Old Bank Primary Academy

Old Bank
Academy
Where Every Pupil Grows

Chapter 6 – Year Five

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5 (1 – 12 x tables, 1 – 6 x tables inverses)	Revise Y1-2 Strategies. Revise Y3-4 Strategies. Add fractions with different denominators. Subtract fractions with different denominators.	Revise Y1-2 Strategies. Revise Y3-4 Strategies. Add / subtract fractions different denominators. Multiply by 0.9 Multiply by 9.9	Revise Y1-2 Strategies. Revise Y3-4 Strategies. Add / subtract fractions different denominators. Multiply by 0.9 or 9.9 Find 90% Find 80% Multiply by 0.8	As per Spring 1 Multiply a fraction by a whole number. Multiply by 2.5 Multiply by 12.5	As per Spring 2 Increase and decrease integers by scale factors. Divide a fraction by a whole number.	As per Summer 1 Divide by 8 Find 12.5% Find 11% Find 2.5%

- All **green** concepts are new learning for the half term.
- All **black** concepts are revision of prior learning.
- There are **16** key concepts to learn and understand during Year Five.
- In addition, the **1-6 x tables are expected to be known as inverses / times tables families with instant recall**.
- During Year Five, **all Key Stage 1 and LKS2 concepts will be revised** and consolidated on a half-termly basis.

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Adding fractions together with different denominators **What is a 'Common Denominator'?**	• Multiply or divide to find a common denominator. • Remember to do this to both the numerator and the denominators. • Add together the new numerators • Leave the denominators!	• 4/14 + 2/7 = ? • 4/14 can be made into 2/7 or 2/7 can be made into 4/14 • 4 + 2 = 6 • So, 4/14 + 4/14 = 8/14 • Or, 2/7 + 2/7 = 4/7

Page 23 – Adding Fractions

3/5 + 1/4	5/21 + 2/14	8/36 + 1/18
2/6 + 1/4	4/15 + 2/5	2/3 + 2/12
3/24 + 5/8	3/18 + 1/9	9/25 + 3/15
6/14 + 1/5	7/11 + 3/7	20/35 + 3/21

2/3 + 1/4	3/7 + 2/14	4/9 + 1/18
3/8 + 1/4	6/10 + 2/5	1/3 + 2/27
2/16 + 3/8	2/3 + 1/9	2/5 + 1/15
1/4 + 1/6	2/9 + 3/7	2/8 + 3/7

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Subtracting fractions with different denominators **What is a 'Common Denominator'?**	• Multiply or divide to find a common denominator. • Remember to do this to both the numerator and the denominators. • Subtract the new numerators • Leave the denominators!	• 10/14 - 2/7 = ? • 10/14 can be made into 5/7 or 2/7 can be made into 4/14 • 5 - 2 = 3 or 10 – 4 = 7 • So, 5/7 - 2/7 = 3/7 • Or, 10/14 – 4/14 = 6/14

2/3 - 1/4	3/7 - 2/14	4/9 - 1/18
3/8 - 1/4	6/10 - 2/5	1/3 - 2/27
12/16 - 3/8	2/3 - 1/9	2/5 - 1/15
1/4 - 1/6	5/9 - 3/7	4/8 - 7/14

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 0.9	• Divide your starting number by 10. • Subtract this from your starting number.	• 70 x 0.9 = ? • 70 ÷ 10 = 7 • 70 – 7 = 63 • So, 70 x 0.9 = 63

80 x 0.9	100 x 0.9	80 x 0.9
170 x 0.9	450 x 0.9	800 x 0.9
3,200 x 0.9	45 x 0.9	8,000 x 0.9
16 x 0.9	0.6 x 0.9	1.3 x 0.9

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 9.9	• Divide your starting number by 10 (answer 1) • Multiply your starting number by 10 (answer 2) • Subtract answer 1 from 2	• 60 x 9.9 = ? • 60 x 10 = 600 • 60 ÷ 10 = 6 • 600 – 6 = 594 • So, 60 x 9.9 = 594

60 x 9.9	100 x 9.9	80 x 9.9
170 x 9.9	450 x 9.9	800 x 9.9
3,200 x 9.9	45 x 9.9	8,000 x 9.9
16 x 9.9	0.6 x 9.9	1.3 x 9.9

30 x 9.9	80 x 9.9	70 x 9.9
140 x 9.9	860 x 9.9	300 x 9.9
3,600 x 9.9	75 x 9.9	9,400 x 9.9
17 x 9.9	0.4 x 9.9	1.6 x 9.9

297	792	693
126	851.4	2,970
35,640	742.5	93,060
168.3	3.96	15.84

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 90% of any number	• Understand that 90% = 9/10 • Understand that 90% = 0.9 • Follow our Smart Strategy for multiplying any number by 0.9	• 70 x 0.9 = ? • 70 ÷ 10 = 7 • 70 – 7 = 63 • So, 70 x 0.9 = 63

60 x 90%	100 x 90%	80 x 9/10
170 x 90%	90% x 450	800 x 0.9
320 x 90%	90% of 45	564 x 90%
90% of 16	0.6 x 90%	90% x 1.3

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 80% of any number	• Understand that 80% = 8/10 • Divide your starting number by 10 then multiply by 8. • Or, because 8/10 = 4/5, divide by 5 and multiply by 4	• 80% of 90 = ? • 90 ÷ 10 = 9 • 9 x 8 = 72 • Or, 90 ÷ 5 = 18, 18 x 4 = 72 • So, 80% of 90 = 72

