

How *Rocket Math* Works (Please see the sample pages which follow)

Rocket Math works so well because it teaches no more than 2 new facts and their reverses on each practice page. For example in the very first addition practice page, [Set A, introduces 1+3, 3+1, 1+2, 2+1](#), while Set B adds [4+1, 1+4, 5+1, 1+5](#) -- **Sample page 1-2**. Sometimes the pace is slower adding only one fact on a page (for example [Multiplication Sets L, M, N, O](#) -- **Sample pages 3-6**) where experience has shown students need a slower pace. The program allows each child to go at his or her own pace, taking up to six days to master those two facts as needed. Each day in class students practice in pairs for two to three minutes each. An explanation of how students practice follows on the next page. Students can, of course, also practice the same way at home. The [parent letter](#) -- **Sample pages 7-8** explains how this should be done at home.

After practicing each day the students take a one-minute test (found in the center of each practice sheet). This test gives them an opportunity daily to show they have learned a set of facts by writing answers as fast as they can write. Before beginning the program all students are given [the writing speed test](#) -- **Sample pages 9** which is used to set their [individual writing speed goals](#) -- **Sample page 10**. If students meet or beat their goal they move on to the next sheet in the sequence. If they don't pass the test, they practice on the same sheet the following day. Once students "pass" a set of facts, they color in the letter for that set on their "[Rocket Chart](#)" -- **Sample page 11** and then graduate on to the next practice page. Rocket Math includes several [award certificates](#) -- **Sample page 12-16** that reinforce student learning and increase their motivation.

Rocket Math has progress monitoring built into the program. Once a week students take a [two-minute progress monitoring test](#) -- **Sample page 17** of all the facts in the operation they are practicing. Each student has an [individual graph](#) -- **Sample page 18** on which to graph their increasing fluency with math facts. These graphs demonstrate student learning and should be shared with parents. The complete, informative and entertaining teacher directions are available for free download so you can completely familiarize yourself with the program before ordering.

How Students Practice

We recommend students practice in pairs in school. At home students should practice with a parent or a responsible sibling.

- One student, the “learner” sits with the [practice sheet](#) -- **Sample pages 1-6** in front of him/her. The problems for practice go in a circle around the outside of the page and *should not* have the answers written in. The learner will practice only these outside facts.
- The learner reads each fact (*not just the answer*) aloud and says the answer.
- The other student, the “checker” has the [answer key](#) -- **Sample page 23** and listens for a hesitation or an error on one of the facts. That is a fact that needs extra practice. So the checker
 1. **tells the answer** and then
 2. asks the learner to **repeat** the problem and the answer three times.
 3. asks the learner to **back up three problems** and begin again.
- Students go around the outside of the page as many times as they can in the two or three minutes allotted for practice. At home, we recommend working two or three minutes or once around the outside.

Addition Set A Practice around the box saying the fact problems and their answers.

1	2	3	1	2	1	1	2	1	3
<u>+3</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>

1	One Minute Timing							Name _____	1
<u>+2</u>	2	1	1	3	2	3	1	<u>+3</u>	
	<u>+1</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>		
2	2	1	1	3	2	3	1	2	
<u>+1</u>	<u>+1</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	
1	3	1	1	2	2	3	1	1	
<u>+3</u>	<u>+1</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+2</u>	
1	2	1	1	3	2	3	1	1	
<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+3</u>	
3	2	3	1	2	1	3	1	2	
<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+2</u>		<u>+1</u>	
2	1	1	3	2	3	1	3		
<u>+1</u>	<u>+1</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	
1	3	1	2	1	2	3	1	1	
<u>+3</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+2</u>	
1	2	1	3	1	2	3	1	1	
<u>+2</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	
3								3	
<u>+1</u>								<u>+1</u>	
	Goal _____			Number correct _____					

1	2	1	1	2	3	1	1	3	2
<u>+3</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	<u>+1</u>	<u>+1</u>

Addition Set B Practice around the box saying the fact problems and their answers.

1	4	1	5	1	4	1	5	3	1
<u>+4</u>	<u>+1</u>	<u>+5</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+4</u>

1	One Minute Timing								Name _____	2
<u>+2</u>	5	1	1	3	2	1	4		<u>+1</u>	
	<u>+1</u>	<u>+4</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>			
4	1	2	1	5	1	1	3		1	
<u>+1</u>	<u>+5</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+4</u>	<u>+2</u>	<u>+1</u>		<u>+5</u>	
1	4	1	1	2	1	1	3		1	
<u>+5</u>	<u>+1</u>	<u>+5</u>	<u>+2</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+1</u>		<u>+3</u>	
3	2	5	4	1	4	1			1	
<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>		<u>+1</u>	
4	1	2	1	2	1	1			2	
<u>+1</u>	<u>+4</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+2</u>		<u>+1</u>	
1	2	1	5	4	1	1			1	
<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+3</u>	<u>+2</u>		<u>+5</u>	
1	5	1	4	2	3	1	1		1	
<u>+5</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+4</u>	<u>+5</u>		<u>+4</u>	
1	4	1	1	5	2	3	1		3	
<u>+4</u>	<u>+1</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+4</u>		<u>+1</u>	
5	Goal _____								1	
<u>+1</u>	Number correct _____								<u>+5</u>	

1	2	5	1	1	4	2	5	1	4
<u>+3</u>	<u>+1</u>	<u>+1</u>	<u>+4</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+3</u>	<u>+1</u>

Multiplication Set L Practice around the box saying the fact problems and their answers.

