



Addition

| Progression | Concrete | Pictorial | Abstract | Application |
|----------------------------------|----------|-----------|--|--|
| Pictorial representations | | | $6 + 4 = 10$ | $12 + _ = 20$ $7 + 3 = 5 + _$ Sarah has 4 teddies and John has 6 teddies. How many do they have altogether? Fred gets 15p pocket money and Abby gets 12p. How much money do they have altogether? Explain your answer. |
| Number lines | | | | Harry has 17 sweets, Jack has 13 sweets. How many do they have altogether? Jane has a book that weighs 25g and a drink that weighs 17g. What is the total weight of these items? |
| Partitioning | | | $30 \begin{matrix} 3 \\ / \quad \backslash \\ 0 \quad 7 \end{matrix}$ $10 = 6 + 4$ $37 = 30 + 7$ | Can you find 4 different ways of making the number 12? How many tens does the number 43 have? My number has 3 tens and 7 ones, what could it be? |
| Expanded Column Addition | | | $200 + 70 + 6$ $+ 100 + 40 + 5$ <hr/> $400 + 20 + 1$ $100 \quad 10$ | Helen wants to buy a sandwich costing £1.33 and a drink costing £1.27. She has £3.00 to spend, does she have enough? Explain your answer. It takes James 23 minutes to travel to the cinema. The film is 119 minutes long. It takes him 27 minutes to get home. If James leaves at 2.30pm, what time will he be home? |
| Column Addition | | | $\begin{array}{r} 45.68 \\ + 67.54 \\ \hline 113.12 \end{array}$ $\begin{array}{r} 345685 \\ + 269217 \\ \hline 614902 \end{array}$ $\frac{3}{4} + \frac{2}{3} = \frac{9}{12} + \frac{8}{12} = \frac{17}{12}$ $\frac{3}{4} \times \frac{9}{12} = \frac{27}{48}$ $\frac{2}{3} \times \frac{8}{12} = \frac{16}{36}$ $\frac{17}{12} = \frac{17 \div 12}{12 \div 12} = \frac{5}{12}$ | Joe was saving to buy a laptop for £455.98 and a printer for £123.78. How much money does he need to save? Jake poured 1978ml of water into one bucket and 2250ml into another. How much water did he have? How much more was in the second bucket? |