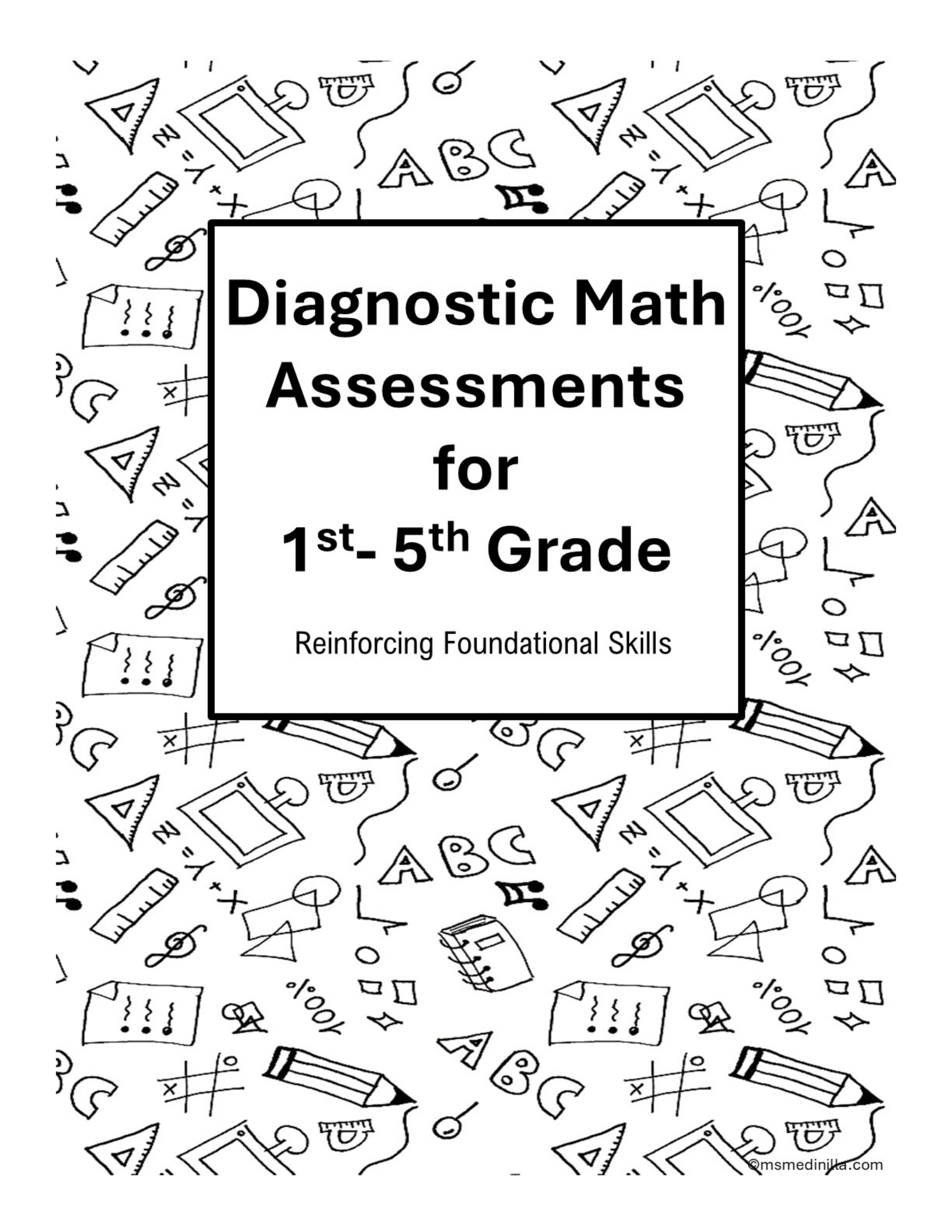


The background of the entire page is a dense, repeating pattern of various black-and-white line drawings. These include geometric shapes like triangles, squares, and circles, as well as school-related items such as rulers, pencils, protractors, and musical notes. The pattern is scattered across the entire page, framing the central text box.

