# Page 

When multiplying by ten encourage the student to look for patterns. Notice that whenever you multiply ten times any number the answer is that number plus a zero. That is because 10 is made up of a digit and a 0 digit. So 4 times 10 is $4 \times 1=4$ and $4 \times 0=0$, or 40 . To make sure the student has this concept, I like to ask, "What is banana times ten?" The answer is banana zero pronounced "banana-ty". The "ty" stands for ten. These are easy facts to learn and remember, but don't take them for granted. Make sure they are mastered using any of the techniques shown below.

On the skip counting sheets, there have been rectangles where the student wrote in the fact at the end of the line in the space with an underline. These can be put to the same use by adding the multiplication problem to the multiple of 10 . Here are a few examples.

|  |  |  |  |  |  |  |  |  | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
|  |  | 20 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | "ten counted one time equals ten" or $10 \times 1=10$



Another way to show this is on a number chart. Circling all of the 10 facts, or multiples of 10 , reveals the pattern that corresponds to the blocks above.

| 0 | 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 |  |  |  |  |  |  |  |  |  |

Of course each fact can be built in the shape of a rectangle. Whenever illustrating with the blocks, also write it and say it as you build.


10 counted 5 times is the same as 50 , or 10 times 5 equals 50 , or 10 over and 5 up is 50 .

# Sample Student Text Page 

Counting by ten is the first step. After this is accomplished, say the factors slowly, then ask the student to say the product. For example, you say, "ten counted one time" or "ten times one" and the student says "ten". Continue by saying "ten times two" and the student says "twenty". (I often have them say twoty as well as twenty to show there is order in our words). Proceed through all the facts sequentially just like they learned to count by ten.

Here are the ten facts with the corresponding numbering.


| $0 \times 0$ | $0 \times 1$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 \times 0$ | $1 \times 1$ | $0 \times 2$ | $0 \times 3$ | $0 \times 4$ | $0 \times 5$ | $0 \times 6$ | $0 \times 7$ | $0 \times 8$ | $0 \times 9$ | $0 \times 10$ |
| $2 \times 0$ | $1 \times 2$ | $1 \times 3$ | $1 \times 4$ | $1 \times 5$ | $1 \times 6$ | $1 \times 7$ | $1 \times 8$ | $1 \times 9$ | $1 \times 10$ |  |
|  | $2 \times 1$ | $2 \times 2$ | $2 \times 3$ | $2 \times 4$ | $2 \times 5$ | $2 \times 6$ | $2 \times 7$ | $2 \times 8$ | $2 \times 9$ | $2 \times 10$ |
| $3 \times 0$ | $3 \times 1$ | $3 \times 2$ | $3 \times 3$ | $3 \times 4$ | $3 \times 5$ | $3 \times 6$ | $3 \times 7$ | $3 \times 8$ | $3 \times 9$ | $3 \times 10$ |
| $4 \times 0$ | $4 \times 1$ | $4 \times 2$ | $4 \times 3$ | $4 \times 4$ | $4 \times 5$ | $4 \times 6$ | $4 \times 7$ | $4 \times 8$ | $4 \times 9$ | $4 \times 10$ |
| $5 \times 0$ | $5 \times 1$ | $5 \times 2$ | $5 \times 3$ | $5 \times 4$ | $5 \times 5$ | $5 \times 6$ | $5 \times 7$ | $5 \times 8$ | $5 \times 9$ | $5 \times 10$ |
| $6 \times 0$ | $6 \times 1$ | $6 \times 2$ | $6 \times 3$ | $6 \times 4$ | $6 \times 5$ | $6 \times 6$ | $6 \times 7$ | $6 \times 8$ | $6 \times 9$ | $6 \times 10$ |
| $7 \times 0$ | $7 \times 1$ | $7 \times 2$ | $7 \times 3$ | $7 \times 4$ | $7 \times 5$ | $7 \times 6$ | $7 \times 7$ | $7 \times 8$ | $7 \times 9$ | $7 \times 10$ |
| $8 \times 0$ | $8 \times 1$ | $8 \times 2$ | $8 \times 3$ | $8 \times 4$ | $8 \times 5$ | $8 \times 6$ | $8 \times 7$ | $8 \times 8$ | $8 \times 9$ | $8 \times 10$ |
| $9 \times 0$ | $9 \times 1$ | $9 \times 2$ | $9 \times 3$ | $9 \times 4$ | $9 \times 5$ | $9 \times 6$ | $9 \times 7$ | $9 \times 8$ | $9 \times 9$ | $9 \times 10$ |
| $10 \times 0$ | $10 \times 1$ | $10 \times 2$ | $10 \times 3$ | $10 \times 4$ | $10 \times 5$ | $10 \times 6$ | $10 \times 7$ | $10 \times 8$ | $10 \times 9$ | $10 \times 10$ |

