Boehm-3 Preschool

Boehm Test of Basic Concepts • Third Edition

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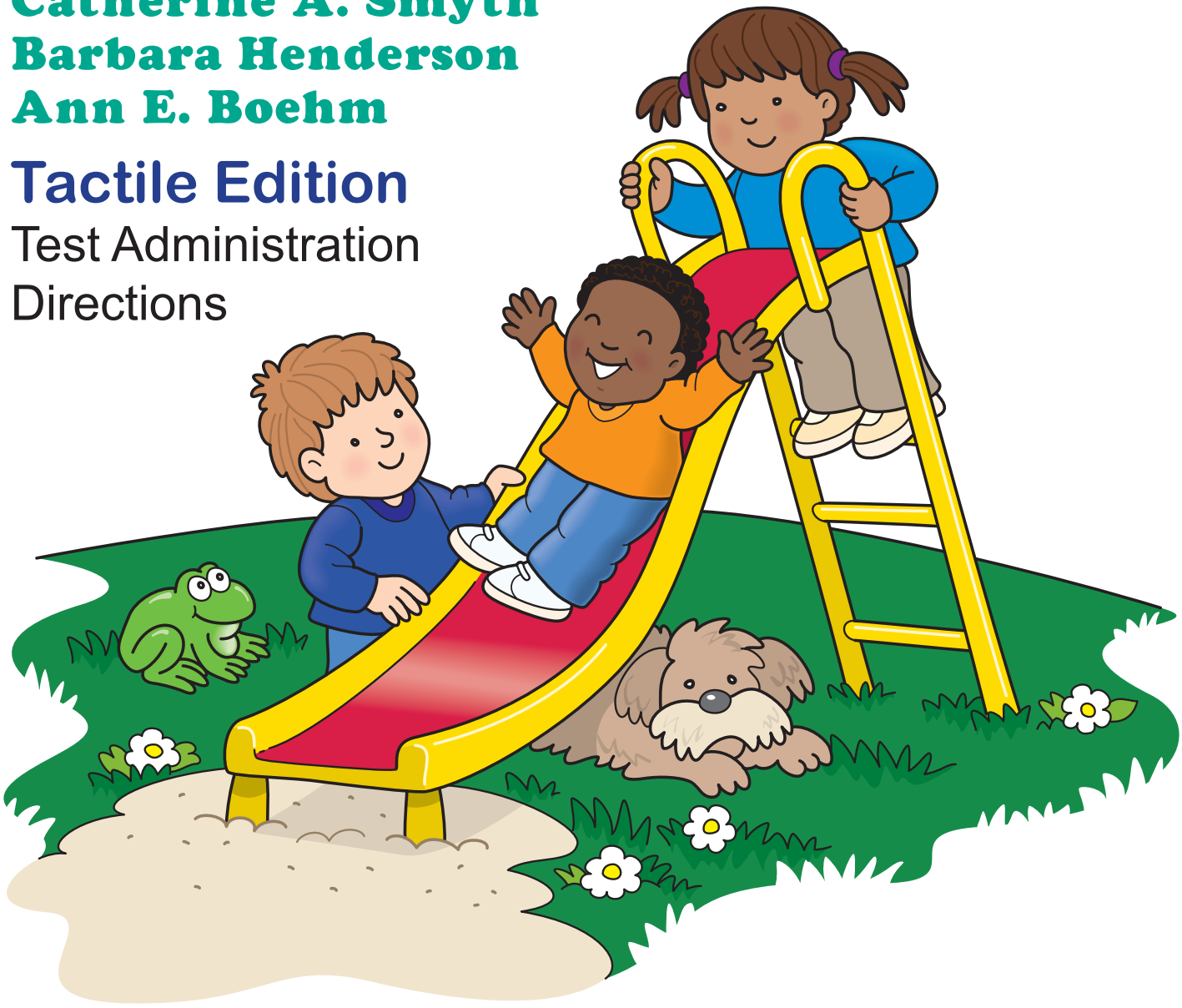
Tactile Edition

Test Administration Directions



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Test Administration Directions

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General Instructions

The *Boehm Test of Basic Concepts—3* Preschool (Boehm—3 *Preschool*) was designed to assess young children's understanding of the basic relational concepts important for language and cognitive development, as well as for later success in school. Knowledge of basic concepts is important for functioning in all areas of children's lives and should be taken into consideration when planning instruction or more intensive interventions (Boehm, 2013). The concepts assessed are fundamental to understanding directions and classroom routines, are an important aspect of emerging literacy, and critical for orientation and mobility. Developed as a downward extension of the *Boehm Test of Basic Concepts* (BTBC) (Boehm, 1971), the Boehm—3 *Preschool* is individually administered to children ages 3 years 0 months to 5 years 11 months.

