A Guide to Multiplication

Maths Equipment

In this guide we use a place value chart, place value counters and a mini whiteboard.

If you don't have these you could:

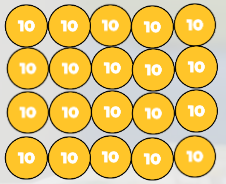
- draw a place value chart on poster paper or the back of a cereal box
- make your own place value counters using card
- use other objects such as dried pasta or small toys.

Place value chart

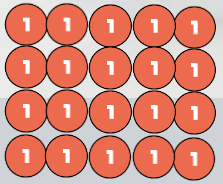
Hundreds	Tens	Ones

10 x hundred counters

20 x ten counters



20 x one counters



Maths with Michael

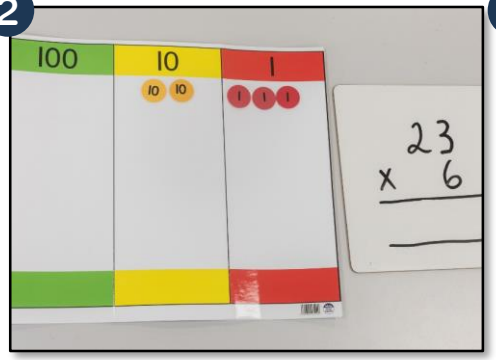
This is a supporting document for episode 3 in our mini-series 'Maths with Michael' which has been produced in collaboration with TV presenter, teacher and parent Michael Underwood.

White Rose Maths

1

We are going to multiply 23 by 6 using place value counters and a place value grid to help us.

2



First build the number 23 in a single row on a place value grid and write the calculation on a whiteboard or piece of paper.

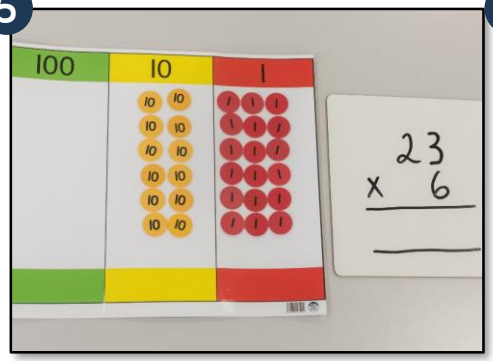
3

Ask "How many lots of 23 do we need to show?"
They should be able to tell you that we need to show 6 lots of 23 because we're multiplying 23 by 6

4

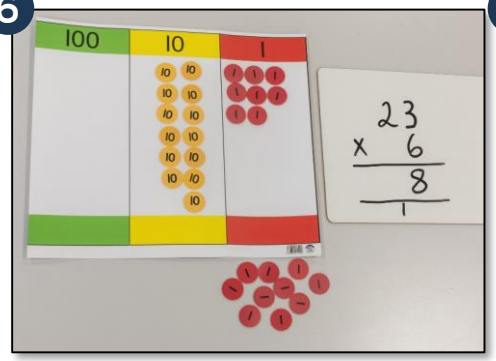
Ask your child to show 6 rows of 23 on the place value grid.

5



Ask "How many ones are there? Can we make an exchange?" That's right there are 18 ones and we can exchange 10 ones for 1 ten.

6

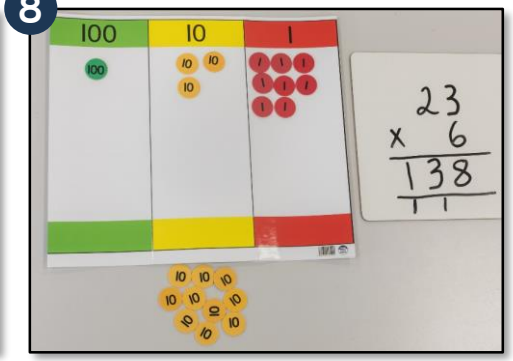


Replace 10 ones with 1 ten. Show this in the calculation highlighting that the 8 represents the remaining ones counters and the 1 below the line represents the ten counter.

7

Ask "How many tens are there? Can we make an exchange?" That's right there are 13 tens and we can exchange 10 tens for 1 hundred.