Money $\quad 10 \notin=1$ Dime A good place to apply math is with money. We've learned that $10 \phi$ is the same as 1 dime, so we can ask how many pennies in 6 dimes to apply 6 times 10. The answer is 60¢. Consider the example.

## Example

How many pennies in 6 dimes?
(10¢) $10 \phi$
104
(10¢)
(106) 106 $6 \cdot 10 \phi=60 \phi$

Find the answer by multiplying.

1) $10 \times 0=$ $\qquad$
2) $5 \times 10=$ $\qquad$
3) $10 \times 2=$ $\qquad$
4) $6 \times 10=$ $\qquad$
5) $(10)(10)=$
6) $(10)(3)=$ $\qquad$
7) $10 \cdot 9=$ $\qquad$
8) $10 \cdot 7=$ $\qquad$
9) 

| 10 |
| ---: |
| $\times \quad 2$ |

10) 

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

11) 


12)

13) $10 \times 7=$ $\qquad$
$7 \times 10=$ $\qquad$
14) $4 \times 10=$ $\qquad$
$10 \times 4=$ $\qquad$
15) $10 \times 6=$ $\qquad$ $6 \times 10=$ $\qquad$
16) $10 \times 3=$ $\qquad$ $3 \times 10=$ $\qquad$

Color all the boxes that have a number you would say when skip counting by 10. Notice the pattern.
17)

| 0 | 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 |

# Sample Student Text Page 

18) How many pennies in four dimes? $\qquad$ (106) 10¢ 10¢ (10¢
19) Ten counted nine times equals $\qquad$ .
20) Ten cars went by the house every hour. How many cars went by in 6 hours? $\qquad$

Find the answer by multiplying.

1) $10 \times 8=$ $\qquad$
2) $1 \times 10=$ $\qquad$
3) $10 \times 9=$ $\qquad$
4) $0 \times 10=$ $\qquad$
5) $(10)(5)=$ $\qquad$
6) $(10)(4)=$ $\qquad$
7) $10 \cdot 6=$ $\qquad$
8) $10 \cdot 10=$ $\qquad$
9) 

| 10 |
| ---: |
| $\times \quad 8$ |

10) 


11)

| 10 |
| ---: |
| $\times \quad 2$ |

12) 

10
$\begin{array}{r}\times \quad 1 \\ \hline\end{array}$
13) $10 \times 5=$ $\qquad$ $5 \times 10=$ $\qquad$
14) $8 \times 10=$ $\qquad$
15) $10 \times 0=$ $\qquad$
16) $10 \times 9=$ $\qquad$ $10 \times 8=$ $\qquad$
$0 \times 10=$ $\qquad$ $9 \times 10=$
17) Skip count and write the missing numbers, then fill in the missing factors under the lines.
$\left.\frac{0}{(10)(0)} \quad \frac{10}{(10)(\quad)} \overline{(10)(2)} \quad \overline{30} \quad \overline{(10)( } \quad\right) \quad \overline{(10)(4)} \quad \overline{(10)(\quad)} \overline{(10)(6)} \quad \overline{(10)(\quad)} \overline{(10)(8)} \quad \overline{(10)(\quad)(10)(10)}$
18) How many pennies in seven dimes? $\qquad$ (10¢) 10¢ (10¢ (10¢ (10¢ (10¢
Sample Student Text
19) Ten counted six times equals $\qquad$ . Page
20) There were ten math problems on each of five pages. How many problems were there in all?