Diagnostic Math Assessments for 1st- 5th Grade

Reinforcing Foundational Skills

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Introduction

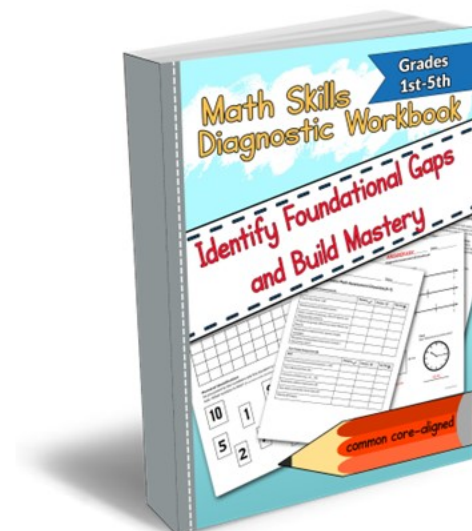
PLEASE NOTE: This is a complimentary sample of the Diagnostic Math Assessment.

This free version provides you with enough tools to begin identifying which foundational math skills your student may need support with. You can use it right away to pinpoint learning gaps and take the first steps toward targeted intervention.

If you find this resource helpful, you'll love the complete **K–5 Diagnostic Math Assessment**, which offers a more in-depth collection of grade-level checklists, detailed skill progressions, and expanded assessment tools to give you the clearest picture of your student's math needs.

If you would like to purchase the entire Book, please send an email to edna@ednamedinilla.com

I will forward the link to the purchase page.



Directions for Use:

- Print the assessment you wish to give your student.
- Begin with the assessment at the student's current grade level.
- If the student cannot answer all of the questions correctly, move down one grade level.
- Continue until the student successfully completes an entire assessment with all correct answers.
- The grade level where the student shows mastery is the level they are currently working at.

This will show you which foundational skills need to be remediated. Focus your instruction on those skills to fill gaps and build a strong foundation for future math learning.

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The Kinder Assessment is to be conducted orally. The student will not need a pencil.

The First-Grade Assessment only has one questions that requires a pencil, the comparing numbers question.

The Second-Grade Assessment has a combination of oral response and written response.

The Third-Grade Assessment has a combination of oral response and written response.

The Fourth and Fifth Grade Assessment are all written response.

Rationale for the Diagnostic Math Assessment (K–5)

This diagnostic assessment was designed to identify foundational math skills that students need in order to succeed in later grades. Each question set targets critical “building block” skills that, if missing, often cause students to struggle with more complex math concepts.

The questions are directly aligned with the **Common Core State Standards for Mathematics (CCSS-M)**, which emphasize a coherent progression of skills from Kindergarten through Grade 5. By including these skills, the assessment ensures that instruction addresses not only grade-level expectations but also underlying gaps that may have developed earlier.

Why These Questions Were Chosen

Kindergarten & 1st Grade: Focus on number recognition, counting, comparing sets, and understanding place value. These are the first steps toward number sense, a critical foundation for all later math. (CCSS: K.CC, 1.NBT)

2nd Grade: Skills include addition/subtraction with regrouping, place value to hundreds, and skip counting. These prepare students for multiplication and division concepts in Grade 3. (CCSS: 2.NBT, 2.OA)

3rd Grade: Multiplication, division, fractions, and time are emphasized because Grade 3 is considered a pivotal year in math development. Without mastery here, students often struggle in upper elementary. (CCSS: 3.OA, 3.NF, 3.MD)

4th Grade: Focuses on multi-digit operations, fraction comparison, and geometry concepts. These build fluency with whole numbers and fractions, key for success in upper grades. (CCSS: 4.NBT, 4.NF, 4.G)

5th Grade: Introduces decimals, fraction operations, coordinate planes, and volume. These prepare students for middle school algebraic thinking and problem-solving. (CCSS: 5.NBT, 5.NF, 5.G, 5.MD)

How This Supports Teachers

By pinpointing the exact level where a student’s understanding breaks down, teachers can target remediation without guessing. Instead of reteaching entire units, instruction can focus on filling gaps directly tied to the CCSS progressions. This ensures students build a strong foundation, regain confidence, and are better prepared to engage with grade-level content.