<u>7</u>	<u>9</u>	<u>7</u>	<u>9</u>	<u>0</u>	<u>5</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>6</u>
<u>x9</u>	<u>x7</u>	<u>x9</u>	<u>x7</u>	<u>x4</u>	<u>x0</u>	<u>x8</u>	<u>x9</u>	<u>x7</u>	<u>x0</u>

5
x3

7
x9

9
x7

4
x3

7
x9

0
x6

9
x6

7
x7

4
x0

7
x9

6
x9

One Minute Timing								Name _____	
<u>2</u>	<u>9</u>	<u>3</u>	<u>0</u>	<u>1</u>	<u>9</u>	<u>5</u>			
<u>x1</u>	<u>x7</u>	<u>x1</u>	<u>x7</u>	<u>x3</u>	<u>x6</u>	<u>x1</u>			
<u>3</u>	<u>9</u>	<u>3</u>	<u>9</u>	<u>3</u>	<u>4</u>	<u>9</u>			
<u>x8</u>	<u>x3</u>	<u>x7</u>	<u>x5</u>	<u>x6</u>	<u>x3</u>	<u>x4</u>			
<u>3</u>	<u>2</u>	<u>2</u>	<u>5</u>	<u>2</u>	<u>3</u>	<u>2</u>			
<u>x3</u>	<u>x0</u>	<u>x2</u>	<u>x2</u>	<u>x4</u>	<u>x5</u>	<u>x9</u>			
<u>7</u>	<u>2</u>	<u>0</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>6</u>			
<u>x2</u>	<u>x6</u>	<u>x3</u>	<u>x3</u>	<u>x9</u>	<u>x9</u>	<u>x3</u>			
<u>3</u>	<u>9</u>	<u>5</u>	<u>9</u>	<u>6</u>	<u>7</u>	<u>9</u>			
<u>x3</u>	<u>x2</u>	<u>x5</u>	<u>x2</u>	<u>x7</u>	<u>x9</u>	<u>x9</u>			
<u>7</u>	<u>6</u>	<u>3</u>	<u>7</u>	<u>0</u>	<u>4</u>				
<u>x3</u>	<u>x4</u>	<u>x4</u>	<u>x2</u>	<u>x9</u>	<u>x8</u>	<u>x2</u>			
<u>8</u>	<u>3</u>	<u>9</u>	<u>9</u>	<u>3</u>	<u>5</u>				
<u>x2</u>	<u>x7</u>	<u>x9</u>	<u>x7</u>	<u>x0</u>	<u>x8</u>	<u>x9</u>			
<u>6</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>7</u>	<u>4</u>	<u>2</u>			
<u>x3</u>	<u>x9</u>	<u>x3</u>	<u>x9</u>	<u>x2</u>	<u>x2</u>	<u>x3</u>			
<u>8</u>	<u>2</u>	<u>2</u>	<u>8</u>	<u>3</u>	<u>9</u>	<u>3</u>			
<u>x1</u>	<u>x6</u>	<u>x2</u>	<u>x2</u>	<u>x5</u>	<u>x4</u>	<u>x7</u>			
Goal _____					Number correct _____				

9
x7

8
x3

9
x6

0
x8

7
x9

3
x3

0
x1

7
x9

2
x0

9
x7

<u>3</u>	<u>9</u>	<u>0</u>	<u>7</u>	<u>8</u>	<u>0</u>	<u>3</u>	<u>9</u>	<u>1</u>
<u>x0</u>	<u>x7</u>	<u>x3</u>	<u>x9</u>	<u>x3</u>	<u>x2</u>	<u>x8</u>	<u>x2</u>	<u>x0</u>

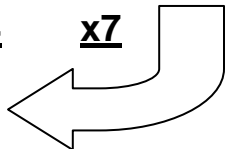
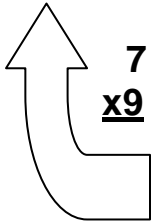
Multiplication Set M Practice around the box saying the fact problems and their answers.

