

Luna's Space Adventure

Name _____

Grade 4 · Multiplying bigger numbers · 4.NBT.B.5

Date _____



Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

By one digit Multiply each place; carry as you go.

1

$$\begin{array}{r} 531 \\ \times 4 \\ \hline \end{array}$$

2

$$\begin{array}{r} 302 \\ \times 6 \\ \hline \end{array}$$

3

$$\begin{array}{r} 682 \\ \times 9 \\ \hline \end{array}$$

4

$$\begin{array}{r} 770 \\ \times 5 \\ \hline \end{array}$$

Two digits by two digits Two rows of partial products, then add.

1

$$\begin{array}{r} 70 \\ \times 40 \\ \hline \\ \hline \end{array}$$

2

$$\begin{array}{r} 32 \\ \times 52 \\ \hline \\ \hline \end{array}$$

Riddle time Solve each one, then use the code to answer the riddle.

What kind of music do planets like?

1 $4 \times 53 =$

2 $9 \times 60 =$

3 $8 \times 67 =$

4 $7 \times 81 =$

5 $56 \times 6 =$

6 $53 \times 4 =$

7 $90 \times 6 =$

8 $3 \times 38 =$

114 = S 190 = B 212 = N 336 = U 536 = P
540 = E 558 = G 567 = T 616 = W 729 = K

1

2

3

4

5

6

7

8

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ANSWER KEY



Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

By one digit Multiply each place; carry as you go.

1	2	3	4
$\begin{array}{r} 531 \\ \times 4 \\ \hline 2124 \end{array}$	$\begin{array}{r} 302 \\ \times 6 \\ \hline 1812 \end{array}$	$\begin{array}{r} 682 \\ \times 9 \\ \hline 6138 \end{array}$	$\begin{array}{r} 770 \\ \times 5 \\ \hline 3850 \end{array}$

Two digits by two digits Two rows of partial products, then add.

1	2
$\begin{array}{r} 70 \\ \times 40 \\ \hline 0 \\ + 2800 \\ \hline 2800 \end{array}$	$\begin{array}{r} 32 \\ \times 52 \\ \hline 64 \\ + 1600 \\ \hline 1664 \end{array}$

Riddle time Solve each one, then use the code to answer the riddle.

What kind of music do planets like?

1 $4 \times 53 =$ 212	2 $9 \times 60 =$ 540	3 $8 \times 67 =$ 536	4 $7 \times 81 =$ 567
5 $56 \times 6 =$ 336	6 $53 \times 4 =$ 212	7 $90 \times 6 =$ 540	8 $3 \times 38 =$ 114

114 = S	190 = B	212 = N	336 = U	536 = P
540 = E	558 = G	567 = T	616 = W	729 = K

<u>N</u>	<u>E</u>	<u>P</u>	<u>T</u>	<u>U</u>	<u>N</u>	<u>E</u>	<u>S</u>
1	2	3	4	5	6	7	8

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GUIDE

① What this sheet practises

Multiplying up to four digits by one digit, and two digits by two digits, using place value.

② A problem from the sheet, worked out

By one digit Multiply each place; carry as you go.

1	2	3	4
$\begin{array}{r} 531 \\ \times 4 \\ \hline 2124 \end{array}$	$\begin{array}{r} 302 \\ \times 6 \\ \hline 1812 \end{array}$	$\begin{array}{r} 682 \\ \times 9 \\ \hline 6138 \end{array}$	$\begin{array}{r} 770 \\ \times 5 \\ \hline 3850 \end{array}$

How: Multiply each place, starting with the ones, and carry to the next place. For two digits by two, make one row for the ones and one for the tens, then add the rows.

③ Words to know

partial product the answer for one part of a multiplication

regroup carry tens to the next place

factor a number being multiplied

product the answer to $\times$

④ Watch for

- Adding the carried digit before multiplying instead of after.
- Leaving out the 0 in the second row when multiplying by the tens digit.
- An answer far from a quick estimate, like 631×4 nowhere near 2,400.

⑤ Where it fits

BEFORE

3.NBT.A.3

Multiply one-digit numbers by multiples of 10.

THIS SHEET

4.NBT.B.5

Multiply up to four digits by one digit, and two digits by two digits.

NEXT

5.NBT.B.5

Multiply multi-digit whole numbers with the standard method.

⑥ Helping at home

Estimate first: 631×4 is about $600 \times 4 = 2,400$. If the answer is far from that, look again.