8



Show the exchange in the place value grid and on the calculation.
Now we have 1 hundred, 3 tens and 8 ones.
23 multiplied by 6 is equal to 138

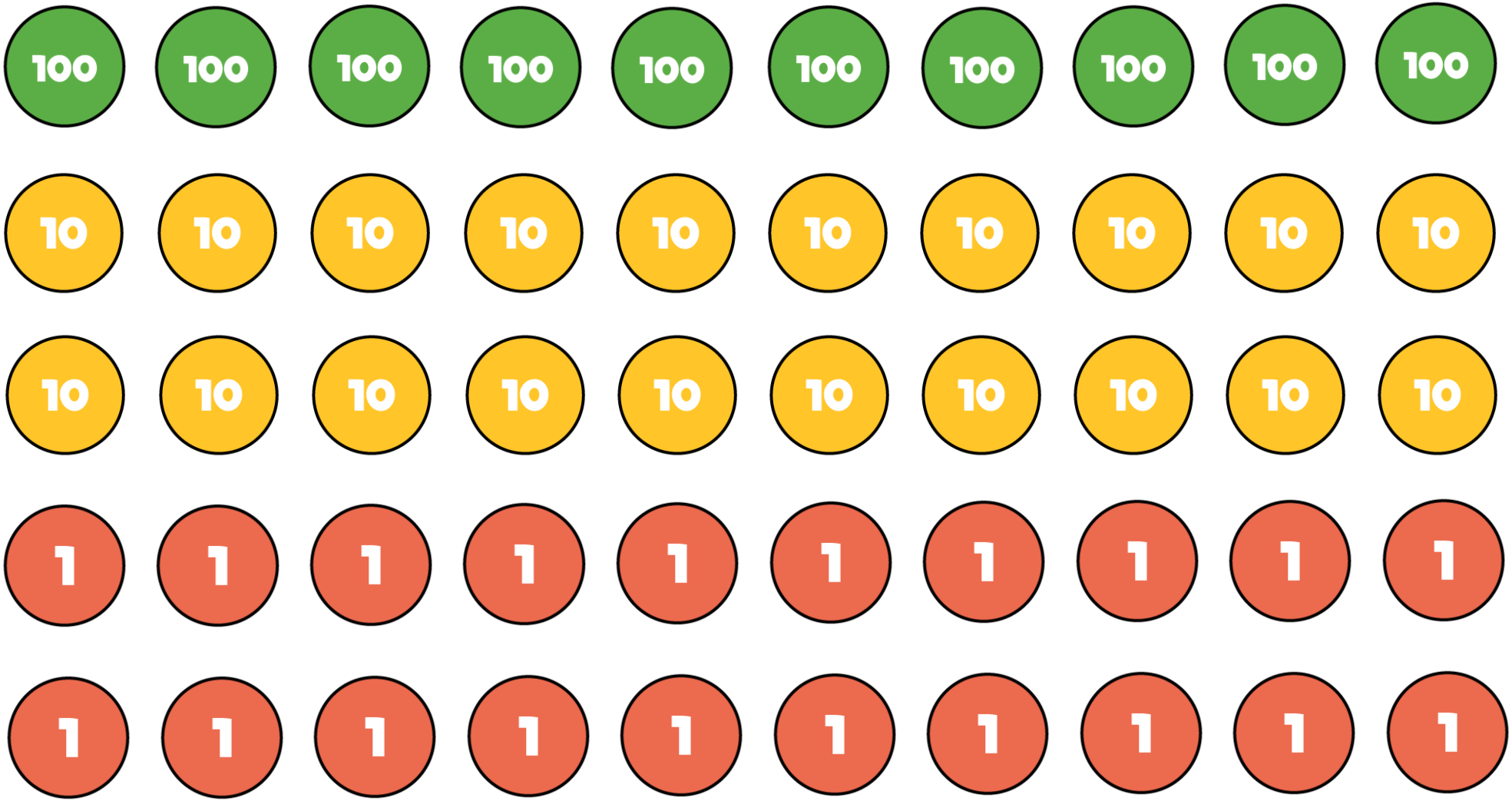
Now Try These

24 × 3 32 × 4 45 × 3 124 × 5

Draw or use a place value grid and counters to help you. Remember to write down all the steps in your calculation too.

White Rose Maths

Printouts – Place Value Counters



White Rose Maths

Printouts – Place Value Chart

Hundreds	Tens	Ones