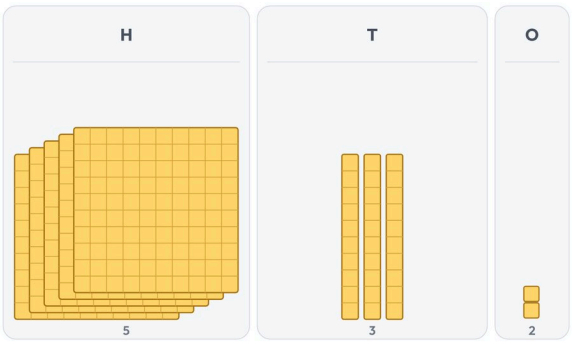
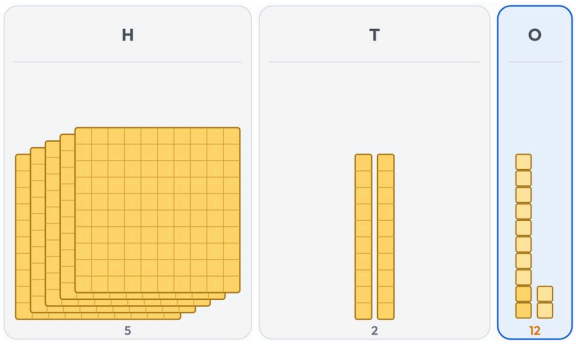
Names (pair) _____ Date _____

Written Subtraction with Exchanging

Example



532 − 247: the ones column has only 2 units



break 1 rod into 10 units: now there are 12 units

$$\begin{array}{rrr} & 4 & 12 & 12 \\ & \cancel{5} & \cancel{3} & \cancel{2} \\ - & 2 & 4 & 7 \\ \hline & 2 & 8 & 5 \end{array}$$

Ones: $2 - 7$ will not work. We exchange one ten for 10 ones: $12 - 7 = 5$. Now there are 2 tens.

Tens: $2 - 4$ will not work. We exchange one hundred for 10 tens: $12 - 4 = 8$.

Hundreds: $4 - 2 = 2$. The difference is 285.

1 ON YOUR OWN Calculate. Write the exchanges above the numbers, and check the answer by adding.

$$\begin{array}{r} \square\,\square \\ 643 \\ -\ 258 \\ \hline \square\,\square\,\square \end{array}$$

check: ☐

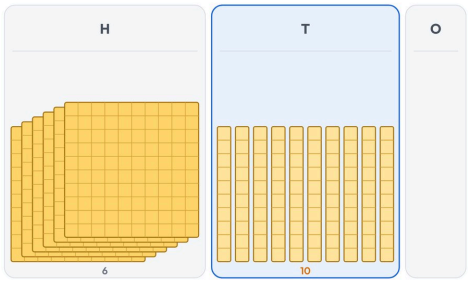
$$\begin{array}{r} \square\,\square\,\square \\ 6041 \\ -\ 2375 \\ \hline \square\,\square\,\square\,\square \end{array}$$

check: ☐

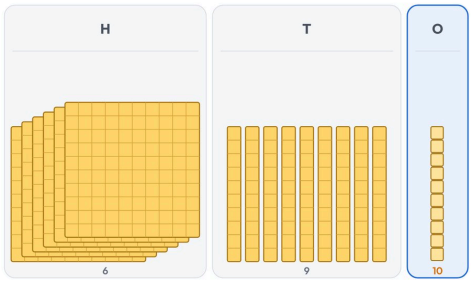
$$\begin{array}{r} \square\,\square \\ 912 \\ -\ 486 \\ \hline \square\,\square\,\square \end{array}$$

check: ☐

2 IN PAIRS **Zeros.** Look at how the app works out $700 - 254$. There is nothing in the tens column, so we first break a flat, then a rod.



1 flat becomes 10 rods



1 rod becomes 10 units

$700 =$ ☐ hundreds, ☐ tens and ☐ ones $700 - 254 =$ ☐

Names (pair) _____ Date _____

Remember

We say we "borrow" from the next column, but really we **rewrite** the number: $532 = 5$ hundreds, 3 tens and 2 ones $= 4$ hundreds, 12 tens and 12 ones. Nothing is given back, because the value of the number stays the same.

3 IN PAIRS Work out $1{,}000 - 367$ in two ways.

a) Exchange: $1{,}000 =$ ☐ hundreds, ☐ tens and ☐ ones

b) Counting on: from 367 to $1{,}000$

$$\begin{array}{r} 1\ 0\ 0\ 0 \\ -\quad 3\ 6\ 7 \\ \hline \square\square\square \end{array}$$

_____

$1{,}000 - 367 =$ ☐

4 IN PAIRS **Find the mistake.** Each calculation is wrong. Describe the mistake and work it out correctly.

calculation	what went wrong	correct
$523 - 168 = 445$	_____	☐
$700 - 254 = 554$	_____	☐
$805 - 327 = 522$	_____	☐

5 ON YOUR OWN Calculate and check by adding.

$4{,}006 - 1{,}238 =$ ☐ check: ☐

$5{,}020 - 1{,}875 =$ ☐ check: ☐

The Place Value Blocks app · otooly.com/place-value-blocks

Adding and subtracting mode, **Subtraction**: enter $532 - 247$ and follow step by step how the blocks and the written method show the exchange.

★ ON YOUR OWN **Exit card.** $603 - 278 =$ ☐ check: ☐