Find the answer by multiplying.

1) $3 \times 10=$ $\qquad$
2) $8 \times 10=$ $\qquad$
3) $10 \times 1=$ $\qquad$
4) $2 \times 10=$ $\qquad$
5) $(10)(9)=$ $\qquad$
6) $(7)(10)=$ $\qquad$
7) $10 \cdot 5=$ $\qquad$
8) $6 \cdot 10=$ $\qquad$
9) 

$$
\begin{array}{r}
10 \\
\times \quad 0 \\
\hline
\end{array}
$$

10) 

$$
\begin{array}{r}
10 \\
\times \quad 4 \\
\hline
\end{array}
$$

11) 

| 10 |
| ---: |
| $\times \quad 10$ |

12) 

| 10 |
| ---: |
| $\times \quad 3$ |

13) $10 \times 1=$ $\qquad$ $1 \times 10=$ $\qquad$
14) $10 \times 4=$ $\qquad$
$4 \times 10=$ $\qquad$
15) $10 \times 2=$ $\qquad$
$2 \times 10=$ $\qquad$
16) $7 \times 10=$ $\qquad$ $10 \times 7=$ $\qquad$

Color all the boxes that have a number you would say when skip counting by 10. What kind of pattern do you see?
17)

| 0 | 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 |

18) How many pennies, or cents, in five dimes? $\qquad$ (100) (109) (109) (109)
19) Ten counted three times equals $\qquad$ .
20) The professor paid two ten dollar bills for his new book. How much did the book cost? $\qquad$
21) $10 \cdot 5=$ $\qquad$
22) $7 \times 10=$ $\qquad$
23) $10 \cdot 2=$ $\qquad$ 4) $(10)(10)=$ $\qquad$
24) 

| 2 |
| ---: |
| $\times \quad 5$ |

6) 

| 10 |
| ---: |
| $\times \quad 5$ |

7) 


8)

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

9) 

| 1 |
| ---: |
| $\times \quad 3$ |

10) 

| 9 |
| ---: |
| $\times \quad 2$ |

11) 

$$
\begin{array}{r}
10 \\
\times \quad 8 \\
\hline
\end{array}
$$

12) 

10
$\times \quad 4$
13) $9 \times 2=$ $\qquad$ $2 \times 9=$ $\qquad$
14) $4 \times 2=$ $\qquad$
15) $10 \times 3=$ $\qquad$
$3 \times 10=$ $\qquad$
16) $5 \times 2=$ $\qquad$ $2 \times 5=$ $\qquad$

## — Quick Review

These two-digit addition and subtraction problems can be done without regrouping. Just add or subtract the units and the tens. The first one is done for you.

Add or subtract.
17)

| 21 |
| ---: |
| $+\quad 32$ |
| 53 |

18) 

| 43 |
| ---: |
| $+\quad 43$ |

19) 

28

| -16 |
| :--- |

20) 89

- 51

If you do not have enough room to work a word problem, use the empty page opposite. Don't forget to write your answer in the blank after the word problem.
21) Jessica slept 7 hours a day for the last 10 days. How much sleep did she get in 10 days? $\qquad$
22) Jessica's little sister Julie still takes naps, so she got 20 more hours of sleep than Jessica during the last ten days. How much sleep did Julie get during that time? (You will need to use your answer from \#21.)

Find the answer by multiplying.