<u>4</u>	<u>4</u>	<u>5</u>	<u>4</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>6</u>	<u>5</u>	<u>9</u>
<u>x4</u>	<u>x5</u>	<u>x4</u>	<u>x4</u>	<u>x9</u>	<u>x0</u>	<u>x7</u>	<u>x3</u>	<u>x4</u>	<u>x7</u>

<u>7</u>	One Minute Timing							Name _____	<u>0</u>
<u>x9</u>	5	3	9	5	9	7	6	<u>x7</u>	
	<u>x4</u>	<u>x1</u>	<u>x7</u>	<u>x1</u>	<u>x0</u>	<u>x1</u>	<u>x0</u>		
<u>5</u>	9	4	3	2	5	9	7	<u>4</u>	
<u>x4</u>	<u>x1</u>	<u>x0</u>	<u>x2</u>	<u>x0</u>	<u>x2</u>	<u>x6</u>	<u>x2</u>	<u>x4</u>	
<u>4</u>	9	9	9	4	9	4	7	<u>4</u>	
<u>x5</u>	<u>x5</u>	<u>x2</u>	<u>x4</u>	<u>x3</u>	<u>x3</u>	<u>x4</u>	<u>x9</u>	<u>x5</u>	
<u>5</u>	3	2	2	3	2	2	7	<u>7</u>	
<u>x0</u>	<u>x8</u>	<u>x2</u>	<u>x4</u>	<u>x7</u>	<u>x2</u>	<u>x2</u>	<u>x8</u>	<u>x9</u>	
<u>4</u>	3	3	6	6	8	7	0	<u>4</u>	
<u>x5</u>	<u>x5</u>	<u>x1</u>	<u>x7</u>	<u>x2</u>	<u>x3</u>	<u>x3</u>	<u>x3</u>	<u>x4</u>	
<u>9</u>	8	5	6	4	0	1	1	<u>4</u>	
<u>x7</u>	<u>x2</u>	<u>x3</u>	<u>x3</u>	<u>x4</u>	<u>x8</u>	<u>x2</u>	<u>x2</u>	<u>x4</u>	
<u>4</u>	6	2	5	2	4	2	3	<u>9</u>	
<u>x4</u>	<u>x9</u>	<u>x3</u>	<u>x9</u>	<u>x5</u>	<u>x9</u>	<u>x7</u>	<u>x9</u>	<u>x7</u>	
<u>3</u>	2	3	1	0	5	7	8	<u>9</u>	
<u>x9</u>	<u>x9</u>	<u>x4</u>	<u>x1</u>	<u>x1</u>	<u>x4</u>	<u>x9</u>	<u>x3</u>	<u>x3</u>	
<u>0</u>	2	5	2	4	2	3	2	<u>7</u>	
<u>x5</u>	<u>x3</u>	<u>x9</u>	<u>x5</u>	<u>x9</u>	<u>x6</u>	<u>x5</u>	<u>x8</u>	<u>x9</u>	
<u>4</u>	Goal _____							Number correct _____	<u>1</u>
<u>x4</u>									<u>x0</u>

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<u>7</u>	<u>9</u>	<u>7</u>	<u>4</u>	<u>5</u>	<u>9</u>	<u>0</u>	<u>3</u>	<u>4</u>	<u>9</u>
<u>x9</u>	<u>x0</u>	<u>x9</u>	<u>x4</u>	<u>x4</u>	<u>x7</u>	<u>x8</u>	<u>x7</u>	<u>x4</u>	<u>x7</u>



Multiplication Set N Practice around the box saying the fact problems and their answers.

8 <u>x9</u>	9 <u>x8</u>	8 <u>x9</u>	9 <u>x8</u>	4 <u>x4</u>	4 <u>x5</u>	7 <u>x9</u>	8 <u>x0</u>	9 <u>x7</u>	5 <u>x4</u>
------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------

4
x4

9
x8

5
x4

8
x9

9
x7

9
x8

0
x3

8
x9

7
x9

4
x4

9
x8

One Minute Timing								Name _____
1	8	2	4	2	7	2		4 <u>x4</u>
<u>x1</u>	<u>x9</u>	<u>x2</u>	<u>x4</u>	<u>x4</u>	<u>x9</u>	<u>x6</u>		
0	3	2	3	3	9	3		9 <u>x8</u>
<u>x7</u>	<u>x3</u>	<u>x8</u>	<u>x8</u>	<u>x5</u>	<u>x8</u>	<u>x6</u>		
7	8	8	4	6	5	8		8 <u>x9</u>
<u>x3</u>	<u>x0</u>	<u>x3</u>	<u>x1</u>	<u>x2</u>	<u>x3</u>	<u>x2</u>		
6	3	9	2	7	9	5		5 <u>x9</u>
<u>x3</u>	<u>x2</u>	<u>x1</u>	<u>x5</u>	<u>x2</u>	<u>x8</u>	<u>x4</u>		
9	6	6	2	4	3	9		9 <u>x8</u>
<u>x7</u>	<u>x0</u>	<u>x9</u>	<u>x9</u>	<u>x3</u>	<u>x9</u>	<u>x4</u>		
5	7	4	8	2	6	2		4 <u>x4</u>
<u>x9</u>	<u>x9</u>	<u>x5</u>	<u>x9</u>	<u>x7</u>	<u>x1</u>	<u>x3</u>		
3	9	9	5	3	9	4		5 <u>x4</u>
<u>x4</u>	<u>x3</u>	<u>x7</u>	<u>x0</u>	<u>x7</u>	<u>x6</u>	<u>x9</u>		
4	9	9	5	8	0	4		7 <u>x9</u>
<u>x2</u>	<u>x5</u>	<u>x2</u>	<u>x2</u>	<u>x1</u>	<u>x3</u>	<u>x2</u>		
8	4	2	7	9	3	6		9 <u>x8</u>
<u>x9</u>	<u>x4</u>	<u>x9</u>	<u>x3</u>	<u>x8</u>	<u>x4</u>	<u>x2</u>		
Goal _____								4 <u>x4</u>
Number correct _____								

9
x7

4
x5

8
x9

8
x3

7
x9

4
x4

8
x9

4
x5

9
x7

Multiplication Set O Practice around the box saying the fact problems and their answers.

