

MULTIPLICATIVE THINKING – SET 6

A *Knows all times tables up to 10*

$$8 \times 7 = 56$$

$$9 \times 3 = 27$$

$$5 \times 4 = 20$$

B *Know some division facts.*

$$12 \div 2 = 6$$

$$30 \div 5 = 6$$

$$27 \div 3 = 9$$

$$80 \div 10 = 8$$

$$16 \div 4 = 4$$

C *Solves simple fractions using division knowledge*

$$\frac{1}{2} \text{ of } 24 = 24 \div 2 = 12$$

$$\frac{1}{5} \text{ of } 40 = 40 \div 5 = 8$$

$$\frac{1}{3} \text{ of } 18 = 18 \div 3 = 6$$

$$\frac{1}{4} \text{ of } 28 = 28 \div 4 = 7$$

D *Half and Double*

$$14 \times 4 =$$

$$18 \times 5 =$$

$$18 \times 5 =$$

$$7 \times 8 = 56$$

$$9 \times 10 = 90$$

$$9 \times 10 = 90$$

E *Place Value Partitioning*

$$6 \times 17 =$$

$$\text{Multiply the tens } 6 \times 10 = 60$$

$$\text{Multiply the ones } 6 \times 7 = 42$$

$$\text{Add together } 6 \times (10 + 7) = (60 + 42)$$

$$6 \times 17 = 102$$

D *Rounding and Compensation*

$$95 \times 7 =$$

$$\text{Round } 100 \times 7 = 700$$

$$\text{Compensate } - (5 \times 7) = - 35$$

$$\text{Find difference } 700 - 35 = 665$$

$$95 \times 7 = 665$$

F *Using known multiplication facts to solve unknown problems*

$$8 \times ? = 112$$

$$\text{Multiply the 10s } 8 \times 10 = 80$$

$$\text{Find the difference } 112 - 80 = 32$$

$$\text{Work out the missing fact } 8 \times 4 = 32$$

$$\text{Add together } 8 \times (10 + 4) = 112$$

$$8 \times 14 = 112$$

$$114 \div 6 =$$

$$\text{Inverse Equation } 6 \times ? = 114$$

$$\text{Multiply the 10s } 6 \times 10 = 60$$

$$\text{Find the difference } 114 - 60 = 54$$

$$\text{Work out the missing fact } 6 \times 9 = 54$$

$$\text{Add together } 6 \times 19 = 114$$

$$114 \div 6 = 19$$

G *Finding a fraction of a number where the numerator is not one*

Find $\frac{3}{4}$ of 84

$$\text{Divide by denominator } 84 \times \frac{1}{4} = 84 \div 4$$

$$\text{Split number and divide } 80 \div 4 = 20$$

$$4 \div 4 = 1$$

$$\text{Add together } 20 + 1 = 21$$

$$\text{Multiply by the numerator } 21 \times 3 = 63$$

$$\frac{3}{4} \text{ of } 84 = 63$$

$111 \times \frac{2}{3} = ?$

$$\text{Divide by denominator } 111 \times \frac{1}{3} = 111 \div 3$$

$$\text{Split number and divide } 90 \div 3 = 30$$

$$21 \div 3 = 7$$

$$\text{Add together } 30 + 7 = 37$$

$$\text{Multiply by the numerator } 37 \times 2 = 74$$

$$111 \times \frac{2}{3} = 74$$