## CONCEPTS AND APPLICATIONS TESTS


#### Abstract

The MBSP book of Basic Math Concepts and Applications Blackline Masters includes 30 tests at each grade level for Grades 2-6. Each test samples skills in the areas of math concepts and applications representing the yearlong curriculum.


The Concepts and Applications Skills Assessed by Grade charts on the following page show the types of problems that appear in each grade level's tests. In many cases, there are too many skills in a skill area for all of them to fit in a single Concepts and Applications test. For example, at Grade 2, there are seven different types of problems within the Number Concepts area; however, only two Number Concepts problems are included on each test. The complete set of Number Concepts problems is sampled across several tests. Therefore, although the number of problems within a skill area remains constant across all tests, the specific types of problems from certain skill areas may vary from test to test. The small letter at the bottom left corner of the first page of each test in the Blackline Master book refers to the sampling pattern used for the test. For instance, every test with " A " at the bottom includes the same specific problem types as every other test with "A," whereas tests with " $B$ " differ in some skills areas from " $A$ " tests.

The following list indicates the number of problems on each test at a specific grade level.

$$
\begin{array}{ll}
\text { Grade 2 } & 18 \text { problems } \\
\text { Grade 3 } & 24 \text { problems } \\
\text { Grade 4 } & 24 \text { problems } \\
\text { Grade 5 } & 23 \text { problems } \\
\text { Grade 6 } & 24 \text { or } 25 \text { problems }
\end{array}
$$

At a given grade level, each weekly test has the same time limit (i.e., the time limit allowed on the first test of the school year is the same time limit allowed for every test during the year). See the chart below for the time limit at each grade.

## Time Limit for Concepts and Applications Tests

Grade 28 minutes
Grade 36 minutes
Grade 46 minutes
Grade 57 minutes
Grade $6 \quad 7$ minutes

## Concepts and Applications Skills Assessed by Grade

The list that follows shows the skills represented on the Concepts and Applications tests for each grade level. Within some skill areas, there are too many specific types of problems to fit into a single test. In these cases, the skills are sampled systematically across several different tests. The sampling scheme for each test is shown by the small letter at the bottom left corner of the first page.

## Grade 2

Counting
Number Concepts
Names of Numbers
Measurement
Charts and Graphs
Money
Fractions
Applied Computation
Word Problems
Grade 3
Counting
Number Concepts
Names of Numbers
Measurement
Charts and Graphs
Money
Fractions
Decimals
Applied Computation
Word Problems

Grade 5
Numeration
Money
Measurement
Geometry
Charts and Graphs
Fractions and Factors
Decimals
Applied Computation
Word Problems
Grade 6
Numeration
Measurement
Geometry
Charts and Graphs
Applied Computation
Word Problems
Percentages
Ratios and Probability
Proportions
Variables

Grade 4
Number Concepts
Names of Numbers and Vocabulary
Measurement
Grid Reading
Charts and Graphs
Area and Perimeter
Fractions
Decimals
Word Problems

Normative Scores on Basic Math Concepts and Applications Tests (Points)

| Grade | $n$ |  | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 91 | 25th | 8 | 15 | 18 |
|  |  | 50th | 12 | 23 | 26 |
|  |  | 75th | 20 | 31 | 31 |
| 3 | 168 | 25th | 11 | 17 | 21 |
|  |  | 50th | 13 | 22 | 27 |
|  |  | 75th | 18 | 27 | 34 |
| 4 | 131 | 25th | 10 | 16 | 21 |
|  |  | 50th | 14 | 21 | 26 |
|  |  |  | 17 | 26 | 32 |
| 5 | 176 | 25th | 6 | 6 | 8 |
|  |  | 50th | 8 | 8 | 12 |
|  |  | 75th | 13 | 13 | 18 |
| 6 | 158 | 25th | 3 | 4 | 6 |
|  |  | 50th | 5 | 8 | 11 |
|  |  | 75th | 8 | 12 | 15 |

Note. Data at Grades 5 and 6 come exclusively from high-poverty schools.

