INFORMAL MATH PROBES – GRADE 5

_____ can correctly

NUMERATION:
- Read numbers from .001 to 1 billion in _____/5 attempts.
- Write numbers from .001 to 1 billion in _____/5 attempts.

SUBTRACTION:
- Subtract 3 digits from 3 digits with regrouping in ____/5 problems.

MULTIPLICATION:
- Multiply 50 facts _____minutes, _____ seconds with _____ % accuracy.
- Multiply 3-digit by 1-digit numbers in _____/5 problems.
- Multiply 3-digit by 2-digit numbers in _____/5 problems.
- Square numbers 1-12 in ____/5 problems

DIVISION:
- Divide 3 digit by 1 digit with remainders in ____/5 problems.
- Divide 3 digits by 2 digits with remainders in ____/5 problems.

DECIMALS:
- Multiply decimals by natural numbers 1-9 in ____/5 problems
- Divide decimals by natural numbers 1-9 in ____/5 problems

FRACTIONS: (LCD-Lowest Common Denominator
- Write ____/5 fractions in lowest terms.
- Add fractions when LCD is included in ____/5 problems.
- Add fractions when LCD is not included in ____/5 problems.
- Subtract fractions when LCD is included in ____/5 problems.
- Subtract fractions when LCD is not included in ____/5 problems.

WORD PROBLEMS:
- Solve ____/5 fifth grade word problems.

CLASSROOM WORK:
- Daily assignments done with ____% accuracy.
- Chapter test scores range from ____% to ____% accuracy.

INFORMAL MATH PROBES – GRADE 5

Name: _____   Date: _____

NUMERATION:
Read numbers .001 through 1 billion:
1,739,451,276   0.025   1,107,251,602   122,620,015   0.135

/5

Write numbers .001 through 1 billion:

 _0.025_____   __0.135__   _122,620,015_ _1,107,251,602_   _1,739,451,276_

/5

SUBTRACTION:
Subtract 3 digits from 3 digits with regrouping:

a. 600	b. 700	c. 900	d. 500	e. 300
- 326	- 485	- 671	- 218	- 149
274	215	229	282	151

MULTIPLICATION:
Multiply 3-digit by 1-digit numbers:

a. 234	b. 376	c. 185	d. 478	e. 167
x 4	x 2	x 3	x 2	x 4
936	752	555	956	668

Multiply 3-digit number by 2-digit number

a. 486	b. 493	c. 786	d. 639	e. 793
x 35	x 65	x 94	x 87	x 59
17,010	32,045	73,884	55,593	46,787

Square the following numbers:

2	12	9	10	7
4	144	81	100	49
_____	_____	_____	_____	_____

Multiplication Facts

Name: _____

Time: _____ No. Correct: ____/100

8	5	2	3	5	7	9	2	4	6
x 9	x 5	x 2	x 4	x4	x 6	x 1	x10	x 3	x17
72	25	4	12	20	42	9	20	12	102
5	6	3	3	2	11	5	3	2	6
x 5	x 11	x 4	x 1	x 3	x 0	x 8	x 0	x 1	x 8
25	66	12	3	6	0	40	0	2	48
5	4	12	10	9	23	2	34	50	11
x 12	x 8	x 5	x 1	x 0	x 8	x 2	x 5	x 6	x 9
60	32	60	10	0	184	4	170	300	99
3	9	18	47	4	31	2	9	8	7
x 7	x 7	x 1	x 3	x 3	x 5	x 4	x 5	x 4	x 1
21	63	18	141	12	155	8	45	32	7
5	49	38	22	1	8	17	6	44	26
x19	x 3	x 2	x 9	x 2	x 10	x 6	x 6	x 2	x 3
95	147	76	198	2	80	102	36	88	78
18	43	31	48	26	18	25	41	18	27
x 8	x 6	x 7	x 3	x 9	x 7	x 6	x 6	x 9	x 5
144	258	217	144	234	126	150	246	162	135
33	41	49	27	13	29	47	37	26	15
x 3	x 3	x 4	x 8	x 5	x 8	x 7	x 2	x 0	x 1
99	123	196	216	65	232	329	74	0	15
25	27	15	34	42	29	18	26	45	39
x 7	x 4	x 0	x 9	x 8	x 9	x 6	x 4	x 3	x 2
175	108	0	306	336	261	108	104	135	78
49	47	26	35	11	44	27	36	14	42
x 1	x 0	x 2	x 5	x 4	x 6	x 9	x 7	x 4	x 0
49	0	52	175	44	264	243	252	56	0
28	24	38	17	42	14	39	13	32	24
x 7	x 7	x 8	x 8	x 7	x 8	x 9	x 9	x 7	x 1
196	168	304	136	294	112	351	117	224	24