60 x 80%	100 x 80%	80 x 8/10
170 x 80%	80% x 450	800 x 4/5
320 x 80%	80% of 45	560 x 80%
80% of 16	0.6 x 80%	80% x 1.3

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 0.8	• Understand that 0.8 = 8/10 and that 0.8 = 80% • Follow our Smart Strategy for finding 80% of any number	• 90 x 0.8 = ? • 90 ÷ 10 = 9 • 9 x 8 = 72 • Or, 90 ÷ 5 = 18, 18 x 4 = 72 • So, 90 x 0.8 = 72

60 x 0.8	100 x 80%	190 x 8/10
170 x 0.8	0.8 x 450	650 x 4/5
320 x 0.8	0.8 of 45	560 x 0.8
0.8 x 16	0.6 x 0.8	0.8 x 1.3

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply a fraction by a whole number.	• Multiply your numerator by the whole number, also known as a 'multiplier'. • Leave the denominator. • Simplify if possible	• 5/6 x 6 = ? • 5 x 6 = 30 • 5/6 x 6 = 30/6 • This can be simplified to 5/1 or simply '5'

2/3 x 5	1/3 x 18	12/15 x 7
4/7 x 3	8/14 x 8	9/15 x 8
9/11 x 7	12/17 x 9	5/19 x 16
13/4 x 16	8/15 x 26	4/7 x 6.5

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any Number by 2.5	• Double your starting number • Halve your starting number • Add your two answers together	• 240 x 2.5 = ? • 240 x 2 = 480 • ½ of 240 = 120 • 480 + 120 = 600 • So, 240 x 2.5 = 600

6 x 2.5	12 x 2.5	86 x 2.5
14 x 2.5	18 x 2.5	942 x 2.5
26 x 2.5	124 x 2.5	726 x 2.5
370 x 2.5	48.8 x 2.5	6.46 x 2.5

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any Number by 12.5	• Multiply your number by 10 • Follow our Smart Strategy to multiply any number by 2.5 • Add your two answers together.	• **240 x 12.5 = ?** • **240 x 10 = 2,400** • **240 x 2 = 480** • **½ of 240 = 120** • **480 + 120 = 600** • **2,400 + 600 = 3,000** • **So, 240 x 12.5 = 3,000**

6 x 12.5	12 x 12.5	86 x 12.5
14 x 12.5	18 x 12.5	942 x 12.5
26 x 12.5	124 x 12.5	726 x 12.5
370 x 12.5	48.8 x 12.5	6.46 x 12.5

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Increase and decrease integers by scale factors.	• Understand that ‘increase’ means to multiply by and ‘decrease’ means to divide by any given number.	• 8 increased by a scale factor of 7 = 8 x 7 = 56 • 72 decreased by a scale factor of 9 = 72 ÷ 9 = 8

Increase N by a scale factor of _____

Increase…		Decrease…
7 by 9		72 by 9
12 by 11		132 by 11
16 by 22		84 by 7

Decrease N by a scale factor of _____

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide a fraction by a whole number.	• Divide your numerator by the divisor (whole number). • If this is impossible, multiply your divisor by the denominator instead.	• 2/3 ÷ 2 = ? • 2 ÷ 2 = 1, so it's 1/3 • 4/7 ÷ 3 = ? • 7 x 3 = 21 so it's 4/21

$2/3 \div 5$	$1/3 \div 18$	$12/15 \div 7$
$4/7 \div 4$	$8/14 \div 8$	$16/15 \div 8$
$9/11 \div 7$	$18/25 \div 9$	$45/59 \div 15$
$13/14 \div 16$	$8/15 \div 25$	$4/7 \div 6$

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide any number by 8	• Halve your starting number • Halve it again, then again. • **Or, if you can, use a bus stop division and 8x tables facts**	• 7,280 ÷ 8 = ? • 7,280 ÷ 2 = 3,640 • 3,640 ÷ 2 = 1,820 • 1,820 ÷ 2 = 910

240 ÷ 8	368 ÷ 8	160 ÷ 8
480 ÷ 8	432 ÷ 8	1,600 ÷ 8
960 ÷ 8	1,248 ÷ 8	456 ÷ 8
3,280 ÷ 8	8.4 ÷ 8	184 ÷ 8

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 12.5% of any number	• Follow our Smart Strategy for dividing any number by 8 • Or, find 10% and then find 2.5%, adding them together	• 12.5% of 8,000 = ? • 8,000 ÷ 8 = 1,000 • Or, 10% = 800 and 2.5% = 200 so 800 + 200 = 1,000

240 x 12.5%	12.5% of 368	160 x 12.5%
480 x 12.5%	432 x 12.5%	600 x 12.5%
12.5% of 960	12.5% of 248	456 x 12.5%
12.5% of 3,280	8.4 x 12.5%	12.5% of 1,840

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 11% of any number	• Divide starting number by 10 • Divide starting number by 100 • Add both answers together	• 11% of 3,400 = ? • 3,400 ÷ 10 = 340 • 3,400 ÷ 100 = 34 • 340 + 34 = 374

240 x 11%	11% of 368	160 x 11%
480 x 11%	432 x 11%	600 x 11%
11% of 960	11% of 248	456 x 11%
11% of 3,280	8.4 x 11%	11% of 1,840

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 2.5% of any number	• Divide your starting number by 100 to find 1% • Follow our Smart Strategy to multiply any number by 2.5	• 2.5% of 2,600 = ? • 2,600 ÷ 100 = 26 • 26 x 2 = 52 • ½ of 26 = 13 • 52 + 13 = 65

