

## Progressive stages in Division

### Stage 1

- ✓ Solve problems by sharing objects in a practical context
- ✓ Solve problems by sharing objects into equal groups
- ✓ Solve problems by grouping objects



Give each bear 2 sweets - how many sweets do we need?



Give every bear a sweet - how many sweets do we need?

### Stage 2

- ✓ Know halves of even numbers to 10
- ✓ Know halves of even numbers to 20



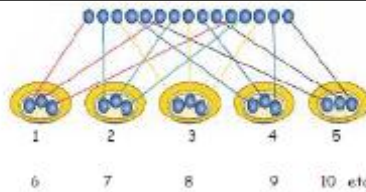
Half of 6 is 3  
 $\frac{1}{2}$  of 6 = 3



half of 8 is 4  
 $8 \div 2 = 4$

### Stage 3

- ✓ Understand division as sharing
- ✓ Understand division as grouping



$$15 \div 3 = 5$$

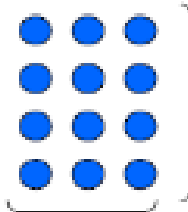


1,2,3,4,5    6,7,8,9,10 etc



### Stage 4

- ✓ Reinforce division as grouping through use of arrays



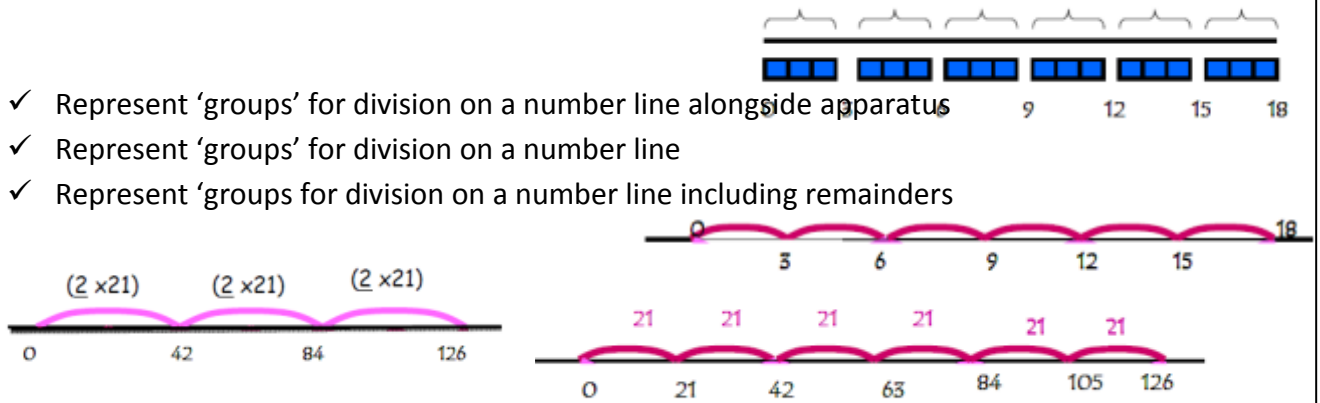
12 divided into groups of 4 gives 3 groups  
 $12 \div 4 = 3$

12 divided into groups of 3 gives 4 groups  
 $12 \div 3 = 4$

## Progressive stages in Division

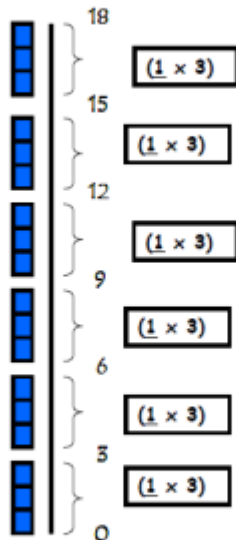
### Stage 5

- ✓ Represent 'groups' for division on a number line alongside apparatus
- ✓ Represent 'groups' for division on a number line
- ✓ Represent 'groups' for division on a number line including remainders



### Stage 6

- ✓ Understand division as repeated addition using a vertical number line alongside apparatus



### Stage 7

- ✓ Multiple chunks of the divisor are added. Multiplication facts are needed to see the size of the chunk.

$$100 \div 7 = 14 \text{ r } 2$$

$$\begin{array}{r}
 100 + 2 \\
 98 \text{ (4 X 7)} \\
 + 28 \\
 70 \text{ (10 x 7)} \\
 0 + 70
 \end{array}$$

Fact Box	
1 x 7 =	7
2 x 7 =	14
5 x 7 =	35
10 x 7 =	70
20 x 7 =	140
50 x 7 =	350
100 x 7 =	700