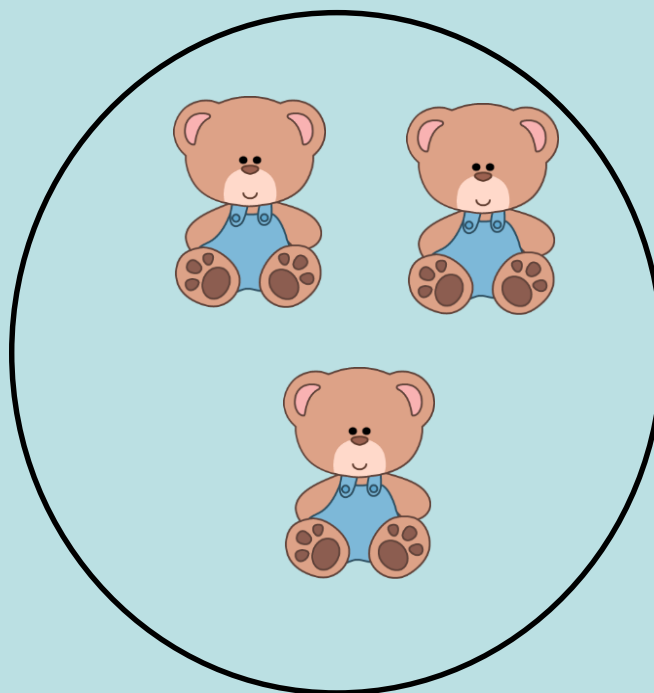
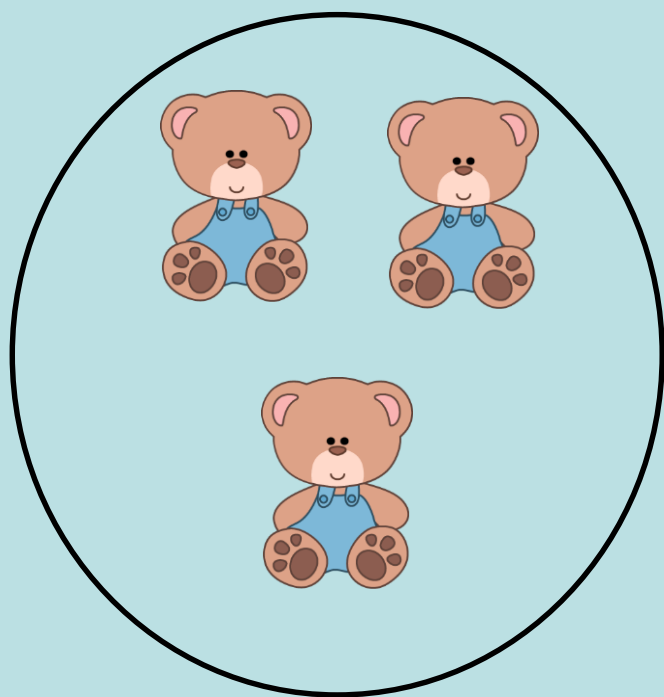


# Pegasus Calculation Policy for division

Under the new curriculum, the focus has shifted on the expectations for division. In previous years, children have been expected to 'share' and 'chunk'. However, due to a poor knowledge of times tables in upper key stage 2, the National Curriculum has taken away formal written methods before year 5. The expectation for the end of year 4 is for children to be secure with their times tables facts up to  $12 \times 12$  and their associated division facts. This involves being fluent with numbers.