240 x 2.5%	2.5% of 368	160 x 2.5%
480 x 2.5%	432 x 2.5%	600 x 2.5%
2.5% of 960	2.5% of 248	456 x 2.5%
2.5% of 3,280	8.4 x 2.5%	2.5% of 1,840

Chapter 7 – Year Six

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer term
Year 6 (1 – 12 x tables, 1 – 12 x tables inverses)	Revise Y1-2 Strategies. Revise Y3-4 Strategies. Revise Y5 Strategies. Fractions of amounts. Calculate percentages. Find 0.5% of a number.	As per Autumn 1 Multiply a fraction by a fraction. Convert a mixed number to an improper fraction	As per Autumn 2 Convert an improper fraction to a mixed number Divide a fraction by another fraction. Divide a decimal number by a one-digit divisor.	As per Spring 1 Apply X / ÷ by 10, 100 and 1000 to converting measures.	Revision of all Smart Strategies. Daily sessions, Mathsbot.com, SATs past paper workshops, targeted starter tasks.

- All **green** concepts are new learning for the half term.
- All **black** concepts are revision of prior learning.
- There are 9 key concepts to learn and understand during Year Six, including complex conversions knowledge.
- In addition, the **all x tables are expected to be known as inverses / times tables families with instant recall**.
- During Year Six, **all Years 1-5 concepts will be revised** and consolidated on a half-termly basis.

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Calculate fractions of amounts	• Divide your starting number by the denominator (bottom) using a bus stop method. • Multiply the answer by your numerator (top). • Remember to use any unit of measure needed, eg: £, kg	• 4/7 of £5,635 = ? • 5,635 ÷ 7 = 805 • 805 x 4 = 3,220 • So, 4/7 of £5,635 = £3,220

2/5 of 750	5/6 of 660	2/7 of 350
4/11 of 121	3/8 of 960	3/2 of 840
7/9 of 630	5/8 of 7,264	7/3 of 51
3/16 of 4,800	12/5 of 455	11/3 of 510

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Calculate percentages of amounts	• Divide your starting number by 100 to find 1% • Multiply the answer by whatever percentage you are looking for.	• 13% of 700 = ? • 700 ÷ 100 = 7 • 7 x 10 = 70, 7 x 3 = 21 • So, 7 x 13 must be 91 • 13% of 700 = 91

6% of 700	11% of 600	4% of 3,500
11% of 1,500	21% of 1,400	2% of 840
20% of 600	8% of 1,200	7% of 500
17% of 4,800	3% of 455	4.5% of 500

13% of 700	15% of 600	3% of 3,500
4% of 1,500	12% of 1,400	7% of 840
16% of 600	51% of 1,200	98% of 500
38% of 4,800	8% of 455	3.5% of 500

13% of 900	6% of 8,000	9% of 3,500
7% of 1,500	8% of 1,800	5% of 840
4% of 20,000	51% of 3,400	97% of 900
38% of 7,600	7% of 675	7.5% of 800

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Calculate ***higher*** percentages of amounts	• For some percentages, it's easier to use number bonds to 100 and subtract. • For example, finding 98% is easier if you find 2% then subtract this from your starting number rather than multiplying by 98.	• 93% of 800 = ? • 100 – 93 = 7 • Let's find 7% and subtract… • 800 ÷ 100 = 8 • 8 x 7 = 56 • 800 – 56 = 744 • So, 93% of 800 = 744

96% of 700	95% of 600	94% of 3,000
91% of 1,500	99% of 1,400	92% of 840
93% of 600	98% of 1,200	97% of 500
97% of 4,800	83% of 450	85% of 500

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 0.5% of any number	• Divide your starting number by 100 to find 1%. • Halve your answer to find half of one percent.	• 0.5% of 680 • 680 ÷ 100 = 6.8 • ½ of 6.8 = 3.4 • So, 0.5% of 680 = 3.4

240 x 0.5%	0.5% of 300	1,600 x 0.5%
480 x 0.5%	400 x 0.5%	600 x 0.5%
0.5% of 960	0.5% of 248	760 x 0.5%
0.5% of 3,280	8.4 x 0.5%	0.5% of 1,840

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply a fraction by another fraction	• Multiply the numerators • Multiply the denominators • Simplify if possible	• 2/3 x 4/5 = ? • 2 x 4 = 8 • 3 x 5 = 15 • 2/3 x 4/5 = 8/15

2/3 x 3/8	7/8 x 3/5	4/7 x 2/5
5/6 x 9/12	2/9 x 9/14	3/6 x 3/6
11/13 x 7/9	18/20 x 9/10	7/9 x 7/8
16/19 x 17/21	13/19 x 23/35	34/50 x 14/20

Can any of these be simplified?

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Convert a mixed number to an improper fraction	• Multiply the whole number by the denominator. • Add the numerator of the fraction.	• 5¼ = ? • 5 x 4 = 20 • 20 + 1 = 21 • 5¼ = 21/4

2 and 3/8	7 and 4/7	10 and 2/5
3 and 1/6	9 and 3/9	19 and 2/3
13 and 7/10	12 and 1/2	18 and 2/4
85 ¼	91 ½	346 ¼

Can any of these be simplified?

