Name
3.OA. 7

Multiply.

| 7 |
| ---: |
| $\times 2$ |$\times 8$

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

$$
\begin{array}{r}
6 \\
\times 1 \\
\hline
\end{array}
$$

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

5
$\times 4$

| 3 | 8 | 9 | 7 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| $\times 8$ | $\times 5$ | $\times 8$ | $\times 5$ | $\underline{5}$ |
|  |  |  |  |  |
| 4 | 2 | 3 | 8 | 7 |
| $\times 5$ | $\times 8$ | $\times 7$ | $\times 5$ | $\times 4$ |


| 6 | 8 | 9 | 3 | 8 |
| ---: | ---: | ---: | ---: | ---: |
| $\times 7$ |  |  |  |  |
| $\times 4$ | $\times 3$ | $\times 6$ | 5 |  |
| $\times 3$ |  |  |  |  |
| 7 | 8 | 9 | 6 | 6 |
| $\times 7$ | $\times 10$ | $\times 2$ | $\times 8$ | $\times 5$ |

$\qquad$

Teacher notes:
Fluently multiply and divide within 100 , using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5=40$, one knows $40 \div 5=8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Students who demonstrate full accomplishment can multiply any two numbers with a product within 100 with ease by picking and using strategies that will get to the answer fairly quickly, and/or can instantly recall from memory the product of any two one-digit numbers.

Students who demonstrate partial mastery may have efficient strategies for some multiplication and division facts, but may rely on other strategies such as making arrays, equal groups and/or repeated addition/subtraction to solve for facts that they have not mastered.

| Not yet: Student shows misunderstanding, inc procedure | evidence of ect concept or | Got It: Student essentially understands the target concept. |  |
| :---: | :---: | :---: | :---: |
| 0 Unsatisfactory: Little Accomplishment <br> The task is attempted and some mathematical effort is made. There may be fragments of accomplishment but little or no success. Further teaching is required. | 1 Marginal: <br> Partial <br> Accomplishment <br> Part of the task is accomplished, but there is lack of evidence of understanding or evidence of not understanding. Further teaching is required. | 2 Proficient: <br> Substantial Accomplishment <br> Student could work to full accomplishment with minimal feedback from teacher. Errors are minor. Teacher is confident that understanding is adequate to accomplish the objective with minimal assistance. | 3 Excellent: <br> Full <br> Accomplishment <br> Strategy and execution meet the content, process, and qualitative demands of the task or concept. Student can communicate ideas. May have minor errors that do not impact the mathematics. |

Adapted from Van de Walle, J. (2004) Elementary and Middle School Mathematics: Teaching Developmentally. Boston: Pearson Education, 65