The test stimuli for the *Tactile Edition* were carefully chosen to be familiar, everyday objects and shapes that a young child with visual impairment will have experienced. During the test administration it is important that the children concentrate on the concept being tested and have easy recognition of the tactile stimuli. The *Getting Ready Binder* consists of all nineteen tactile stimuli to introduce to the children before the actual test administration. These cards can be presented as many times as necessary until you are sure that the child is familiar with all of the stimuli.

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In addition to the tactile test items, a variety of manipulatives are included in the Boehm-3 *Preschool Tactile Edition*. There are several concepts that are difficult to represent in a two-dimensional format, such as up, down, in front, and first. These are items that we hope are already familiar to children with visual impairment in their daily play, but it is recommended that you introduce and discuss the blocks, bowls, and toy car before testing as well.

It is permissible to use the tactile items in the *Getting Ready Binder* to *teach* the child about the test stimuli; in fact, you are encouraged to do so. Make it fun, but make sure the child can identify the items before proceeding to the test.

It may be helpful for two individuals to work together on administering the *Tactile Edition*. Manipulating the binders and stimulus sheets while making notes and recording responses can be somewhat overwhelming for one person; two adults working together can divide the tasks and make the experience a little bit smoother for the child (we learned this the hard way!).

This *Tactile Edition* administration manual is not meant to be comprehensive regarding the Boehm-3 *Preschool*. For additional information, the Examiner's Manual is available for purchase separately at www.pearsonassessments.com.

There are two starting points: One for 3-year-olds and the other for 4- and 5-year olds. The length of the test for 3-year-olds is 52 items, measuring 26 concepts. The length

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of the test for 4- and 5-year-olds is 58 items, measuring 29 concepts.

- Only children ages 3 years 0 months to 3 years 11 months are administered items 1 through 24 (Binder 1).
- All children (ages 3-0 through 5-11) are administered items 25 through 52 (Binder 2).
- Only children 4 years 0 months to 5 years 11 months are administered items 53 through 82 (Binder 3).

Administration Time

Children with visual impairment who completed the tactile prototype required anywhere from 20 to 62 minutes to complete the test, with some breaks, plus time needed for preparation and to put the child at ease. Our experience suggests that most children will enjoy taking the test and remain thoroughly involved for the duration of its administration. Some children, however, have limited attention spans. In such cases, it may be advisable to administer the Boehm—3 *Preschool* over the course of two or more testing sessions.

If two sessions are needed, it is advisable to complete the first binder, allow the child a break, then complete the second binder. Easier items are interspersed with more difficult items to increase a child's sense of success and to enhance attention. Most children become interested in the test and enjoy taking it, so holding the child's attention is usually not difficult.

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Administration and Scoring

General Information

Administering the Boehm—3 *Preschool* is simple and straightforward. Each child is administered five practice items in the *Tactile Edition.* There are two starting points to begin administration; where the test begins will depend on the child's age.

- Children who are 3 years 0 months to 3 years 11 months begin at item 1 and proceed to item 52 (Binders 1 and 2).
- Children who are 4 years 0 months to 5 years 11 months begin at item 25 and proceed to item 82 (Binders 2 and 3).

There are three item sets. The first set contains 12 concepts (24 items); the second set contains 14 concepts (28 items); and the third set contains 15 concepts (30 items), with each concept tested in two different contexts. Each age group (3-0 to 3-11and 4-0 to 5-11) is tested with two sets of items. The item set common to both age groups includes items 25 through 52. In the *Tactile Edition*, there are three binders, divided by age levels:

- Binder 1 is only for Ages 3-0 to 3-11
- Binder 2 is for all ages, Ages 3-0 to 5-11
- Binder 3 is only for Ages 4-0 to 5-11

Actual administration of the practice and test items involves the child indicating tactually and/or verbally his or her response to the direction you read.

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This assessment requires children to use their independent tactile skills to discriminate test stimuli and choose a correct answer. Some of the concepts have a relationship to each other (**across**, **first**, **last**) and the child will need to scan the entire page to understand the concept. Items where it is particularly important for the child to look at the entire page before identifying the concept are identified by the direction "*Guide the child's hand across the page.*"

It is acceptable to help a child scan the page, but a respectful hand-under-hand strategy (Miles, 2003) is recommended, rather than taking the child's hand and moving it. A child should be encouraged to engage in tactile scanning with only a verbal reminder as the test progresses.