4 and 5/8	8 and 4/9	9 and 2/7
6 and 2/7	12 and 3/5	17 and 2/3
26 and 7/10	16 and 3/4	40 and 7/8
435 ¼	236 ½	873 and 1/5

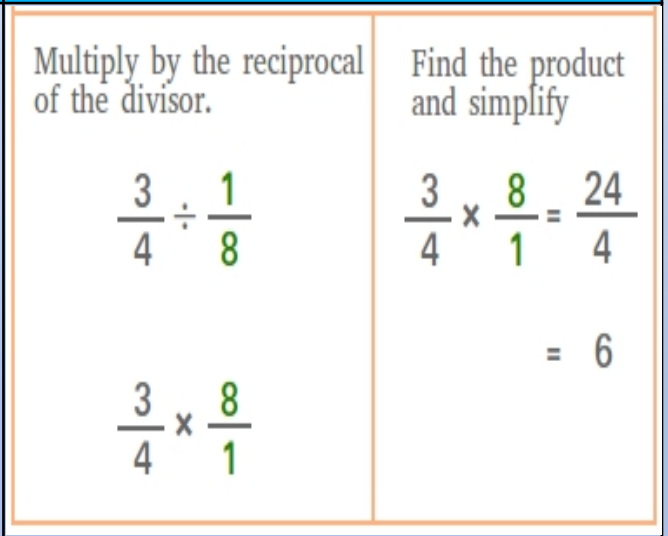
Can any of these be simplified?

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Convert an improper fraction to a mixed number	• Divide the denominator by the numerator to find the whole number. • Use the remainder to create a new numerator. • Do **not** change the denominator.	• 23/5 = ? • 23 ÷ 5 = 4 r3 • 23/5 = 4 and 3/5

12/5	16/7	21/4
19/9	34/5	37/6
757/3	3,546/8	438/7
320/15	267/13	235/23

Can any of these be simplified?

2 and 2/5	2 and 2/7	5 and 1/4
2 and 1/9	6 and 4/5	6 and 1/6
252 and 1/3	443 and 2/8 (1/4)	62 and 4/7
21 and 5/15 (1/3)	20 and 7/13	10 and 5/23

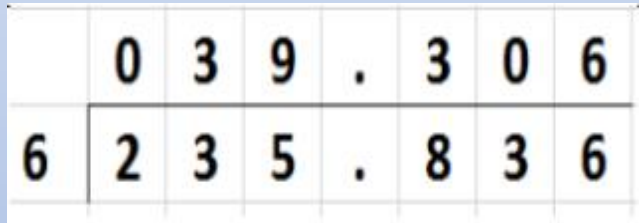
AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide a fraction by another fraction.	• For the fraction you are dividing by (divisor), swap the numerator and denominator around. • Follow our Smart Strategy for multiplying a fraction by another fraction.	 **Let's have a closer look on the next slide…**

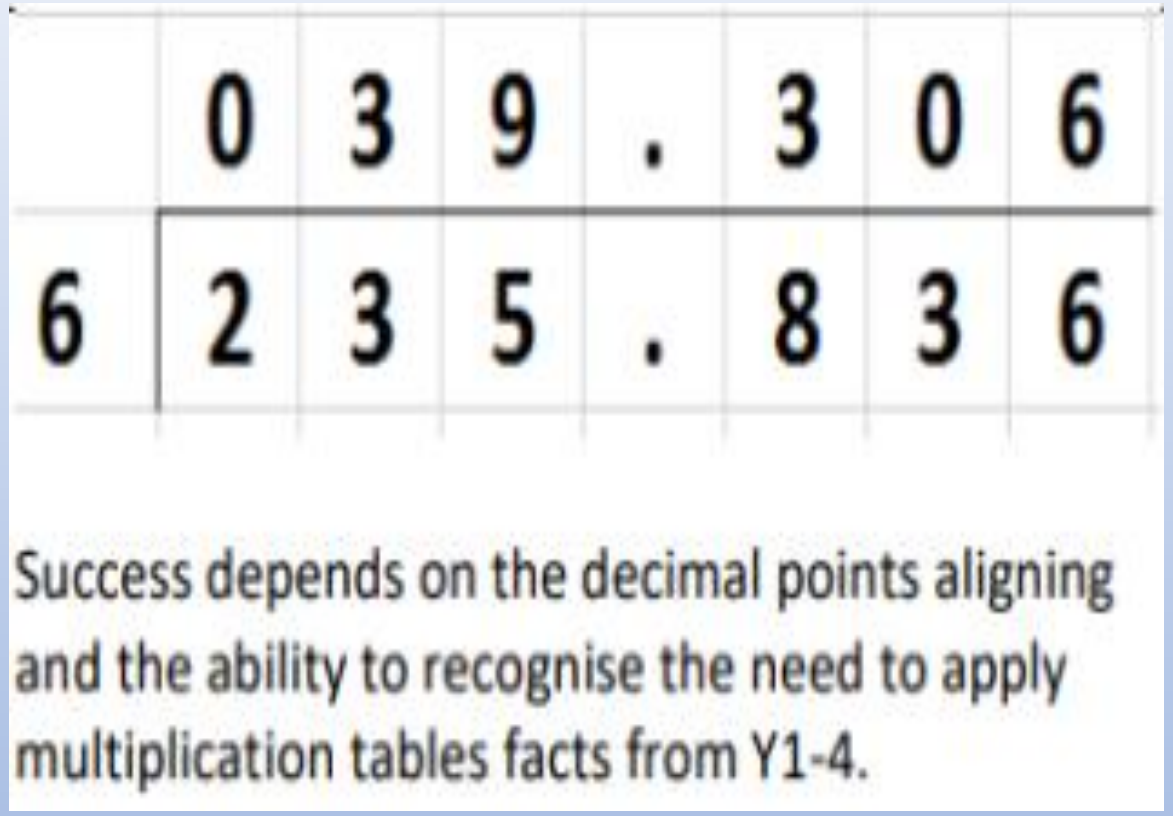
Multiply by the reciprocal of the divisor.	Find the product and simplify
$\frac{3}{4} \div \frac{1}{8}$	$\frac{3}{4} \times \frac{8}{1} = \frac{24}{4}$
$\frac{3}{4} \times \frac{8}{1}$	$= 6$

1. One over eight is swapped to become eight over one.
2. The division symbol is then swapped for a multiplication.
3. Here, we now see 3 x 8 and 4 x 1 because we have turned the problem into a fraction x fraction task.

