**L.O - To explore 2 digit by 1 digit multiplication.**

**success criteria**

- To use knowledge of repeated addition represent multiplication sentences.
- To apply knowledge of partitioning to represent calulations.
- To explore these methods to solve calculations without exchanging.

Key vocabulary: partition, diennes, multiplication, tens, ones, repeated addition


**<u>Lets have a look at this calculation.</u>**

21 x 3 = ?

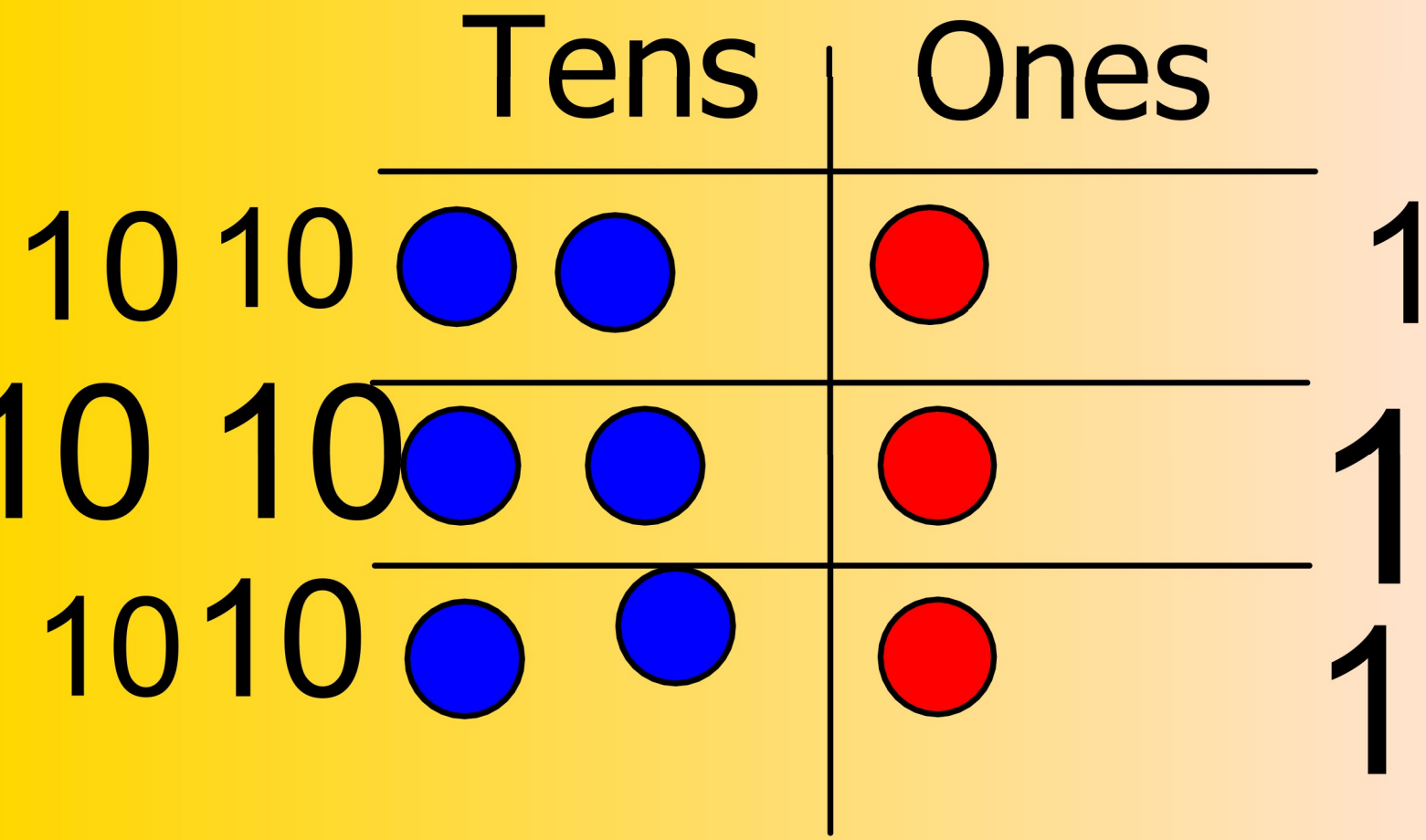
What operation do we need to use and what methods can we use to help us solve
this calculation?

**We can use our knowledge of place value**
to help us solve multiplication calculations like this
21 x 3=

what do we know about 21 based on our knowledge of place value?

