



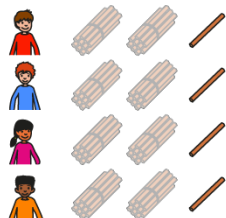
*'Eighty-four sticks are shared equally between four children. How many sticks does each child get?'*

$$84 \div 4 = ?$$

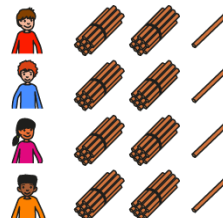
Algorithm with place-value headings, and pictorial representation:

<p>Step 1 – write the divisor and dividend</p> 	<p>Step 2 – sharing the tens</p> 
<p>10s 1s</p> $4 \overline{) 84}$ <p><i>'Eighty-four divided by four.'</i></p>	<p>10s 1s</p> $4 \overline{) 84} \quad 8 \text{ tens} \div 4 = 2 \text{ tens}$ <p><i>'Eight tens divided by four is equal to two tens.'</i></p>

### Step 3 – sharing the ones



### Summary



10s	1s	
2	1	
4	8	4

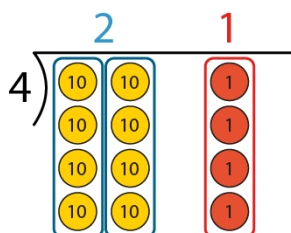
8 tens ÷ 4 = 2 tens  
4 ones ÷ 4 = 1 one

*'Four ones divided by four is equal to one one.'*

10s	1s	
2	1	
4	8	4

*'Each child gets twenty-one sticks.'*

Algorithm with place-value counters – summary:



8 tens ÷ 4 = 2 tens

4 ones ÷ 4 = 1 one

- *'Eight tens and four ones divided between four is equal to two tens and one one.'*
- *'Each child gets twenty-one sticks.'*

Extracted from NCETM Mastery Professional Development Materials *Multiplication and Division*

2.15 Division: partitioning leading to short division

[https://www.ncetm.org.uk/files/107958602/ncetm\\_spine2\\_segment15\\_y4.pdf](https://www.ncetm.org.uk/files/107958602/ncetm_spine2_segment15_y4.pdf)

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