$2/5 \div 3/4$	$368 \div 8$	$160 \div 8$
$4/5 \div 5/8$	$432 \div 8$	$1{,}600 \div 8$
$6/9 \div 8/9$	$1{,}248 \div 8$	$456 \div 8$
$3/14 \div 2/5$	$9/84 \div 8/17$	$3/4 \div 12/19$

Can any of these be simplified?

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide a decimal number by a one-digit divisor.	• Place a decimal point at the end of your dividend. • Continue writing past the decimal point with '0' • Place a decimal point **directly** above the first, on top of the bus stop. • Continue the division.	 Success depends on the decimal points aligning and the ability to recognise the need to apply multiplication tables facts from Y1-4. **Let's have a closer look on the next slide…**



1. This method allows us to carry on instead of needing to stop at a remainder.

2. It is well-suited to calculations involving money or measures.

3. Make sure the decimal points align and just carry on the calculation…

55 ÷ 4	368mm ÷ 6	163kg ÷ 2
475kg ÷ 8	43.2cm ÷ 7	£57.60 ÷ 5
6150g ÷ 9	1,248 ÷ 3	459.6 ÷ 3
37.14g ÷ 5	968.4g ÷ 8	23.94g ÷ 7

Stop after ??? decimal places ;)

See your SS Document at the back

1000m = 1km

100cm = 1m

10mm = 1cm

$\frac{1}{2}$ m = 0.5m = 50cm

$\frac{1}{4}$ m = 0.25m = 25cm

$\frac{3}{4}$ m = 0.75m = 75cm

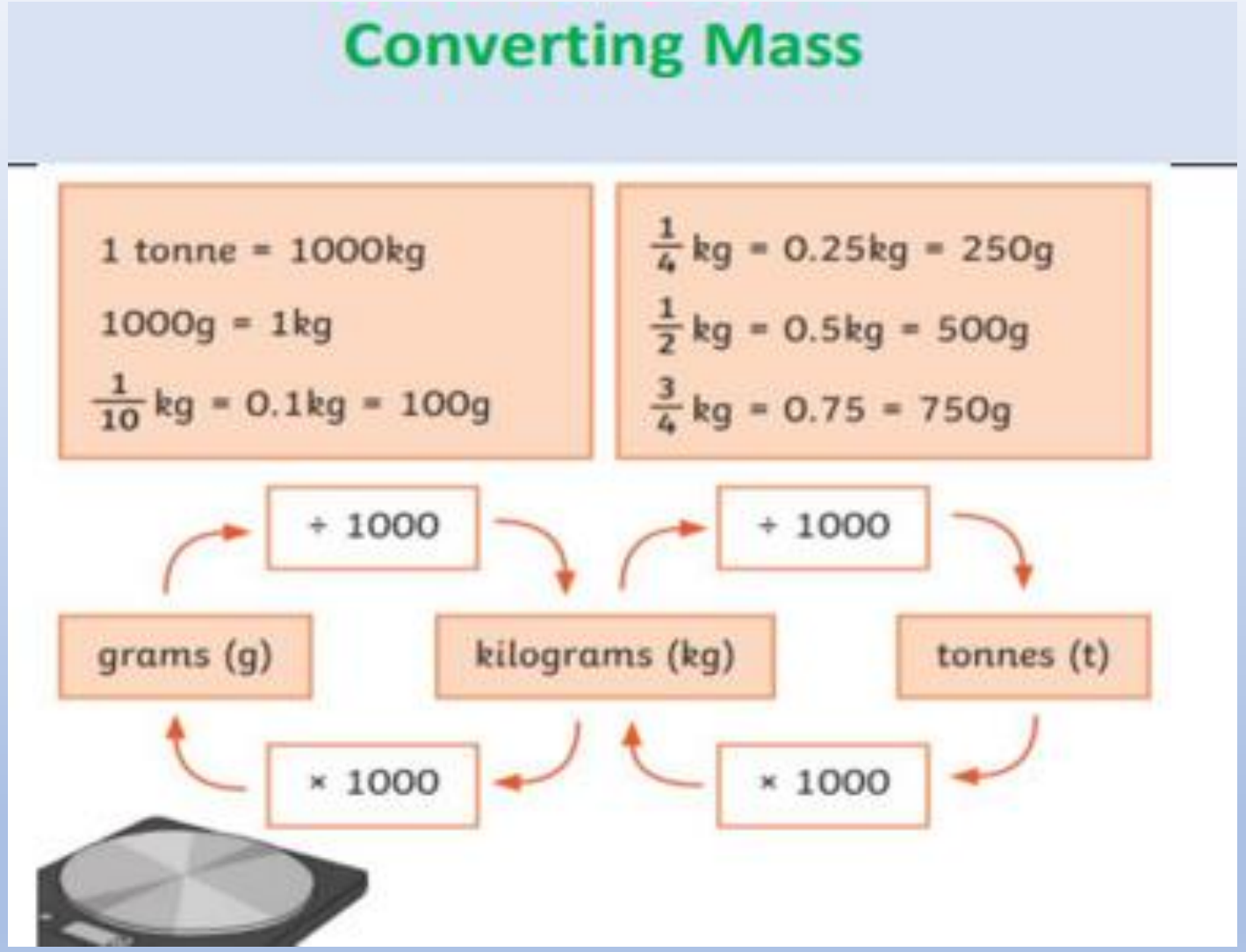
$\frac{1}{10}$ m = 0.01m = 10cm

millimetres (mm) ÷ 10 centimetres (cm) ÷ 100 metres (m) ÷ 1000 kilometres (km)

