

Place Value Counters

For children to have a real understanding of place value they need to build on their knowledge in a systematic way. This is where good, carefully chosen manipulatives can be of great value.

Year 1

Hunting for a hundred

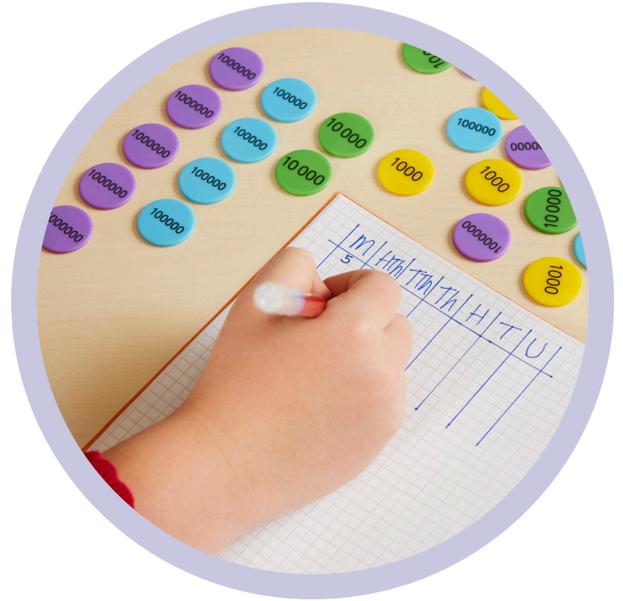
- Prepare star shapes or similar, as shown. Place them in an outdoor area if possible.
- Children locate one star at a time and tell you where it is.
- If correct, they may add a 10 counter to their tens frame. The object is to collect all ten counters and reach 100.



10	10
10	10
10	

Finding fifty

- Show the number 50
- How many 10s are there?
- What happens if we add another?
- What happens if we take two away?



Place value counters are a clear and simple manipulative suitable for all age groups.

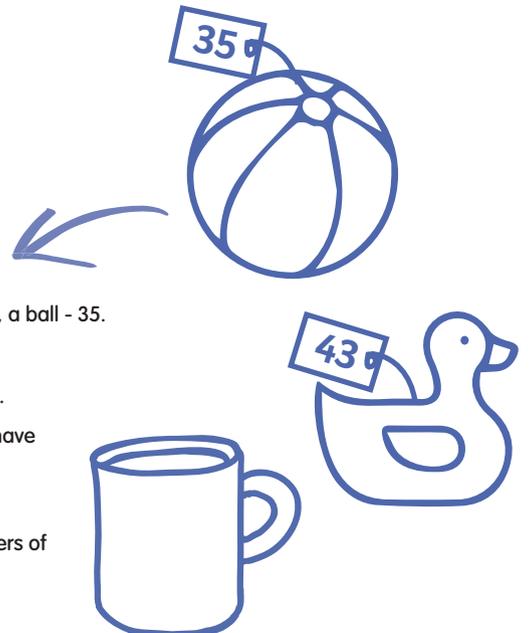
Year 2

Adding two digit numbers



How much?

- Choose a selection of objects and add a 'price' to them e.g. a duck - 43, a ball - 35.
- Display the objects with their amounts.
- Each child scoops up one small cup from a mixture of 1 and 10 counters.
- They can 'buy' some of the objects, but can only use the counters they have scooped.
- Which objects will they choose?
- Children might write or draw each 'purchase' and put the correct numbers of counters next to it



Duck =

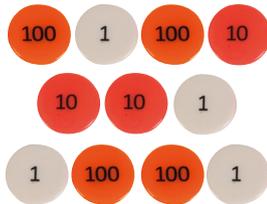
Place Value Counters



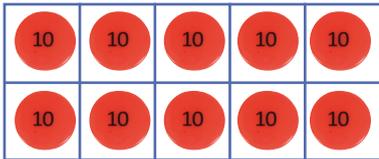
Year 3

What number?

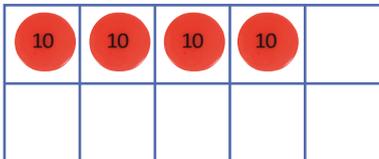
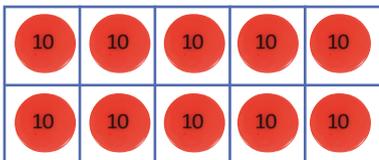
- What number is represented by these counters?



What does 100 items look like?



- 10 tens is equal to 1 hundred.
- 100 is ten times the size of 10.

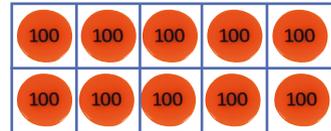


- How many tens in other the 3 digit multiples of 10?
- Fourteen tens is equal to 10 tens and 4 more tens.
- Fourteen tens is equal to 100 and 4 more tens - 140

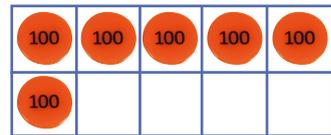
Year 4

How many hundreds?

10 hundreds is equal to 1 thousand

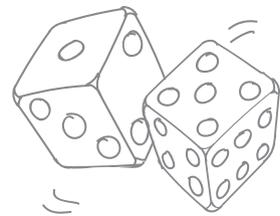


How many hundreds in four digit multiples of 100?



Dice game

Identify the place value of each digit in a 4 digit number.



- Each player takes turns throw a dice 4 times.
- One each throw they must choose that number of place value counters from



- They must choose a different place value colour each time.
- After 4 throws count up the counters. Who has made the highest number?





Place Value Counters

Year 5

Place value experts

Identify the place value of each digit with numbers up to 2 decimal places

e.g. 52.43

10	1	0.1	0.01
10	1	0.1	0.01
10		0.1	0.01
10		0.1	
10			

Tenths and hundredths

0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1

- 16 tenths is equal to 1 one and 6 tenths and is written as 1.6

0.1	0.1	0.1	0.1	0.1
0.1				

0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01

- 16 hundredths is equal to 1 tenth and 6 hundredths and is written as 0.16

0.01	0.01	0.01	0.01	0.01
0.01				

Year 6

Making a million

- Ten hundred thousands is equal to 1 million.
- How many 1000 counters would you need to make a million?'

100000	100000	100000	100000	100000
100000	100000	100000	100000	100000

Place value genius!

- Ask children to demonstrate their understanding by using place value counters from 0.01 to 100,000 to make given numbers.

e.g. 214,223.12