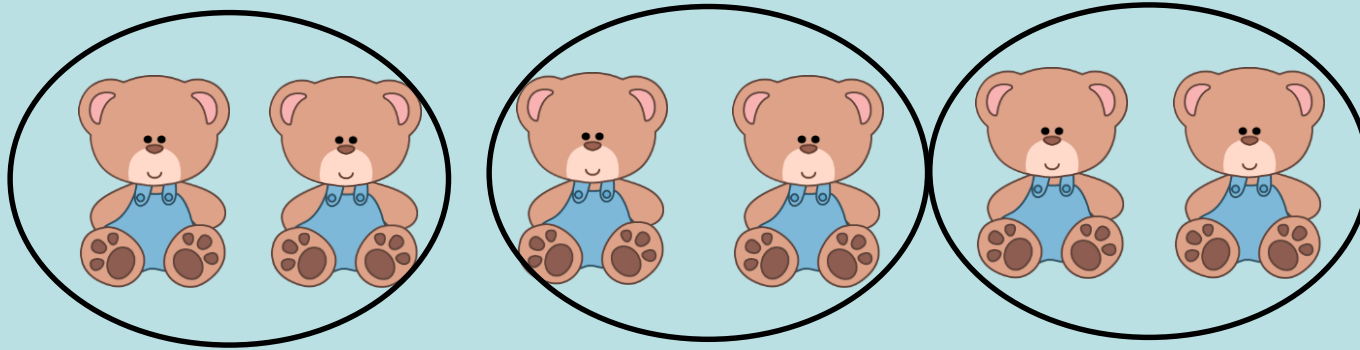
# Division as Sharing

$$6 \div 2 = 3$$



# Division as Grouping

$$6 \div 2 = 3$$



Year 5

# Short Division

$$\begin{array}{r} 2132 \\ 3 \overline{)6396} \end{array}$$

# Short Division

$$\begin{array}{r} 031 \\ \hline 4 \overline{)124} \end{array}$$

# Short division with 'internal' remainders

$$\begin{array}{r} 036 \\ \hline 4 \overline{)14} 24 \end{array}$$



# Short division with remainders

$$\begin{array}{r} 036 \text{ r}2 \\ \hline 4 \overline{)14^26} \end{array}$$

# Short division with remainders as decimals

$$\begin{array}{r} 036.5 \\ \hline 4 \overline{)14} \overset{2}{6} \overset{2}{0} \end{array}$$

# Short division with remainders as fractions


$$\begin{array}{r} \phantom{0} \phantom{3} \phantom{6} \phantom{2} \phantom{/} \phantom{4} \\ 4 \overline{) 1426} \\ \underline{4} \phantom{0} \phantom{3} \phantom{6} \phantom{2} \phantom{/} \phantom{4} \\ \phantom{0} \phantom{3} \phantom{6} \phantom{2} \phantom{/} \phantom{4} \\ \phantom{0} \phantom{3} \phantom{6} \phantom{2} \phantom{/} \phantom{4} \\ \phantom{0} \phantom{3} \phantom{6} \phantom{2} \phantom{/} \phantom{4} \\ \phantom{0} \phantom{3} \phantom{6} \phantom{2} \phantom{/} \phantom{4} \end{array}$$

r 2

# Opportunity to participate

**17**

$$581 \div 7 =$$

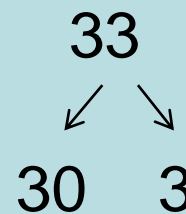


1 mark

Year 6

# Long division

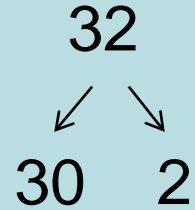
$$\begin{array}{r} 0247 \\ 33 \overline{) 8151} \\ \underline{66} \phantom{1} \\ 155 \\ \underline{132} \\ 231 \\ \underline{231} \\ 0 \end{array}$$



- 30+3=33
- 60+6=66
- 90+9=99
- 120+12=132
- 150+15=165
- 180+18=198
- 210+21=231
- 240+24=264
- 270+27=297
- 300+30=330

# Long division with remainders

$$\begin{array}{r} 011r5 \\ \hline 32 \overline{) 357} \\ \underline{32} \phantom{0} \\ 37 \\ \underline{32} \\ 5 \end{array}$$



$$30+2=32$$

$$60+4=64$$

$$90+6=96$$

$$120+8=128$$

$$150+10=160$$

$$180+12=192$$

$$210+14=224$$

$$240+16=256$$

$$270+18=288$$

$$300+20=320$$

# Long Division with remainders as fractions

$$\begin{array}{r}
 0105 \quad 8/34 \text{ or } 4/17 \\
 \hline
 34 \overline{) 3578} \\
 \underline{34} \quad \downarrow \downarrow \\
 178 \\
 \underline{170} \\
 8
 \end{array}$$

$$\begin{array}{c}
 34 \\
 \swarrow \quad \searrow \\
 30 \quad 4
 \end{array}$$

$$30+4=34$$

$$60+8=68$$

$$90+12=102$$

$$120+16=136$$

$$150+20=170$$

$$180+24=204$$

$$210+28=238$$

$$240+32=272$$

$$270+36=306$$

$$300+40=340$$




# Long Division with remainders as decimals

$$\begin{array}{r}
 0051.25 \\
 \hline
 28 \overline{) 143.5} \\
 \underline{140} \quad \downarrow \\
 35 \\
 \underline{28} \\
 70 \\
 \underline{56} \\
 140 \\
 \underline{140} \\
 0
 \end{array}$$

$$\begin{array}{c}
 33 \\
 \swarrow \quad \searrow \\
 20 \quad 8
 \end{array}$$

$$\begin{aligned}
 20+8 &= 28 \\
 40+16 &= 56 \\
 60+24 &= 84 \\
 80+32 &= 112 \\
 100+40 &= 140 \\
 120+48 &= 168 \\
 140+56 &= 196 \\
 160+64 &= 224 \\
 180+72 &= 252 \\
 200+80 &= 280
 \end{aligned}$$

# Opportunity to participate

<b>20</b>	<p>1 7   7 1 4</p>	
<b>Show your method</b>	<p></p>	<p><input data-bbox="1696 1001 1798 1096" type="checkbox"/> 2 marks</p>

# Opportunity to participate

**36**

5 9 | 2 2 4 2

Show  
your  
method

2 marks