Name: _____ Date _____

Diagnostic Assessment (A)

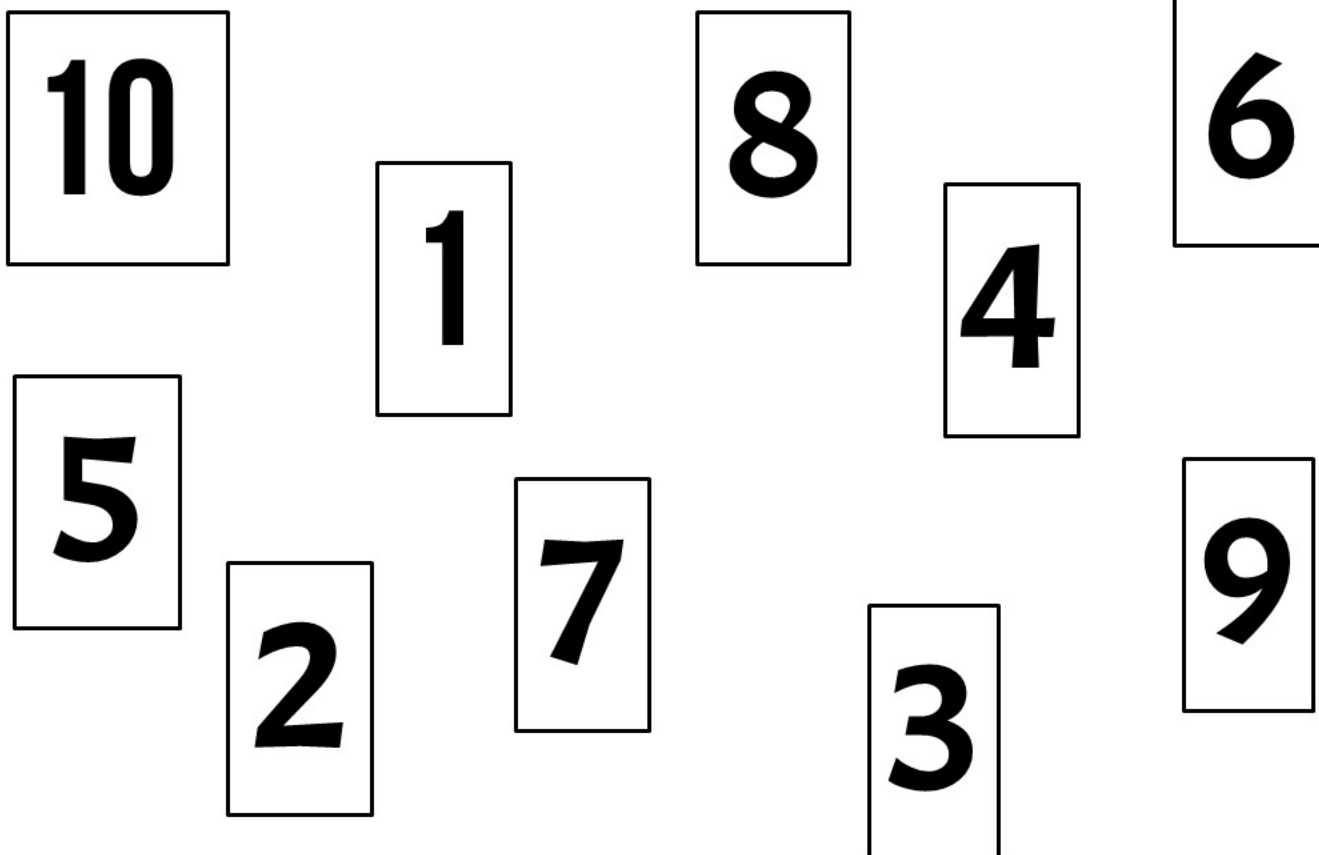
Oral Count

Say: Count aloud from 1–30. (Write the numbers as the student says them.)

Numeral Identification

As you point to the numbers ask the student to identify the number.

Ask: What number is this? (Put a check mark next the ones correctly identified.)



Name: _____ **ANSWER KEY** Date _____

Diagnostic Assessment (A)

