

# Stage 5 Early Additive

## Addition & Subtraction

I can solve addition and subtraction problems in my head using my basic facts:

Doubles  
 $8 + 7 = 8 + 8 - 1$

Fives  
 $8 + 7 = 5 + 3 + 5 + 2$

Making Tens  
 $8 + 7 = 8 + 2 + 5$

I can solve 2 digit addition and subtraction problems in my head using:

Tidy Numbers  
 $29 + \square = 52$  as  $29 + (1 + 22)$

Place Value  
 $33 + 16$  as  $30 + 10 + 3 + 6$

Back through ten  
 $84 - 4 - 4 = 76$



# Stage 6 Advanced Additive

## Addition & Subtraction

I can solve multi digit addition and subtraction problems by choosing an appropriate mental strategy:

Possible strategies for  $63 - 39 = \square$

Rounding and compensating  
 $63 - 39 = 63 - 40 + 1 = 24$

Reversibility  
 $63 - 39$  as  $39 + \square = 63$

Equal additions  
 $63 - 39$  as  $64 - 40 = 24$

Possible strategies for  $396 + 78$

Tidy numbers  
 $396 + 78 = 396 + 4 + 70 + 4$

Place value partitioning  
 $396 + 78 = 300 + 160 + 14$

Equal additions  
 $263 - 139 = 264 - 140$



# Stage 7 Advanced Multiplicative

## Addition & Subtraction

I can choose appropriate strategies to solve addition and subtraction problems involving decimals, integers and related fractions:

Using decimal place value  
 $4.95L + 7.5L = \square$

Compensation

$$4.95 + 7.5 = 4.45 + 8 = 12.45L$$

Tidy Numbers

$$5 + 7.5 = 12.5 \text{ so } 4.95 + 7.5 = 12.45L$$

Place Value

$$4 + 7 = 11 \text{ and } 0.9 + 0.5 = 1.4 \\ \text{so } 4.95 + 7.5 = 12.45L$$

Using decimal place value

$$2.65m + 1.96m = \square$$

$$0.05 + 1.95 = 2.01$$

$$\text{so } 2.6 + 2.01 = 4.61m$$

Partitioning fractions

$$\frac{3}{4} + \frac{5}{8} = (\frac{3}{4} + \frac{2}{8}) + \frac{3}{8} = 1 \frac{3}{8}$$

Equivalent operations on Integers

$$7 - -3 = 7 + 3 = 10$$