millimetres (mm) × 10 centimetres (cm) × 100 metres (m) × 1000 kilometres (km)

This will help you with the next page…

36km = ___m	___cm = 2m	__km = 8,600m
475m = ___km	___mm = 86cm	___km = 900m
18cm = ___mm	___mm = 1m	___m = 576cm
18cm = ___m	18cm = ___km	___mm = 4.5m



1. There are similarities here with converting metric measurements for length and capacity / volume.

2. Notice how we multiply by 1,000 to turn a larger unit into a smaller one (because there are more of them).

3. To turn a smaller unit into a larger one, we divide by 1,000 as there are fewer.

How do we **multiply** by 1,000 easily?

36kg = ___g	___g = 2kg	__kg = 8,600g
475g = ___kg	___g = 86kg	___kg = 900g
18kg = ___g	___kg = 100g	___kg = 576g
18.6kg = ___g	1.096kg = ___g	___kg = 45g

How do we **divide** by 1,000 easily?

Converting Capacity

1000ml = 1l

$\frac{1}{10}$ l = 0.1l = 100ml

$\frac{1}{4}$ l = 0.25l = 250ml

$\frac{1}{2}$ l = 0.5l = 500ml

$\frac{3}{4}$ l = 0.75l = 750ml

$\frac{1}{100}$ l = 0.01l = 10ml

÷ 1000

millilitre (ml)

litres (l)

× 1000

1. There are similarities here with converting metric measurements for length and mass / weight.
2. Notice how we multiply by 1,000 to turn a larger unit into a smaller one (because there are more of them).
3. To turn a smaller unit into a larger one, we divide by 1,000 as there are fewer.

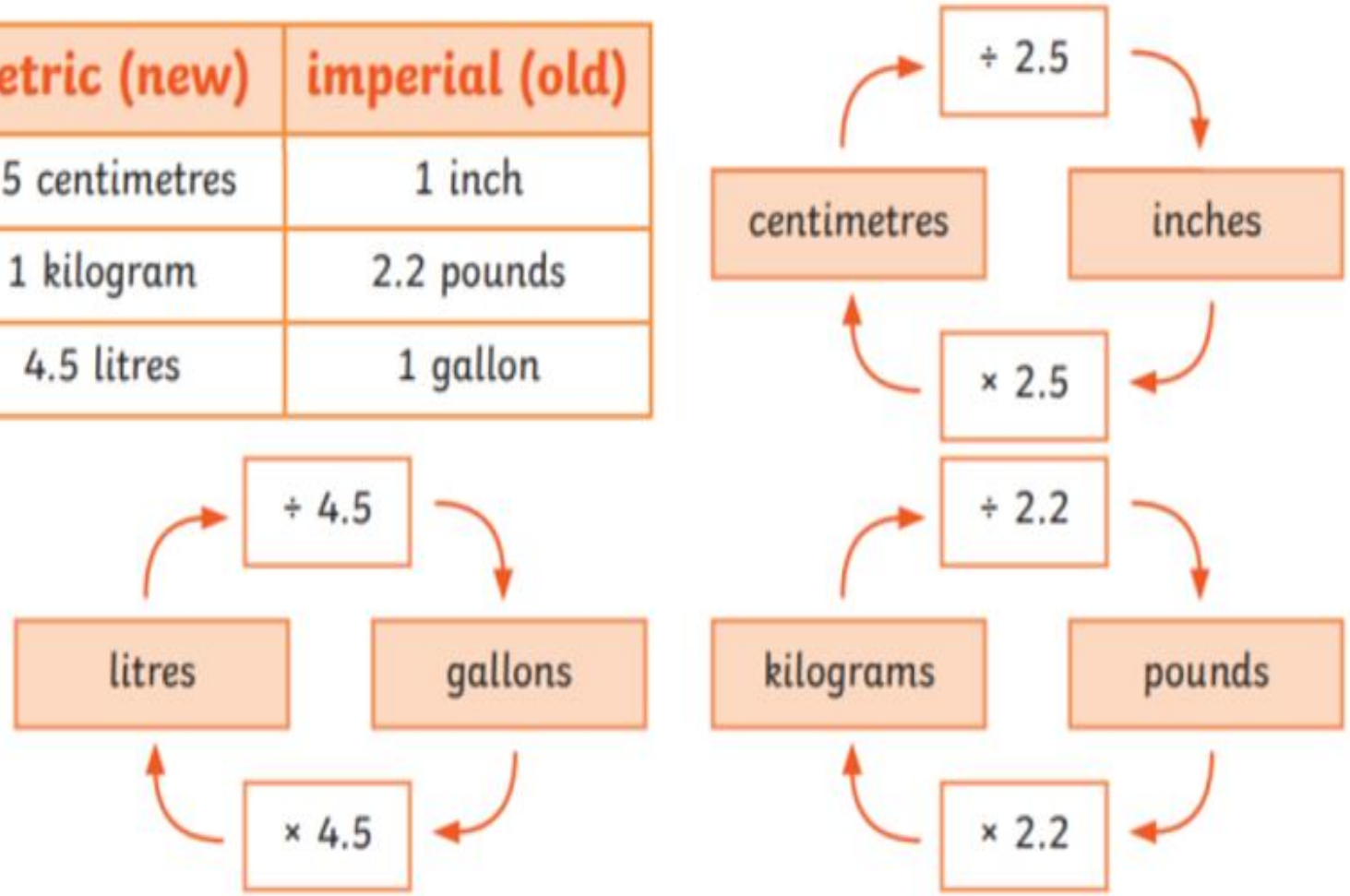
How do we **multiply** by 1,000 easily?