5th Grade Math Probes

DIVISION
Divide 3-digits by 1-digit with remainders:

___72 r 3	__88 r1	__92 r 3	__37 r. 3	__68 r. 1
4) 291	3) 265	5) 463	8) 299	2) 137

Divide 3-digits by 2-digits with remainders:

___6 r41__	___8 r 26	___6 r 2__	__6 r 50__	__5 r 7___
42) 293	81) 674	38) 230	79) 524	84) 427

DECIMALS:
Multiply decimals by natural numbers 1-9:

.042 x 2 = 0.184   .5 x 6 = 3   .25 x 8 = 2   .333 x 9 = 2.997   .04 x 1 = 0.04

Divide decimals by natural numbers 1-9:

.5 ÷ 2 = 0.25   .025 ÷ 1 = 0.025   .623 ÷ 5 = 0.1246   .75 ÷ 9 = 0.083   .133 ÷ 4 = 0.033

FRACTIONS
Write in the lowest terms:

$\frac{5}{10} = \frac{1}{2}$ $\frac{6}{8} = \frac{3}{4}$ $\frac{4}{16} = \frac{1}{4}$ $\frac{3}{18} = \frac{1}{6}$ $\frac{2}{12} = \frac{1}{6}$

Adding and Subtracting Fractions

Add fractions with Lowest Common Denominator included:

$\dfrac{1}{4}$	$\dfrac{1}{12}$	$\dfrac{3}{10}$	$\dfrac{3}{14}$	$\dfrac{4}{15}$
$+\ \dfrac{2}{4}$	$+\ \dfrac{10}{12}$	$+\ \dfrac{5}{10}$	$+\ \dfrac{4}{14}$	$+\ \dfrac{3}{15}$
3/4	**11/12**	**4/5**	**1/2**	**7/15**

Add fractions without Lowest Common Denominator provided:

$\dfrac{3}{16}$	$\dfrac{4}{15}$	$\dfrac{1}{18}$	$\dfrac{3}{4}$	$\dfrac{5}{16}$
$+\ \dfrac{2}{10}$	$+\ \dfrac{3}{9}$	$+\ \dfrac{2}{12}$	$+\ \dfrac{5}{6}$	$+\ \dfrac{2}{6}$
1/4	**3/5**	**2/9**	**1 1/4**	**31/48**

Subtract fractions with Lowest Common Denominator included:

$\dfrac{8}{9}$	$\dfrac{7}{10}$	$\dfrac{9}{12}$	$\dfrac{11}{15}$	$\dfrac{6}{11}$
$-\ \dfrac{3}{9}$	$-\ \dfrac{5}{10}$	$-\ \dfrac{4}{12}$	$-\ \dfrac{7}{15}$	$-\ \dfrac{3}{11}$
5/9	**1/5**	**5/12**	**4/15**	**3/11**

Subtract fractions without Lowest Common Denominator provided

$\dfrac{3}{5}$	$\dfrac{1}{2}$	$\dfrac{3}{4}$	$\dfrac{1}{2}$	$\dfrac{5}{6}$
$-\ \dfrac{1}{3}$	$-\ \dfrac{2}{5}$	$-\ \dfrac{5}{9}$	$-\ \dfrac{2}{13}$	$-\ \dfrac{1}{5}$
4/15	**1/10**	**7/36**	**9/26**	**19/30**

Problem Solving

1. The Tasty Tea Company produced 6,792 tea bags one day. If they put 24 tea bags in each box, how many boxes do they need? They need 283 boxes

2. One truck has 854 cartons of tea to deliver. Another has 783 cartons. How many cartons are to be Delivered in all? 1,637 cartons will be delivered in all

3. There are 2,772 boxes of tea ready to be put into cartons. If there are 12 boxes in a carton, how many cartons are needed? 231 cartons are needed

4. 12 stores ordered a total of 6,300 boxes of tea. If each store ordered the same number of boxes, how many boxes does each receive? Each receives 525 boxes.

5. A Tasty Tea delivery truck traveled 634 miles one week and 586 miles another week. How much farther did it travel the first week? 48 more miles the first week