$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$
--	--	--	--	--	--	--	--	--	--

$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$

$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$

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

$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$

$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$

$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$

$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$

$\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$

$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$

$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$

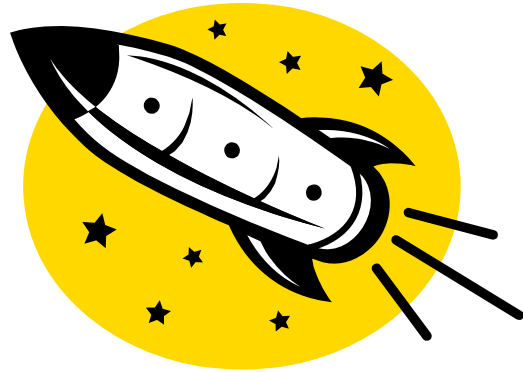
$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$

One Minute Timing								Name _____	
$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$			
$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 0 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$			
$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$			
$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 1 \\ \hline \end{array}$			
$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$			
$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 0 \\ \hline \end{array}$			
$\begin{array}{r} 1 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 7 \\ \hline \end{array}$			
$\begin{array}{r} 9 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$			
$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$			
Goal _____				Number correct _____					

$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 0 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$
--	--	--	--	--	--	--	--	--

Dear Parents,

This year my students are going to be spending time daily practicing and learning math facts, beginning in the operation of _____ . Our class will keep working on these facts until everyone knows all the facts in this operation instantly, without any pause before answering. We will be using a program called *Rocket Math*.



It will take only a few minutes each day of class time, but students will keep working until they have mastered all the facts. A fact is mastered when it can be answered instantly, without any pause. *Rocket Math* is unique because it teaches only 2 facts and their reverses on each page. For example 6x3, 3x6, 4x5 and 5x4. The program allows each child to go at his or her own pace, taking as many days to master those two facts as needed. Students are given an opportunity daily to show they have learned a set of facts by passing a test. Once students “pass” a set of facts, they color in the letter for that set on their “Rocket Chart.”

You can help your child progress and learn faster by practicing at home. Any day your child does not pass a set of facts he or she will have that day’s practice sheet to bring home as homework. It will help a great deal if you will practice with your child for five minutes with that sheet.

Here’s how we recommend you practice:

- Your child sits with the practice sheet in front of him/her. The problems for practice go in a circle around the outside of the page and *should not* have the answers written in. You will work only these outside facts. You may wish to tape paper over the inside part. This is the test that your child took that day.
- Your child reads each fact (*not just the answer*) aloud and says the answer.

- If you hear either the slightest hesitation or an error on one of the facts, give your child some extra practice on that fact by immediately giving your child the answer and asking him/her to repeat the problem and the answer again.
- Your child then backs up three problems and begins again.
- If there is no hesitation or mistake when the problem is reached this time, be sure to praise your child and let him/her continue. Go once around the outside of the page. This should only take about five minutes. If you would like to do a second session of practice, wait at least an hour, or try it again in the morning. When working on memorizing facts, two short sessions with time in between, is much more helpful than one very long session.
- **Your child will be able to explain this procedure to you because it is the same that we practice in class.**

Learning all the facts in an operation is a lot of work, but future success in math is dependent upon knowing facts so well that the answers come automatically without much thinking. Especially in a world of calculators, being able to compute math facts mentally is needed just to know if the calculator answer is correct. You can also help by sharing with your child the importance of learning math facts. Thank you so much for your support of this critical learning goal. I will keep you notified of your child's success in this important task.

Sincerely,

Writing Speed Test

Write the number in each box. You will have one minute. Wait for the teacher's signal.

23	7	28	4	67	6
----	---	----	---	----	---

6 boxes

54	5	57	9	45	12
----	---	----	---	----	----

12 boxes

81	4	42	1	66	18
----	---	----	---	----	----

6 boxes

19	2	30	3	8	4
----	---	----	---	---	---

12 boxes

36	1	6	5	11	6
----	---	---	---	----	---

30 boxes

68	9	5	7	17	36
----	---	---	---	----	----

36 boxes

94	6	47	8	10	42
----	---	----	---	----	----

42 boxes

70	8	35	9	21	48
----	---	----	---	----	----

48 boxes

57	4	24	5	16	54
----	---	----	---	----	----

54 boxes

How many boxes were completed? _____

Goal Sheet

What is your goal? It's to meet or beat your best score ever, each time.

Directions: To identify the student's goals highlight or circle the entire row.