Preparing for Testing

Before your initial administration of the test, read these instructions and familiarize yourself with all of the test components. After you have familiarized yourself with the test materials and are ready to administer the test, assemble the *Tactile Edition* binders, a *Tactile Edition Record Form*, and a pen or pencil. Locate the practice items and determine the starting point for the child you are testing.

Testing Environment

Select a quiet, well-lit, well-ventilated room that is free of distractions. Testing a child while "corner-sitting" at a child-sized table is the most typical setting. Use your clinical judgment and knowledge of the surroundings to determine the setting that is most conducive to a good testing

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environment. Be responsive to the child's needs. If necessary, sit on the floor with the child. Make sure that the child has had a recent bathroom break before testing.

Sometimes the Boehm—3 *Preschool* will be the child's first testing experience and may produce a certain amount of anxiety. Before testing begins, it is useful to spend some time playing and getting acquainted with the child, to put him or her at ease. It is important to establish rapport at the outset of the testing sessions and to maintain it by praising the child from time to time, *without indicating whether the child's answers are right or wrong*. For example, you may say "That's very good thinking," or "You are doing just fine." If the child appears reluctant to answer an item, offer encouragement by saying "Give it a try," or "It's alright if you make a mistake." Dealing with the child in an open and friendly manner helps make the testing experience pleasant for both you and the child.

Completing the Record Form

Before you begin testing, complete the demographic information on the front of the *Tactile Edition Record Form*. This information includes the child's gender, grade/class, school/site, teacher, examiner, language(s) spoken in the home, and visual diagnosis.

Computing the Chronological Age

You can compute the child's chronological age by subtracting his or her date of birth from the date of testing. There are some important steps to remember.

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- When you need to borrow days, always borrow 30, regardless of the month.
- When you need to borrow months, always borrow 12.
- Do not round the days up or down. During standardization, the child's age was not rounded.

If the test was given in two sessions, use the date of the initial testing.

Here is an example. A child was tested on February 5, 2013. The child was born on August 16, 2009. Figure 1 illustrates the computation and demonstrates that the child has a chronological age of 3 years, 5 months, and 19 days. The child's age is not rounded to 3 years and 6 months.

	Year	Month	Day
Date of Test	~~2013~~ 2012	~~2~~ + 13	~~5~~ 35
Date of Birth	2009	8	16
Chronological Age	3	5	19

Figure 1. Computing the Child's Chronological Age

Administering the Test

Presenting Practice Items

The practice items are included so that you can show the child what he or she will be expected to do during presentation of the test items. Verify that the child understands what to do and is paying attention before the test begins.

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For the *Tactile Edition*, position one binder on the table and the other two to the side or on the floor. Open the ring binder. Take one item at a time out of the ring binder and place it in front of the child, in easy reach of his or her hands. (It may help if you have a piece of non-slip material that will help to hold the item in one position.) When you are ready to begin testing, read the directions aloud to the child. Emphasize the concept words that appear in *italic.* Read the directions exactly as written on the *Tactile Edition Record Form*.

During presentation of the practice items (A-B-C-D-E):

- Repeat the directions for the practice items and provide additional explanation, if needed, until the child knows what to do.
- Encourage the child to guess if he or she does not know the correct answer.
- Tell the child the correct answer on the practice items if he or she does not point to the correct answer. If after practice the child still does not understand the task demands, discontinue testing.
- Try to put the child at ease and make the testing experience pleasant.

There are 5 tactile practice items used in the *Tactile Edition*. These are included to familiarize the child with the format of the directions you will be reading. Discontinue the testing process if the child does not understand the directions after using the practice items and return to activities with the *Getting Ready Binder*.

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Administering Test Items

When you are ready to begin testing, read the direction aloud to the child. Emphasize the concept words that appear in *italic*. Do not read the test item numbers. Read the directions exactly as written.

During presentation of the test items:

- Make sure the child is attentive when you begin to read a test item. If needed, ask "**Ready?**" Some children are quick to respond and may give an answer before you have given the direction. It may be useful to hold the child's hand while presenting the direction.
- Read the test items exactly as they appear on the *Tactile Edition Record Form*.
- In pilot testing, children taking the tactile prototype tended to use a variety of methods to indicate their selections – pointing, tapping, karate chops. If you are not certain of the child's response, ask the child to show you again.
- Make sure the child is attentive and ready to go before proceeding to the next test item.
- Provide reinforcing statements to encourage the child.
- Encourage the child to guess.

