

# ACADIENCE MATH



(Grades K-1)

**Students in Grade K-1 are Globally assessed three times a year, using ACADIENCE Math. The assessment gives us a snapshot of students' math abilities in the areas of *Early Numeracy and Computation Fluency* (in Grade 1) Below; you will find information about each measure.**

**We utilize our ACADIENCE Math data as a component to help us identify students who would benefit from Tiered Math Supports and/or Title 1 Math services.**



<b>Measure:</b>	<b>What Students Do:</b>	<b>Score:</b>	<b>Administration Time:</b>	<b>Grade Level:</b>
<b>Computation Fluency (Comp)</b>	<b>Solve math computation problems, such as addition, subtraction, multiplication, division (based on grade level).</b>	<b>Number of items correctly answered (some answers are weighted, based on complexity)</b>	<b>4-12 minutes (depending on grade level and complexity)</b>	<b>1-5</b>
<b>Beginning Quantity Discrimination (BQD)</b>	<b>Students' ability to quickly discern the greatest number in a set and ability to weigh relative differences in magnitude efficiently.</b>	<b>Number of items correctly answered</b>	<b>1 minute</b>	<b>Kindergarten</b>
<b>Number Identification Fluency (NIF)</b>	<b>Students' ability to link written numbers to names.</b>	<b>Number of items correctly answered</b>	<b>1 minute</b>	<b>Kindergarten 1<sup>st</sup> Grade</b>
<b>Next Number Fluency (NNF)</b>	<b>Students' ability to demonstrate knowledge of counting principles and skill in counting.</b>	<b>Number of items correctly answered</b>	<b>1 minute</b>	<b>Kindergarten 1<sup>st</sup> Grade</b>
<b>Advanced Quantity Discrimination (AQD)</b>	<b>Students' ability to quickly discern the greatest number in a set and ability to weigh relative differences in magnitude efficiently.</b>	<b>Number of items correctly answered</b>	<b>1 minute</b>	<b>1<sup>st</sup> Grade</b>
<b>Missing Number Fluency (MNF)</b>	<b>Students' ability to demonstrate knowledge of counting principles and skill in counting.</b>	<b>Number of items correctly answered</b>	<b>1 minute</b>	<b>1<sup>st</sup> Grade</b>



# Computation Fluency

## Overview

**Level:** Grades 1 through 5 (Fall, Winter, Spring)

**Use:** Benchmarking

### Computation Fluency:

**Assesses a student's ability to solve computation. Content reflects math expectations appropriate to each grade level. Because it is a timed measure, Computation Fluency can also measure the level of automaticity of these skills.**

**The student answers math items in relation to basic math computation concepts, such as addition, subtraction, multiplication, division. The student attempts as many items as possible (paper/pencil) in a given time span, based on grade level and complexity (4-12 minutes).**

**Each Computation form contains boxed math problems on 2 given forms (Form A and Form B).**

*Grade 1 Example:*

1. $\begin{array}{r} 6 \\ +0 \\ \hline \end{array}$	2. $\begin{array}{r} 8 \\ +2 \\ \hline \end{array}$	3. $\begin{array}{r} 16 \\ - 2 \\ \hline \end{array}$	4. $\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$	5. $\begin{array}{r} 15 \\ - 7 \\ \hline \end{array}$
6. $\begin{array}{r} 4 \\ -0 \\ \hline \end{array}$	7. $\begin{array}{r} 13 \\ + 7 \\ \hline \end{array}$	8. $\begin{array}{r} 20 \\ - 9 \\ \hline \end{array}$	9. $\begin{array}{r} 12 \\ + 3 \\ \hline \end{array}$	10. $\begin{array}{r} 9 \\ -4 \\ \hline \end{array}$
11.	12.	13.	14.	15.

# Beginning Quantity Discrimination (BQD)

## Overview

Level: **Grade K (Fall, Winter, Spring)**

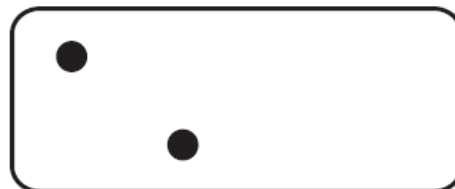
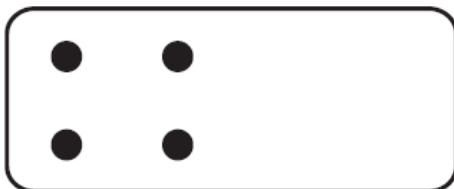
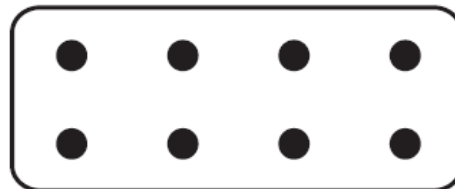
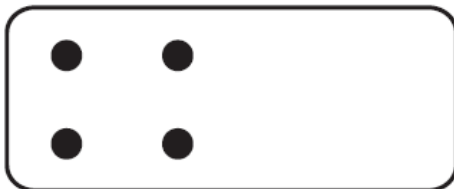
Use: **Benchmarking**

### Description:

**Assesses a student's ability to quickly discern the greatest number in a set and ability to weigh relative differences in magnitude efficiently.**

**The assessment is administered 1:1. Students are shown pages with domino-like dots and are asked to tell which domino shows the greater amount. As students verbally respond, the assessor records the responses in a student response booklet. Students are timed for 1 minute.**

*Grade K Example:*



# Number Identification Fluency (NIF)

## Overview

**Level:** Grade K and Grade 1 (Fall, Winter, Spring)

**Use:** Benchmarking

### Description:

**Assesses a student's ability to link written numbers to names of numbers.**

**The assessment is administered 1:1. Students are shown pages with various numbers and are asked to tell the name of each number. As students verbally respond, the assessor records the responses in a student response booklet. Students are timed for 1 minute.**

*Grade K Example:*

5

3

2

# Next Number Fluency (NNF)

## Overview

**Level:** Grade K and Grade 1 (Fall, Winter, Spring)

**Use:** Benchmarking

### Description:

**Assesses a student's ability to demonstrate knowledge of counting principles and skill in counting.**

**The assessment is administered 1:1. Students are verbally given a number from the assessor. The student will, then, have to verbally say the next number. As students verbally respond, the assessor records the responses in a student response booklet. Students are timed for 1 minute.**

*Grade K Example:*

*Assessor will say: "4"*

*Student would be expected to say: "5"*

# Advanced Quantity Discrimination (AQD)

## Overview

**Level:** Grade 1 (Fall, Winter, Spring)

**Use:** Benchmarking

## Description:

**Assesses a student's ability to quickly discern the greatest number in a set and ability to weigh relative differences in magnitude efficiently.**

**The assessment is administered 1:1. Students are shown pages with 2 sets of numbers and are asked to tell which number is the greater number. As students verbally respond, the assessor records the responses in a student response booklet. Students are timed for 1 minute.**

*Grade 1 Example:*

14

22

56

48

37

28

43

75

# Missing Number Fluency (MNF)

Overview

**Level:** Grade 1 (Fall, Winter, Spring)

**Use:** Benchmarking

**Description:**

**Assesses a student's ability to demonstrate knowledge of counting principles and skill in counting.**

**The assessment is administered 1:1. Students are shown quadrant sets of numbers and are asked to tell which number is missing in the set. As students verbally respond, the assessor records the responses in a student response booklet. Students are timed for 1 minute.**

*Grade 1 Example:*

15    \_\_\_    17    18

41    \_\_\_    43    44

30    \_\_\_    40    45

30    40    \_\_\_    60