Boxes Filled	15 sec. Placement Probe	1 minute Daily Test	2 minute Annual Goal
24 or less	Place into <i>Mastering Numerals</i> to improve writing		
25	6	25	50
26	6	26	52
27	6	27	54
28	7	28	56
29	7	29	58
30	7	30	60
31	7	31	62
32	8	32	64
33	8	33	66
34	8	34	68
35	8	35	70
36	8	36	72
37	9	37	74
38	9	38	76
39	9	39	78
40	10	40	80
41	10	41	80
42	10	42	80
43	10	43	80
44	11	44	80
45	11	45	80
46	11	46	80
47	11	47	80
48	12	48	80
49	12	49	80
50	12	50	80
51	12	51	80
52	13	52	80
53	13	53	80
54	13	54	80

sample page
DO NOT duplicate

Write your **STARTING** goals here. Remember, whenever you beat your goal, cross it out and write down your new "record score" as your new goal!

My goal for a 15- second placement probe: _____

My goal for a 1 minute Daily Test: _____

ROCKET CHART

_____ is rocketing ahead in

_____ math facts.

Sample page
Do Not duplicate

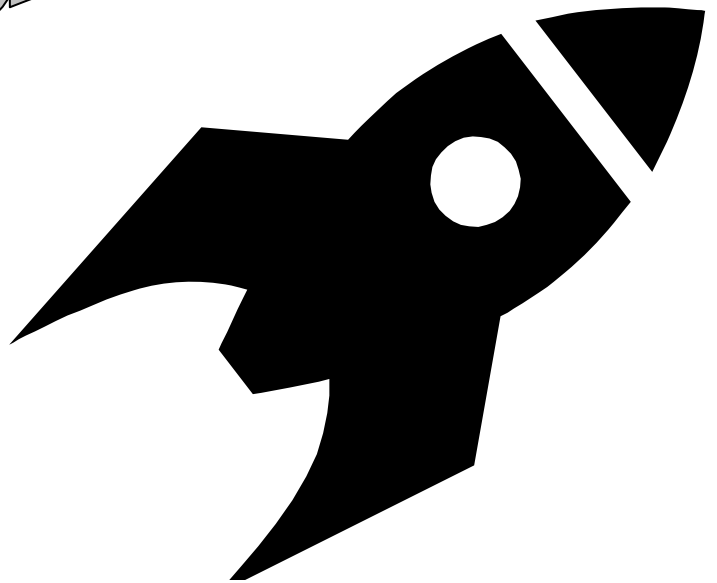
Set	1 st try	2 nd try	3 rd try	4 th try	5 th try	6 th try
Z						
Y						
X						
W						
V						
U						
T						
S						
R						
Q						
P						
O						
N						
M						
L						
K						
J						
I						
H						
G						
F						
E						
D						
C						
B						
A						

Wow! You moved up the Rocket Chart!

To:

Date

Signature



Congratulations

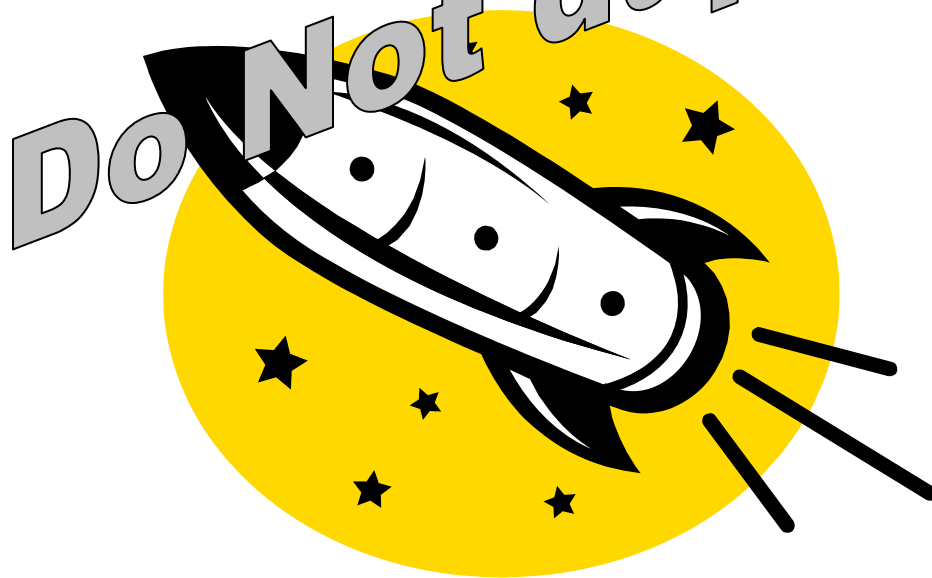
You are getting faster and faster

You have been making steady progress in the Rocket Math program.

To: _____

Date _____

Signature _____





sample page
to Rocket Math

Do Not duplicate

You helped me get better!

To: _____



You Are Awesome!

You are making
incredible progress with
your math facts.

Awarded to:

sample page
Do Not duplicate

Signature



Sample page
Your progress in the Rocket
Math program is Out of this
World!