Oral Count

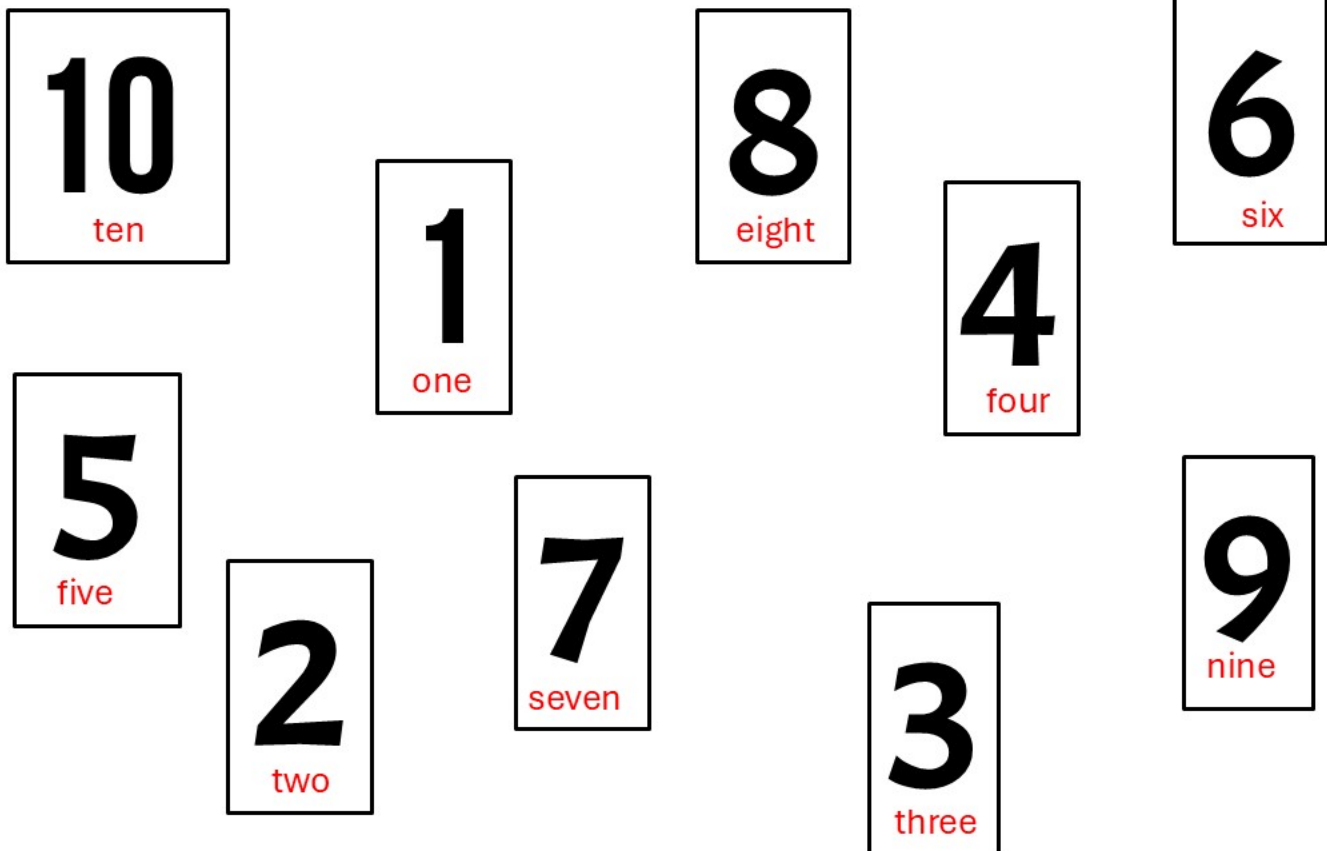
Say: Count aloud from 1–30. (Write the numbers as the student says them.)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

Numerals Identification

As you point to the numbers ask the student to identify the number.

Ask: What number is this? (Put a check mark next the ones correctly identified.)



Name: _____ Date _____

Diagnostic Assessment (B)

Oral Forward Count

Say: Count aloud from 1–100. (Write the numbers as the student says them.)

Oral Backward Count

Say: Count aloud from 1–30. (Write the numbers as the student says them.)

Compare numbers

Say: Circle the number that is greater.

35	53
----	----

21	12
----	----

Name: _____ **ANSWER KEY** _____ Date _____

Diagnostic Assessment (B)

Oral Forward Count

Say: Count aloud from 1–100. (Write the numbers as the student says them.)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Oral Backward Count

Say: Count aloud from 1–30. (Write the numbers as the student says them.)

30	29	28	27	26	25	24	23	22	21
20	19	18	17	16	15	14	13	12	11
10	9	8	7	6	5	4	3	2	1

Compare numbers

Say: Circle the number that is greater.

35 53

21 12

Name: _____ Date _____

Diagnostic Assessment (C)

Oral Skip counting

Say: Can you count by 2's up to 60? (Write the numbers as the student says them.)