It has _____ Ten's
It has _____ One's

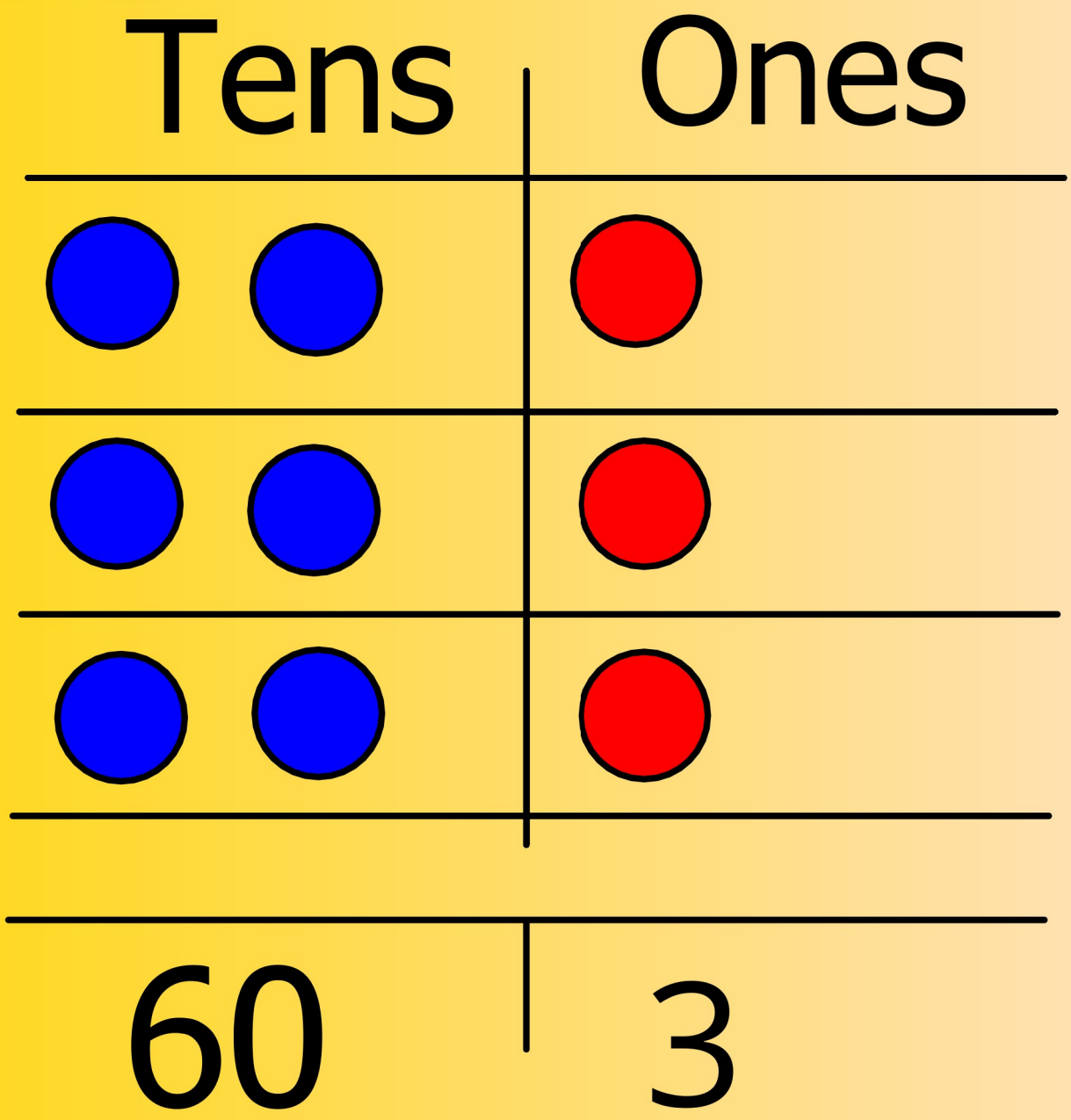
# 21 x 3 =




Why have I put 3 lots of 21 into this table?

Because I am multiplying 21 by 3.