Be Proud!!!

To: _____

SUBTRACTION TWO MINUTE TIMING # 1

8	11	6	14	11	9	12	15	3	12
<u>-7</u>	<u>-6</u>	<u>-5</u>	<u>-9</u>	<u>-9</u>	<u>-8</u>	<u>-6</u>	<u>-9</u>	<u>-1</u>	<u>-5</u>

7	4	13	2	13	5	14	6	15	10
<u>-6</u>	<u>-1</u>	<u>-8</u>	<u>-1</u>	<u>-6</u>	<u>-1</u>	<u>-7</u>	<u>-2</u>	<u>-8</u>	<u>-9</u>

16	4	10	14	5	16	7	9	7	9
<u>-8</u>	<u>-2</u>	<u>-8</u>	<u>-6</u>	<u>-2</u>	<u>-9</u>	<u>-2</u>	<u>-7</u>	<u>-7</u>	<u>-0</u>

8	12	9	8	10	18	7	9	15	11
<u>-6</u>	<u>-8</u>	<u>-4</u>	<u>-4</u>	<u>-7</u>	<u>-9</u>	<u>-3</u>	<u>-6</u>	<u>-7</u>	<u>-8</u>

12	10	11	13	10	5	8	7	17	1
<u>-3</u>	<u>-6</u>	<u>-4</u>	<u>-4</u>	<u>-5</u>	<u>-5</u>	<u>-5</u>	<u>-4</u>	<u>-9</u>	<u>-0</u>

15	5	16	10	5	8	3	7	6	11
<u>-6</u>	<u>-3</u>	<u>-8</u>	<u>-1</u>	<u>-4</u>	<u>-1</u>	<u>-2</u>	<u>-1</u>	<u>-4</u>	<u>-2</u>

7	18	6	8	13	9	11	8	2	13
<u>-5</u>	<u>-9</u>	<u>-3</u>	<u>-2</u>	<u>-5</u>	<u>-3</u>	<u>-5</u>	<u>-3</u>	<u>-1</u>	<u>-7</u>

6	9	16	12	6	10	15	14	4	9
<u>-1</u>	<u>-2</u>	<u>-7</u>	<u>-7</u>	<u>-3</u>	<u>-2</u>	<u>-8</u>	<u>-5</u>	<u>-3</u>	<u>-1</u>

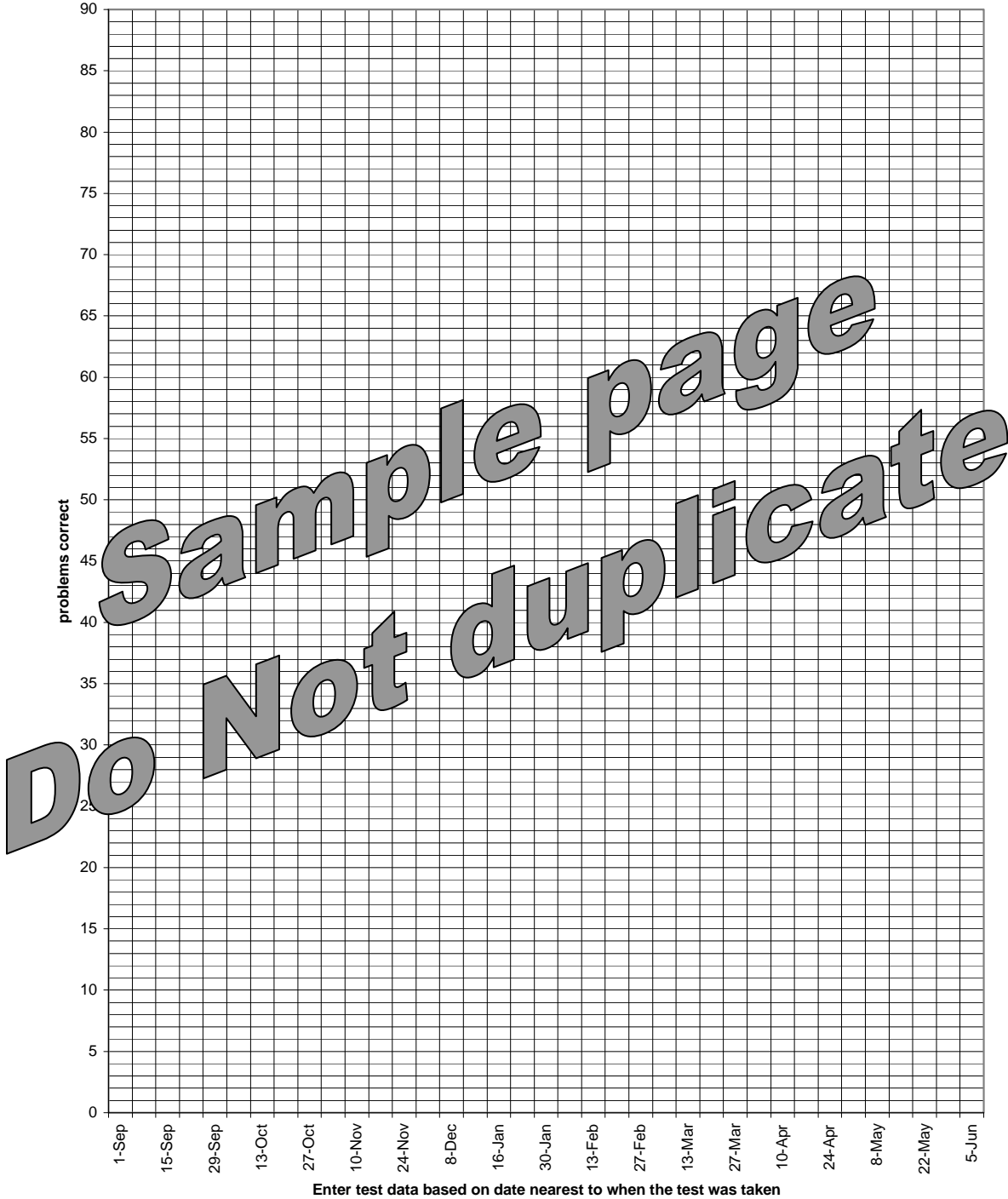
4	10	11	4	14	11	8	12	15	12
<u>-2</u>	<u>-4</u>	<u>-7</u>	<u>-4</u>	<u>-7</u>	<u>-3</u>	<u>-4</u>	<u>-9</u>	<u>-7</u>	<u>-6</u>