Say: Can you count by 5's up to 100? (Write the numbers as the student says them.)

Say: Can you count by 10's up to 100? (Write the numbers as the student says them.)

--	--	--	--	--	--	--	--	--	--

Say: Can you count by 100's up to 1,000? (Write the numbers as the student says them.)

--	--	--	--	--	--	--	--	--	--

Identify even and odd

Say: Circle all the even numbers. Then draw a box around all the odd numbers.

7

5

8

6

3

10

1

4

9

2

Basic Facts (Mental Math)

Say: Can you solve this for me.

(Allow time for the student to **mentally calculate**. Place a check mark next to the correct answer.)

9+4	6+8	5+7	7+3	8+8	3+3	6+6	4+8	5+5
9-5	8-3	6-2	10-4	11-2	5-5	12-9	15-5	7-3

Name: _____ **ANSWER KEY** _____ Date _____

Diagnostic Assessment (C)

Oral Skip counting

Say: Can you count by 2's up to 60? (Write the numbers as the student says them.)

2	4	6	8	10	12	14	16	18	20
22	24	26	28	30	32	34	36	38	40
42	44	46	48	50	52	54	56	58	60

Say: Can you count by 5's up to 100? (Write the numbers as the student says them.)

5	10	15	20	25	30	35	40	45	50
55	60	65	70	75	80	85	90	95	100

Say: Can you count by 10's up to 100? (Write the numbers as the student says them.)

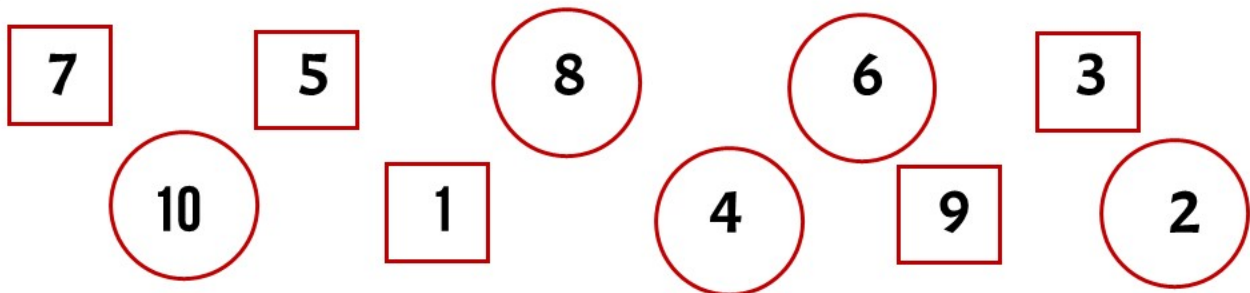
10	20	30	40	50	60	70	80	90	100
----	----	----	----	----	----	----	----	----	-----

Say: Can you count by 100's up to 1,000? (Write the numbers as the student says them.)

100	200	300	400	500	600	700	800	900	1000
-----	-----	-----	-----	-----	-----	-----	-----	-----	------

Identify even and odd

Say: Circle all the even numbers. Then draw a box around all the odd numbers.



Basic Facts (Mental Math)

Say: Can you solve this for me.

(Allow time for the student to **mentally calculate**. Place a check mark next to the correct answer.)

9+4 13	6+8 14	5+7 12	7+3 10	8+8 16	3+3 6	6+6 12	4+8 12	5+5 10
9-5 4	8-3 5	6-2 4	10-4 6	11-2 9	5-5 0	12-9 3	15-5 10	7-3 4

Name: _____ Date _____

Diagnostic Assessment (D)

Multiplication Facts

Say: Can you mentally solve this for me?

2×4	6×8	5×7	7×3	8×8	3×3	6×6	4×8	5×5
9×5	8×3	6×2	10×4	6×3	5×4	2×9	1×5	7×3

Division Facts

Say: Can you mentally solve this for me?

$4 \div 2$	$10 \div 5$	$12 \div 2$	$15 \div 3$	$30 \div 3$	$20 \div 10$
------------	-------------	-------------	-------------	-------------	--------------

Multiply and Divide

Say: Can you solve this for me?

$$\begin{array}{r} 24 \\ \times 3 \\ \hline \end{array}$$

$$37 \div 5 = \underline{\quad}$$

Fractions

Say: Can you shade this fraction?

