEVEL 2 (18-30 MONTHS)

(T) = Direct testing; (O) = Observation; (E) = Either testing or observation; (TO) = Timed observation

MAND — LEVEL 2		Met
6-a	Spontaneously emits 5 mands without an object present and without verbal prompts (O)	
6-b	Emits 15 <b>different</b> mands without echoic or imitative prompts — object can be present (E)	
6-c	Mands for 5 different missing items without prompts (except a verbal prompt) (E)	
6-d*	Generalizes 4 mands to 4 different people (E)	
6-e*	Maintains a newly acquired mand for a missing item after 24 hours of no contact with the item (E)	
<b>6-M</b>	<b>Mands for 20 different missing items without prompts (except e.g., <i>What do you need?</i>) (e.g., mands for paper when given a crayon) (E)</b>	
7-a	Mands 5 times with 2 words in a phrase or sentence (e.g., <i>Drink juice.</i> ) (TO: 60 min.)	
7-b	Mands for other individuals to emit 2 different actions with verbal prompts (e.g., <i>go, spin</i> ) (E)	
7-c	Emits 2 mands to remove undesirable items or activities (O)	
7-d*	Demonstrates response generalization for two different mands (e.g., calls a filled cup both <i>cup</i> and <i>drink</i> ; calls a dog both <i>dog</i> and <i>Maggie</i> ) (O)	
7-e*	Mands contain varied intonation appropriate to both positive and negative MOs 5 times (O)	
7-f*	Mands for help or assistance 2 times (O)	
7-g*	Demonstrates a high frequency of manding (e.g., 15 in a 5 minute period) (O)	
<b>7-M</b>	<b>Mands for others to emit 5 different actions needed to enjoy a desired activity (e.g., <i>open to get outside, push when on a swing</i>) (E)</b>	
8-a	Mands 5 times with 2 words in a phrase or sentence (TO: 60 min.)	
8-b	Mands for information 2 times using <i>what</i> questions (e.g., <i>What's that?</i> ) (E)	
8-c	Mands with a pronoun 2 times (e.g., <i>My train. That's yours.</i> ) (O)	
8-d*	Mands occur with 3 different carrier phrases (e.g., <i>I want... It's my... Can I... That's my...</i> ) (O)	
8-e*	Mands with <i>yes</i> and <i>no</i> 4 times (e.g., <i>Do you want a ride? Yes.</i> ) (E)	
8-f	Mands for information 2 times using <i>where</i> questions (e.g., <i>Where's Elmo?</i> ) (E)	
<b>8-M</b>	<b>Emits 10 different mands that contain 2 or more words (not including <i>I want</i>) (e.g., <i>Go fast. My turn. Pour juice.</i>) (TO: 60 min.)</b>	
9-a	Spontaneously emits 50 mands per day (can be with objects present, but without verbal prompts) (O)	
9-b	Acquires 2 mands from tact or echoic only training (e.g., sees and tacts a live giraffe, and later mands to go back to see the giraffe) (O)	
9-c	Mands for information 25 times using any type of question word (O)	
9-d	Mands with an adjective 5 times (e.g., <i>big chip, red car</i> ) (O)	
9-e	Emits 5 mands in 30 seconds (e.g., during a game or fun activity such as water play) (TO: 30 sec.)	
9-f*	Mands contain 3-word phrases 10 times (e.g., <i>That's my horse.</i> ) (O)	
<b>9-M</b>	<b>Spontaneously emits 15 different mands (e.g., <i>Let's play. Open. I want book.</i>) (TO: 30 min.)</b>	

\* = Supporting Skill; No \* = Task Analysis Step Toward a Milestone