36 li = ___ml	___ml = 2 li	__li = 8,600ml
475 li = ___ml	___ li = 8 li	___li = 900ml
1,800ml = ___li	___li = 100ml	___ml = 5.7 li
18.6 li = ___ml	1.96 li = ___ml	___ml = 45 li

How do we **divide** by 1,000 easily?

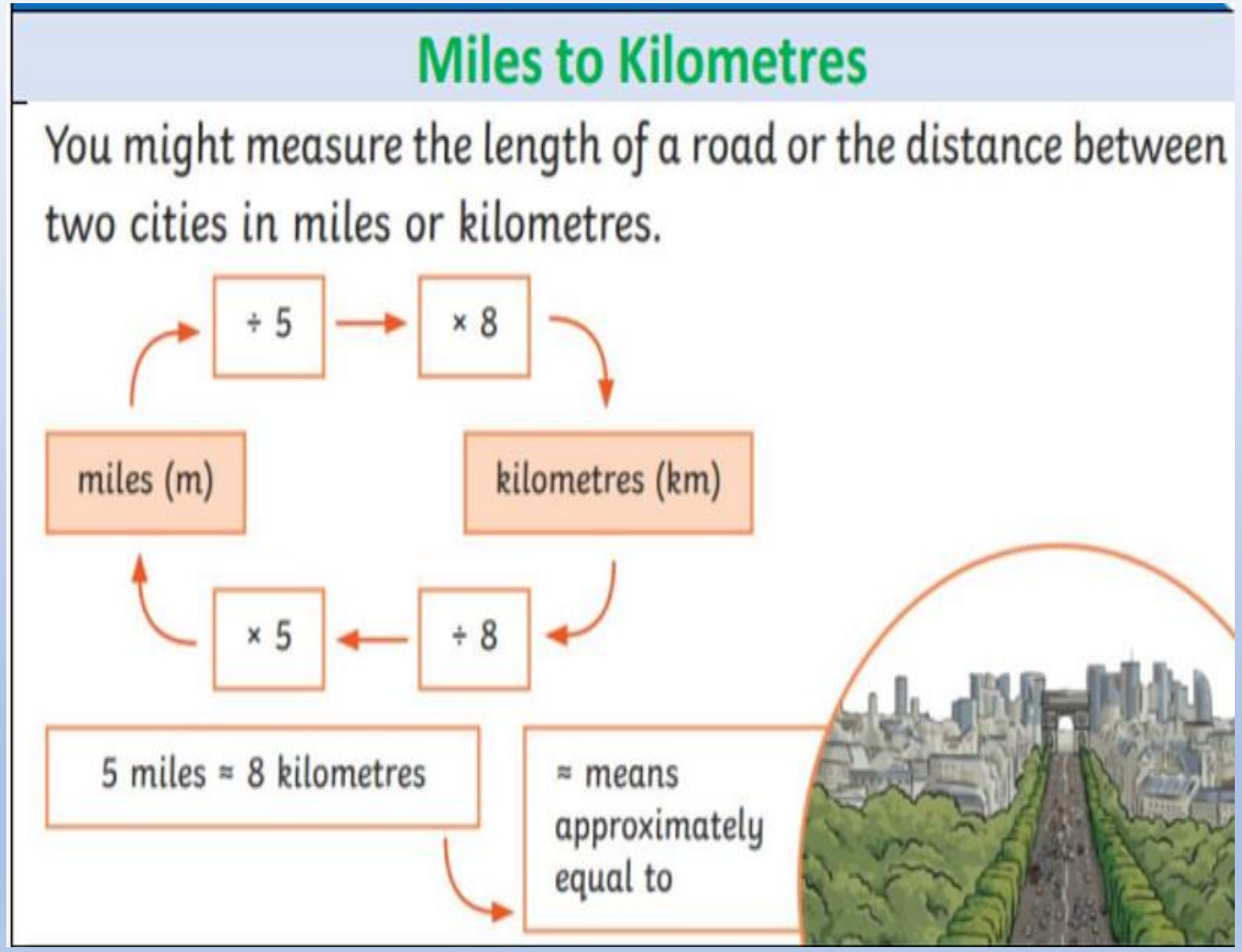
Metric to Imperial Conversions

metric (new)	imperial (old)
2.5 centimetres	1 inch
1 kilogram	2.2 pounds
4.5 litres	1 gallon



1. The easiest way to divide by 2.5 is to divide by 5 then just double your answer.
2. The easiest way to divide by 2.2 is to multiply your original number by 10 then divide by 22
3. Multiplying by 2.2 is the same as doubling then adding 1/5 of your starting number.
4. Multiplying by 4.5 is the same as multiplying by 4 then adding half of your original number.
5. The easiest way to divide by 4.5 is to divide by 9 then just double your answer.