12	17	6	2	13	10	14	8	10	9
<u>-4</u>	<u>-8</u>	<u>-6</u>	<u>-0</u>	<u>-9</u>	<u>-5</u>	<u>-8</u>	<u>-0</u>	<u>-3</u>	<u>-5</u>

Goal _____

Number correct _____

Individual Student Graph



ADDITION PLACEMENT PROBES

(15 second mini-tests)

Placement Probe --- Addition Facts --- A-F

Goal ___ Correct ___

2	1	4	8	2	4	1
<u>+1</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	<u>+9</u>

2	1	3	5	7	1	1
<u>+3</u>	<u>+1</u>	<u>+2</u>	<u>+1</u>	<u>+1</u>	<u>+6</u>	<u>+1</u>

Placement Probe --- Addition Facts --- G-L

Goal ___ Correct ___

2	7	9	3	5	6	2
<u>+5</u>	<u>+2</u>	<u>+4</u>	<u>+5</u>	<u>+9</u>	<u>+3</u>	<u>+7</u>

4	3	6	4	3	3	3
<u>+9</u>	<u>+3</u>	<u>+1</u>	<u>+3</u>	<u>+3</u>	<u>+9</u>	<u>+7</u>

Placement Probe --- Addition Facts --- M-R

Goal ___ Correct ___

6	4	3	8	7	8	7
<u>+9</u>	<u>+1</u>	<u>+4</u>	<u>+8</u>	<u>+9</u>	<u>+9</u>	<u>+3</u>

0	9	9	9	5	4	2
<u>+8</u>	<u>+6</u>	<u>+9</u>	<u>+8</u>	<u>+4</u>	<u>+7</u>	<u>+0</u>

Placement Probe --- Addition Facts --- S-Z

Goal ___ Correct ___

5	8	6	8	7	8	7
<u>+6</u>	<u>+5</u>	<u>+7</u>	<u>+6</u>	<u>+5</u>	<u>+7</u>	<u>+6</u>

7	5	6	6	6	8	7
<u>+8</u>	<u>+8</u>	<u>+5</u>	<u>+8</u>	<u>+6</u>	<u>+8</u>	<u>+7</u>

SUBTRACTION PLACEMENT PROBES

(15 second mini-tests)

Placement Probe --- Subtraction Facts --- A-F Goal ____ Correct ____

$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ -2 \\ \hline \end{array}$
--	---	--	--	--	--	--

$\begin{array}{r} 10 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ -3 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$
---	--	--	--	---	--	--

Placement Probe --- Subtraction Facts --- G-L Goal ____ Correct ____

$\begin{array}{r} 17 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ -3 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -2 \\ \hline \end{array}$
---	--	---	--	--	--	--

$\begin{array}{r} 8 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ -7 \\ \hline \end{array}$
--	---	--	---	--	--	--

Placement Probe --- Subtraction Facts --- M-R Goal ____ Correct ____

$\begin{array}{r} 15 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -3 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ -5 \\ \hline \end{array}$
---	--	---	---	---	---	--

$\begin{array}{r} 13 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ -3 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ -7 \\ \hline \end{array}$
---	---	---	---	---	---	--

Placement Probe --- Subtraction Facts --- S-Z Goal ____ Correct ____

$\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ -6 \\ \hline \end{array}$
---	---	---	---	---	---	---

$\begin{array}{r} 13 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ -9 \\ \hline \end{array}$
---	---	---	---	---	---	---

MULTIPLICATION PLACEMENT PROBES

(15 second mini-tests)