--

--

--

--

$$\frac{1}{2}$$

$$\frac{1}{3}$$

$$\frac{1}{4}$$

$$\frac{3}{4}$$

Name: _____ **ANSWER KEY** _____ Date _____

Diagnostic Assessment (D)

Multiplication Facts

Say: Can you mentally solve this for me?

2×4 8	6×8 48	5×7 35	7×3 21	8×8 64	3×3 9	6×6 36	4×8 32	5×5 25
9×5 45	8×3 24	6×2 12	10×4 40	6×3 18	5×4 20	2×9 18	1×5 5	7×3 21

Division Facts

Say: Can you mentally solve this for me?

$4 \div 2$ 2	$10 \div 5$ 2	$12 \div 2$ 6	$15 \div 3$ 5	$30 \div 3$ 10	$20 \div 10$ 2
-----------------	------------------	------------------	------------------	-------------------	-------------------

Multiply and Divide

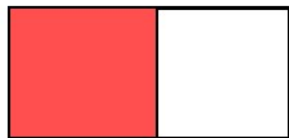
Say: Can you solve this for me?

$$\begin{array}{r} 24 \\ \times 3 \\ \hline 72 \end{array}$$

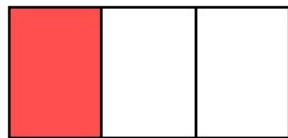
$$37 \div 5 = \underline{7 \text{ r} 2}$$

Fractions

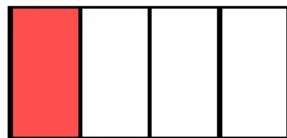
Say: Can you shade this fraction?



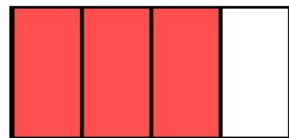
$$\frac{1}{2}$$



$$\frac{1}{3}$$



$$\frac{1}{4}$$



$$\frac{3}{4}$$

Name: _____ Date _____

Diagnostic Assessment (E)

Multiply & Divide

Say: Can you mentally solve this for me?

$$\begin{array}{r} 324 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ \times 14 \\ \hline \end{array}$$

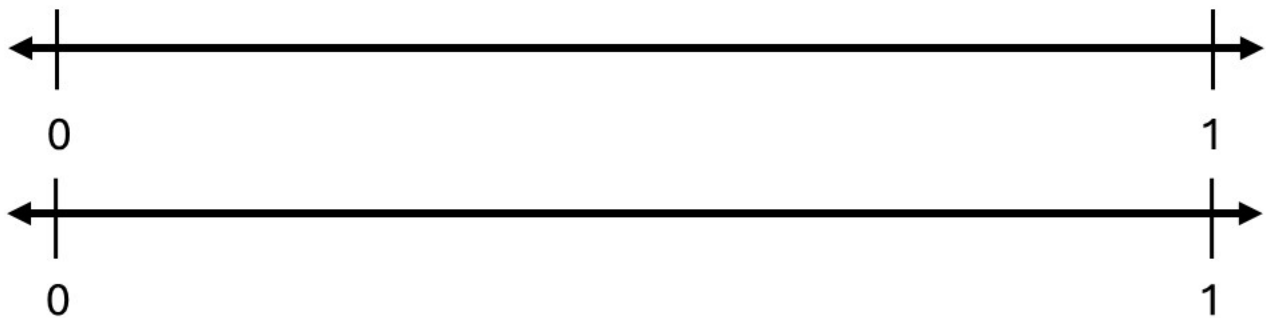
$$472 \div 6 = \underline{\quad}$$

Compare Fractions

Say: Which fraction is greater? How do you know?

$$\frac{1}{2}$$

$$\frac{2}{3}$$



Add & Subtract Fractions

Say: Solve.

$$\frac{2}{4} + \frac{3}{4} =$$

$$\frac{5}{8} - \frac{3}{8} =$$

Name: _____ **ANSWER KEY** _____ Date _____

Diagnostic Assessment (E)

Multiply & Divide

Say: Can you mentally solve this for me?