1) $10 \cdot 8=$
2) $6 \times 10=$
3) $10 \cdot 9=$ $\qquad$
4) $(10)(0)=$ $\qquad$
5) 

| 5 |
| ---: |
| $\times \quad 1$ |

6) 


7)

8)

9)

| 2 |
| ---: |
| $\times \quad 2$ |

10) 


11) $9 \times 1=$
$1 \times 9=$
12) $3 \times 10=$ $10 \times 3=$

Rewrite using place value notation.
13) $389=$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$
14) $72=$ $\qquad$ $+$ $\qquad$

Add or subtract.
15)

| 46 |
| ---: |
| $+\quad 22$ |

16) 


17)
$\begin{array}{r}37 \\ -\quad 23 \\ \hline\end{array}$
18) 94

| $-\quad 23$ |
| :--- |


| -43 |
| :--- |

## Sample Student Text Page

20) There are four people in our family. How many fingers do we have in all? $\qquad$
21) Grandma made 6 cherry pies and 4 apple pies. Aunt Mona cut each pie into 10 pieces. How many pieces of pie were there when she was done? $\qquad$
22) Noah bought 9 quarts of milk. How many pints of milk does he have?

Find the answer by multiplying.

1) $4 \cdot 1=$
2) $2 \times 10=$
3) $10 \cdot 3=$ $\qquad$
4) $(10)(9)=$ $\qquad$
5) 


6)

7)

| 10 |
| ---: |
| $\times \quad 7$ |

8) 

10 $\begin{array}{r}\times \quad 1 \\ \hline\end{array}$
9)

10)

11)

12)

| 9 |
| ---: |
| $\times \quad 0$ |

Rewrite using place value notation.
13) $164=$ $\qquad$ $+\ldots$ $\qquad$
14) $58=$ $\qquad$ $+$ $\qquad$

Add or subtract.
15)

| 52 |
| ---: |
| $-\quad 20$ |

16) 


17) $\begin{array}{r}35 \\ +\quad 34 \\ \hline\end{array}$
18) 14
$\begin{array}{r}12 \\ \hline\end{array}$
19) What is five counted ten times? $\qquad$
Sample Student Text Page
20) How many cents does Shane have if he has nine dimes? $\qquad$
21) Max has $\$ 5$ dollars and Wayne has ten times as much money as Max. How many dollars does Wayne have? How much money do Max and Wayne have altogether? $\qquad$
22) Karyn filled 8 quart jars with jam. How many pints of jam did she make? $\qquad$

# Sample <br> Test Booklet 

Find the answer by multiplying.

1) $2 \times 10=$
2) $10 \times 9=$ $\qquad$ 3) $3 \times 10=$ $\qquad$ 4) $10 \times 7=$ $\qquad$
3) $(6)(10)=$ $\qquad$
4) $(10)(1)=$ $\qquad$
5) $4 \cdot 10=$ $\qquad$
6) $10 \cdot 5=$ $\qquad$
7) 

| 10 |
| ---: |
| $\times \quad 8$ |

10) 

| 5 |
| ---: |
| $\times \quad 2$ |

11) 

| 1 |
| ---: |
| $\times \quad 3$ |

12) 

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

## Add or subtract.

13) 

34
14)

| 55 |
| ---: |
| $+\quad 42$ |

15) 18
$\begin{array}{r}-1 \\ \hline\end{array}$
16) 60
$\begin{array}{r}17 \\ \hline\end{array}$

Rewrite using place value notation.
17) $194=$ $\qquad$ $+$ $\qquad$ $+$
18) Jeremy has 7 dimes. How many cents does he have? $\qquad$
19) Christa bought 10 quarts of milk. How many pints did she buy? $\qquad$ Her son and his friends drank 10 pints. How many pints were left over? $\qquad$
20) Jason jogged 3 miles a day for 10 days. How many miles did he jog altogether? $\qquad$






|  |
| :---: |
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