Placement Probe --- Multiplication Facts --- A-F Goal ____ Correct ____

4	9	2	2	3	2	1
<u>x3</u>	<u>x2</u>	<u>x6</u>	<u>x3</u>	<u>x3</u>	<u>x7</u>	<u>x7</u>

2	3	2	1	5	8	4
<u>x2</u>	<u>x4</u>	<u>x9</u>	<u>x3</u>	<u>x2</u>	<u>x2</u>	<u>x2</u>

Placement Probe --- Multiplication Facts --- G-L Goal ____ Correct ____

9	3	6	9	6	3	3
<u>x7</u>	<u>x0</u>	<u>x3</u>	<u>x7</u>	<u>x9</u>	<u>x3</u>	<u>x7</u>

0	7	4	4	2	4	3
<u>x4</u>	<u>x9</u>	<u>x6</u>	<u>x9</u>	<u>x7</u>	<u>x4</u>	<u>x5</u>

Placement Probe --- Multiplication Facts --- M-R Goal ____ Correct ____

7	9	6	4	4	6	4
<u>x4</u>	<u>x8</u>	<u>x6</u>	<u>x5</u>	<u>x8</u>	<u>x5</u>	<u>x6</u>

5	4	8	4	5	8	7
<u>x8</u>	<u>x4</u>	<u>x9</u>	<u>x7</u>	<u>x5</u>	<u>x4</u>	<u>x5</u>

Placement Probe --- Multiplication Facts --- S-Z Goal ____ Correct ____

6	7	8	9	8	7	7
<u>x7</u>	<u>x8</u>	<u>x6</u>	<u>x9</u>	<u>x8</u>	<u>x7</u>	<u>x6</u>

8	8	7	6	9	7	6
<u>x8</u>	<u>x7</u>	<u>x7</u>	<u>x8</u>	<u>x9</u>	<u>x8</u>	<u>x7</u>

DIVISION PLACEMENT PROBES

(15 second mini-tests)

Placement Probe --- Division Facts --- A-F Goal ____ Correct ____

1) $\overline{7}$ 9) $\overline{18}$ 2) $\overline{14}$ 2) $\overline{8}$ 2) $\overline{12}$ 4) $\overline{8}$ 2) $\overline{18}$

4) $\overline{4}$ 2) $\overline{16}$ 3) $\overline{6}$ 7) $\overline{14}$ 2) $\overline{4}$ 2) $\overline{10}$ 1) $\overline{8}$

Placement Probe --- Division Facts --- G-L Goal ____ Correct ____

3) $\overline{24}$ 6) $\overline{54}$ 2) $\overline{18}$ 5) $\overline{45}$ 3) $\overline{21}$ 4) $\overline{12}$

3) $\overline{27}$ 8) $\overline{2}$ 9) $\overline{54}$ 3) $\overline{18}$ 4) $\overline{36}$ 9) $\overline{27}$

Placement Probe --- Division Facts --- M-R Goal ____ Correct ____

7) $\overline{63}$ 4) $\overline{16}$ 9) $\overline{72}$ 4) $\overline{24}$ 8) $\overline{32}$ 5) $\overline{25}$ 4) $\overline{20}$

7) $\overline{28}$ 6) $\overline{30}$ 9) $\overline{63}$ 8) $\overline{72}$ 5) $\overline{35}$ 6) $\overline{24}$ 4) $\overline{32}$

Placement Probe --- Division Facts --- S-Z Goal ____ Correct ____

6) $\overline{36}$ 7) $\overline{49}$ 8) $\overline{64}$ 7) $\overline{56}$ 8) $\overline{40}$ 6) $\overline{48}$ 6) $\overline{42}$

7) $\overline{49}$ 9) $\overline{81}$ 8) $\overline{48}$ 5) $\overline{40}$ 8) $\overline{56}$ 7) $\overline{42}$ 6) $\overline{36}$

Addition Set Z

PRACTICE ANSWER KEY.

8	5	4	6	9	5	7	5	8	6
<u>+8</u>	<u>+5</u>	<u>+8</u>	<u>+4</u>	<u>+8</u>	<u>+4</u>	<u>+9</u>	<u>+6</u>	<u>+5</u>	<u>+7</u>
16	10	12	10	17	9	16	11	13	13

7									9
<u>+6</u>									<u>+2</u>
13									11

3									6
<u>+9</u>									<u>+9</u>
12									15

9									3
<u>+5</u>									<u>+6</u>
14									9

4									4
<u>+3</u>									<u>+4</u>
7									8

2									7
<u>+3</u>									<u>+3</u>
5									10

9									8
<u>+7</u>									<u>+3</u>
16									11

8									9
<u>+6</u>									<u>+9</u>
14									18

7									7
<u>+8</u>									<u>+4</u>
15									11

6									5
<u>+6</u>									<u>+7</u>
12									12

9	4	5	9	5	8	3	8	7	6
<u>+6</u>	<u>+7</u>	<u>+3</u>	<u>+4</u>	<u>+2</u>	<u>+9</u>	<u>+8</u>	<u>+7</u>	<u>+7</u>	<u>+8</u>
15	11	8	13	7	17	11	15	14	14