Lets count up the
Tens and Ones



# 12 x 4

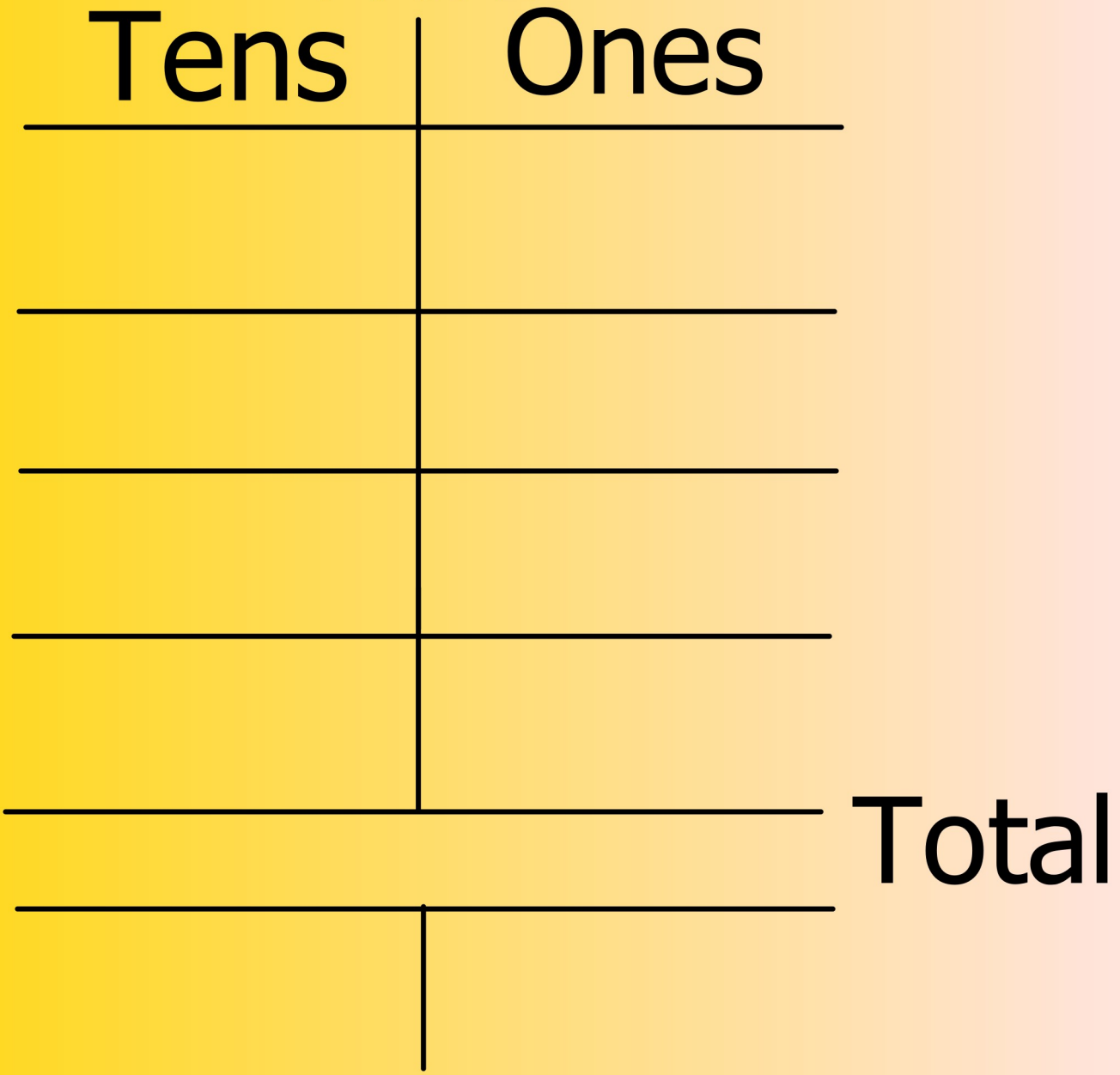
| Tens | Ones |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