4 feet = ___ inches	___ inches = 2.5 feet	___ inches = 13 feet
___ lbs = 5kg	___ kg = 22 lbs	___lbs = 20kg
3 gallons = ___ litres	27 gallons = ___ litres	20 litres = ___ gallons
200 inches = ___ feet	4.5 gallons = ___ litres	38kg = ___ lbs



1. There are 8km in every 5 miles.
2. This means 1 mile = 1.6km
3. It also means, as a fraction, 1km = 5/8 of a mile.
4. It also means, as an improper fraction, 1 mile is 8/5 of a km.
5. To convert miles into km, you must divide by 5 then multiply by 8.
6. To convert km into miles, you need to divide by 8 then multiply by 5.

8 miles = ___km	80 miles = ___km	800 miles = ___km
24km = ___ miles	240km = ___ miles	2,400km = ___ miles
65 miles = ___km	750 miles = ___km	875 miles = ___km
18km = ___ miles	3,000km = ___ miles	680km = ___ miles

Time

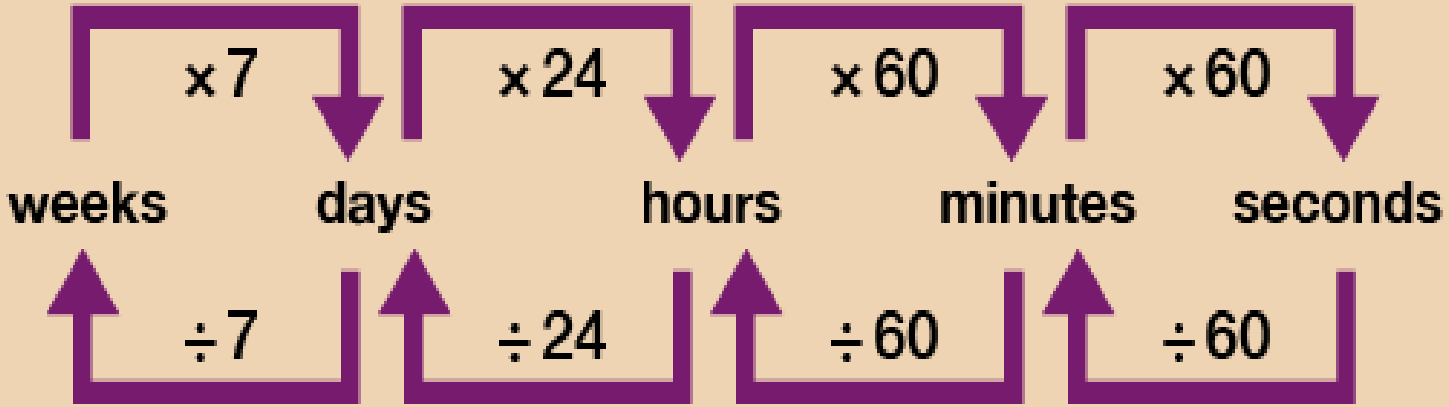
Minute 1 minute = 60 seconds

Hour 1 hour = 60 minutes

Day 1 day = 24 hours

Week 1 week = 7 days

Year 1 year = 12 months = 52 weeks = 365 days



1. To turn weeks into years, we divide by 52.
2. To turn years into weeks, we multiply by 52.
3. To turn days into years, we divide by 365.
4. To turn years into days, we multiply by 365
5. There is a misconception that a month lasts 4 weeks and this is not true – if it were true, there would be 13 months in a year instead of 12 because 52 ÷ 4 = 13, not 12.

8 minutes = ___seconds	480 seconds = ___minutes	1 ¼ hours = ___ minutes
28 days = ___ weeks	1 hour = ___ seconds	4 years = ___ weeks
1 week = ___ hours	90 minutes = ____ hours	840 seconds = ___ minutes
1.8 hours = ___ minutes	2.5 years = ___ weeks	68 hours = ___ seconds

Imperial Measures

Things that could be measured using imperial units:

- Someone's height in feet and inches
- The mass of a bag of sugar in ounces
- The mass of a sack of potatoes in pounds
- A person's mass in stones
- A carton of milk in pints
- The amount of water in a bath in gallons

1 foot = 12 inches

1 pound = 16 ounces

1 stone = 14 pounds

1 gallon = 8 pints

	METRIC	IMPERIAL
Length	millimetre, centimetre, metre, kilometre	inch, foot, yard, mile
Mass	milligram, gram, kilogram	ounce, pound, stone
Capacity	millilitre, centilitre, litre	pint, gallon

1. To turn stones into pounds, we must multiply by 14.
2. To turn pounds into stones, we must divide by 14.
3. To turn ounces into pounds, we must divide by 16.
4. To turn pounds into ounces, we multiply by 16.
5. To turn gallons into pints, we must multiply by 8.
6. To turn pints into gallons, we must divide by 8.

8 stones = ___pounds	196 pounds = ___stones	1 ½ stones = ___ pounds
48 ounces = ___ pounds	3 gallons + ___ pints	48 pints = ___ gallons
960 ounces = ___ pounds	3 ½ gallons = ___ pints	3 stones =___ pounds
5.5 stones = ___ ounces	4.6 gallons = ___ pints	3 stones = ___ ounces