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You may not

- Reword directions for the test items; or
- Cue the child, give him or her "hints," or explain the meaning of the words in the test items.

Answering a Child's Questions

During the administration of test items, you may answer a child's questions about the mechanics of testing. For example, if a child is unsure whether he or she is to point to or say the answer, you may answer his or her question. However, if a child has a question about the content of a test item (e.g., "Is this one top?" or "Does longest mean big?"), tell the child, "Point to the answer you think is best."

Correcting Mistakes or Changing Answers

If a child makes a mistake and wants to change a response, he or she may point to the new answer. Please make note of the child's self-correction to determine if a pattern of response is occurring.

Scoring and Recording the Results

In the Boehm-3 Preschool, you will be using the *Tactile Edition Record Form*. The form contains the script for each item, next to a drawing of the tactile stimuli for that item, with the correct response circled.

Recording the Child's Scores in the Record Form

The five practice items appear at the beginning of the *Tactile Edition Record Form*. Be sure the child is familiar with

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all of the stimuli in the practice items before continuing to the first test item, but there is no need to record a score.

The correct response is indicated in the drawing and a green box to the right of each drawing allows you to indicate the type of response a child gives. If the child selects the circled stimulus, insert a "1" or a "+" in the green box on the record form. If the child selects a different stimulus, circle the child's response using a different color ink. For further analysis, you may also want to indicate in the green box if the child self-corrected his or her response, so mark each circled response in the sequence in which it was selected. If the child gave no response, code it with **NR** for no response. You can use the following codes to indicate other responses:

A for antonym or the opposite of the target concept,

E if the child pointed to each of the individual components of the picture that comprised the item, and

M for any miscellaneous response

The first item set (1-24) for children ages 3-0 to 3-11 can be found after the Test Results page on the *Tactile Edition Record Form*. As soon as the 24th test item is completed, total all the scores in the green boxes and insert the total in the Raw Score box on the Test Results page. If you decide not to take a break between item sets 1 and 2, you can go back and total the scores later.

The second item set (25-52) is the starting point for children ages 4-0 to 5-11 and the continuation of items for children ages 3-0 to 3-11.

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When you complete this item set, you will notice that children ages 3-0 to 3-11 are to stop after responding to Item 52. At Ages 3-0 to 3-11 Stop Here, record the total number of points earned for the second item set in the Raw Score box on the Test Results page.

Children ages 4-0 to 5-11 will continue through the third item set (53-82) and then receive a total Raw Score on the Test Results page.

Total the appropriate item set Raw Score boxes on the Test Results page to determine the child's Total Raw Score.

Determine the Total Percent Correct by dividing the child's raw score by the number of items; the total number of items for 3-year-olds is 52, but the total number of items for 4- and 5-year-olds is 58.

Determining the Concept Score will take a little calculation. Circle the item numbers on the Child's Test Performance Summary pages that the child answered correctly. From these pages, determine how many times the child answered both presentations of a concept correctly; that becomes the concept score. Remember,

Items 1-24 measured a total of 12 concepts
Items 25-52 measured a total of 14 concepts
Items 53-82 measured a total of 15 concepts

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Calculate the Percent Correct for Concept Scores by dividing the number of times the child responded correctly to both presentations of a concept by 12, 14, or 15, depending on the item set above. Enter this number on the Test Results page for each item set, then calculate the Total Concept Score and Percent Correct. The Total Percent Correct is the Concept Score divided by either 26 (for 3-year-olds) or 29 (for all others).

For example, if a 3-year-old responded correctly to both presentations of 10 concepts, the Total Percent Correct Concept Score would be 10 divided by 26, or 38.5% correct. If a 5-year-old responded correctly to both presentations of 21 concepts, the Total Percent Correct Concept Score would be 21 divided by 29, or 72.4% correct. The Total Percent Correct Concept Score helps you to understand the child's concept mastery, but has no normative value.

When you have completed the scoring, you can use the remaining pages of the record form to summarize the child's knowledge and to design interventions if needed. Then complete the Parent Letter, sharing with parents the concepts that were missed by the child. The Parent Letter also gives parents some helpful ways of developing concepts in children who are blind or have low vision.

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