Total

40 | 8 = 48

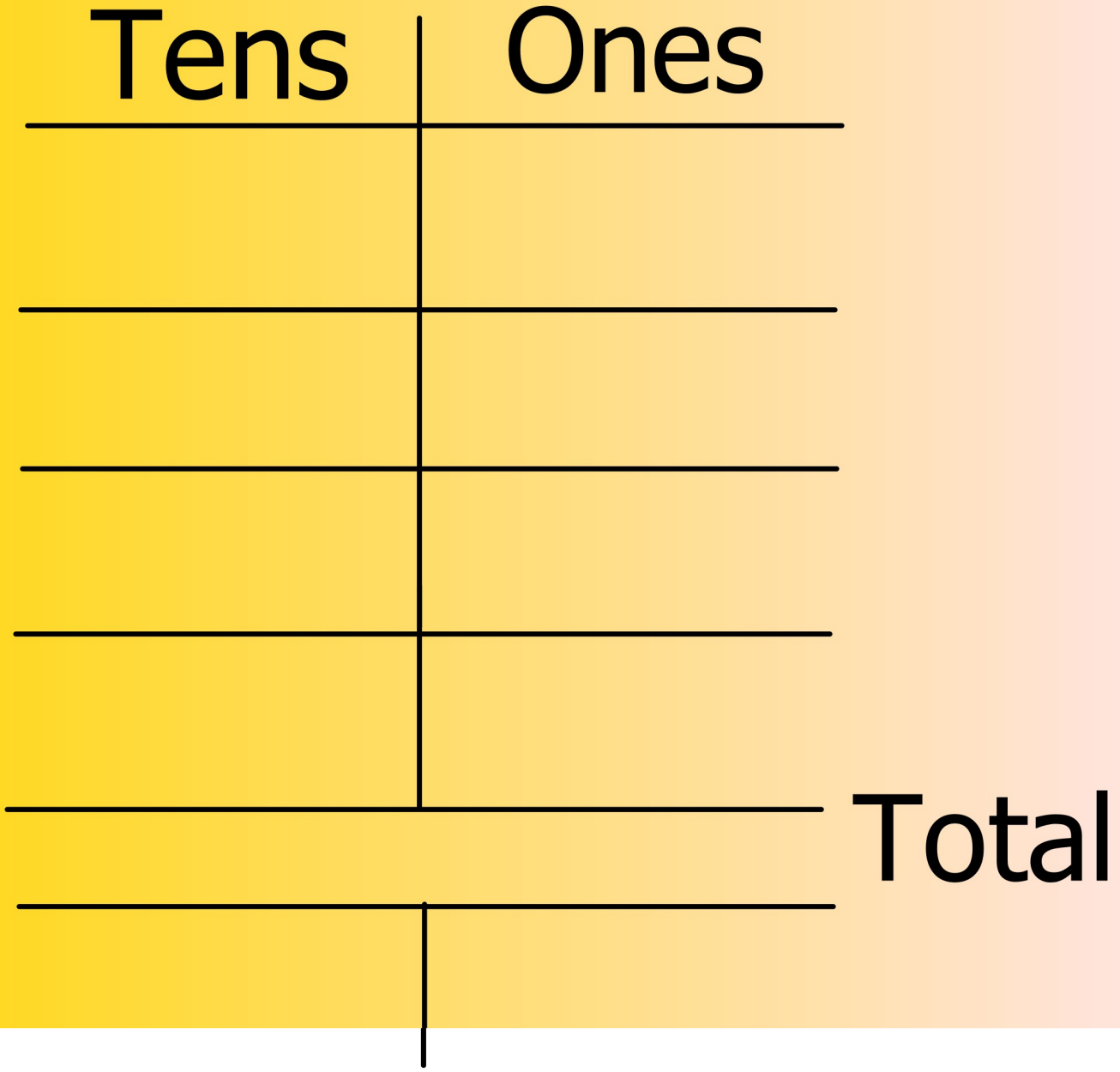
Choose a method to solve this calculation using the place value table.

44 x 2 =



Choose a method to solve this calculation using the place value table.

33 x 3 =



# Multiplying a 2-digit number by a 1-digit number 1

## Discover


1 a) How many flowers have the people bought in total?

Use a number line to help you work out your answer.

b) Use multiplication to work out how many flowers are bought in total.

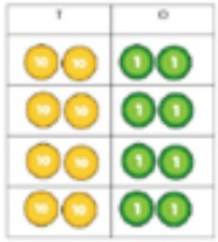
Did you get the same answer?

Let's try this together using one of our methods

# Fluency

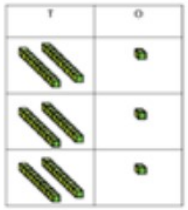
1. There are 21 chocolate bars in a vending machine. How many chocolate bars will there be in 3 vending machines?

2. Fill in the blanks and solve the calculation:



□ × □ = □

3. Fill in the blanks and solve the calculation:

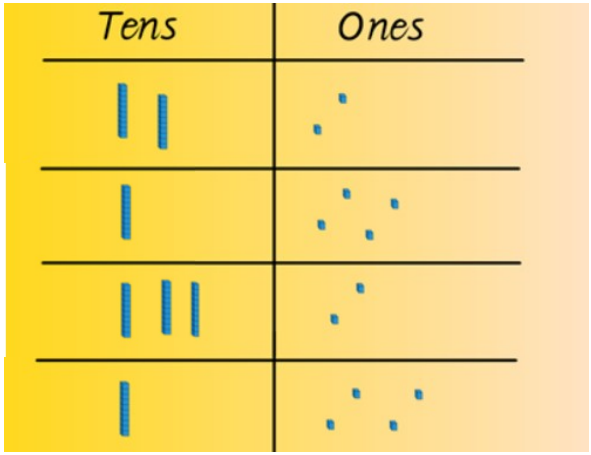


□ × □ = □

# Problem solving

There were 3 classes in year 3, In each class there were 12 boys and 13 girls, How many girls were the in year 3 all together?

Tommy's question was 9 x 8 and he used the multiplication grid to do his working out. Can you explain what he has done wrong?



## Reasoning

Milly used the multiplication grid to solve her calculation and her answer was 48,
Look at her table, is she correct?