$$\begin{array}{r} 324 \\ \times 4 \\ \hline 1,296 \end{array}$$

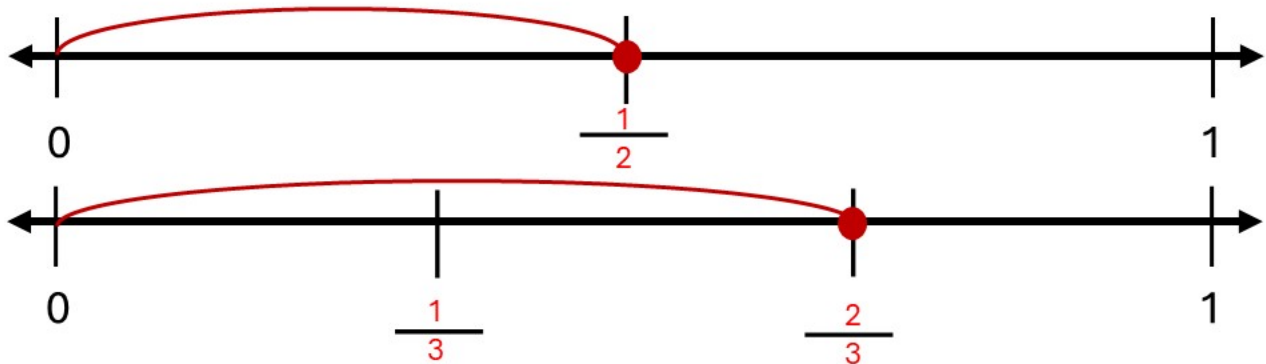
$$\begin{array}{r} 36 \\ \times 14 \\ \hline 144 \\ + 360 \\ \hline 504 \end{array}$$

$$472 \div 6 = \underline{\hspace{2cm}}$$
$$\begin{array}{r} 78 \text{ r } 4 \\ 6 \overline{) 472} \\ \underline{- 42} \\ 52 \\ \underline{- 48} \\ 4 \end{array}$$

Compare Fractions

Say: Which fraction is greater? How do you know?

$$\frac{1}{2} < \frac{2}{3}$$



Add & Subtract Fractions

Say: Solve.

$$\frac{2}{4} + \frac{3}{4} = \frac{7}{4}$$

$$\frac{5}{8} - \frac{3}{8} = \frac{2}{8}$$

Name: _____ Date _____

Diagnostic Assessment (F)

Decimals

Say: Solve

$$\begin{array}{r} 3.24 \\ +4.85 \\ \hline \end{array}$$

$$\begin{array}{r} 3.16 \\ - 1.45 \\ \hline \end{array}$$

$$\begin{array}{r} 13.1 \\ \times 8.74 \\ \hline \end{array}$$

$$13.1 \div 8.74 = \underline{\hspace{2cm}}$$

Multiply Fractions

Say: Solve

$$\frac{2}{3} \times \frac{4}{5} =$$

$$3 \div \frac{1}{2} =$$

Compare Decimals

Say: Use the symbols $>$ $<$ $=$ to compare.

$$0.62 \underline{\hspace{1cm}} 0.602$$

$$5.6 \underline{\hspace{1cm}} 5.61$$

$$1.9 \underline{\hspace{1cm}} 1.95$$

Name: _____ **ANSWER KEY** _____ Date _____

Diagnostic Assessment (E)

Decimals

Say: Solve

$$\begin{array}{r} \overset{1}{3.24} \\ +4.85 \\ \hline 8.09 \end{array}$$

$$\begin{array}{r} \overset{2}{\cancel{3}.16} \\ -1.45 \\ \hline 1.71 \end{array}$$

$$\begin{array}{r} 13.1 \\ \times 8.74 \\ \hline 524 \\ 9170 \\ +104800 \\ \hline 114,494 \end{array}$$

$$13.1 \div 8.74 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 1.4988 \\ 874 \overline{)1310.0000} \\ \underline{-874} \\ 4360 \\ \underline{-3496} \\ 8640 \\ \underline{-7866} \\ 7740 \end{array}$$

Multiply Fractions

Say: Solve

$$\frac{2}{3} \times \frac{4}{5} = \frac{8}{15}$$

$$3 \div \frac{1}{2} =$$

$$\boxed{\frac{3}{1} \text{ KEEP}} \times \boxed{\frac{2}{1} \text{ FLIP}} = \frac{6}{1} = 6$$

CHANGE

Compare Decimals

Say: Use the symbols $>$ $<$ $=$ to compare.

$$0.62 \underline{>} 0.602$$

$$5.6 \underline{<} 5.61$$

$$1.9 \underline{<} 1.95$$