Old Bank Primary Academy

Chapter 4 – Year Three

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3 (1-5, 9, 10 x tables)	Revise Y1-2 Strategies. Add 1000 Subtract 1000	Revise Y1-2 Strategies. Add or subtract 1000 Add 999 Subtract 999	Revise Y1-2 Strategies. Add or subtract 1000 Add or subtract 999 Multiply by 100 Divide by 100 Multiply by 1000 Divide by 1000	Revise Y1-2 Strategies. Add or subtract 1000 Add or subtract 999 X or ÷ by 100 or 1000 Multiply by 9 Multiply by 99	Revise Y1-2 Strategies. Add or subtract 1000 Add or subtract 999 X or ÷ by 100 or 1000 Multiply by 9 or 99 Multiply by 11	Revise Y1-2 Strategies. Add or subtract 1000 Add or subtract 999 X or ÷ by 100 or 1000 Multiply by 9, 11 or 99 Divide by 4

- All green concepts are new learning for the half term.
- All black concepts are revision of prior learning.
- There are 12 key concepts to learn and understand during Year Three.
- In addition, the 3, 4 and 9 x Tables will be learned in and out of order and recited as number sentences.
- During Year Three, all Key Stage 1 concepts will be revised and consolidated on a half-termly basis.

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Add 1,000 to any number	- Increase your thousands by 1. - Leave the 1s, 10s and 100s alone.	6,530 + 1,000 = ? - Add 1,000 to the 6,000 - This leaves 7 thousands **6,**530 + 1,000 = **7,**530

231 + 1,000	540 + 1,000	734 + 1,000
85 + 1,000	463 + 1,000	452 + 1,000
706 + 1,000	637 + 1,000	178 + 1,000
92.2 + 1000	195 + 1,000	99 + 1,000

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Subtract 1,000 from any number	• Reduce your thousands by 1. • Leave the 1s, 10s and 100s alone.	• 6,530 – 1,000 = ? • Take 1,000 from the 6,000 • This leaves 5 thousands • **6,**530 – 1,000 = **5,**530

6,231 – 1,000	5,240 – 1,000	7,234 – 1,000
8,925 – 1,000	1,067 – 1,000	1,960 – 1,000
1,706 – 1,000	5,637 1,000	8,178 – 1,000
1,073 – 1,000	1,000 – 1,000	9,999 – 1,000

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Add 999 to any number	• Add 1,000 to your starting number. • Subtract 1.	• 13 + 999 = ? • 13 + 1,000 = 1,013 • 1,013 − 1 = 1,012 • So, 13 + 999 = 1,012

230 + 999	24 + 999	101 + 999
82 + 999	46 + 999	345 + 999
707 + 999	637 + 999	178 + 999
92.6 + 999	195 + 999	999 + 999

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Subtract 999 from any number	- Subtract 1,000 from your starting number. - Add 1 back.	1,300 – 999 = ? 1,300 – 1,000 = 300 300 + 1 = 301 - So 1,300 – 999 = 301

2,230 - 999	1,999 - 999	1,001 - 999
382 - 999	946 - 999	3,458 - 999
1,707 - 999	8,637 - 999	1,782 - 999
1,010 - 999	6,195 - 999	999 - 999

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 100	• All digits move 2 places left. • Never move the decimal. • We never 'add two zeros'.	• 125 x 100 = ? • All digits move 2 places left • 125 x 100 = 12,500

13 x 100	25 x 100	41 x 100
24 x 100	32 x 100	29 x 100
287 x 100	83 x 100	66 x 100
22.5 x 100	103 x 100	110 x 100

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide any number by 100	- All digits move 2 places right. - We never 'take away two zeros'.	500 ÷ 100 = ? - All digits move 2 places right 500 ÷ 100 = 5

1,300 ÷ 100	2,400 ÷ 100	1,200 ÷ 100
4,400 ÷ 100	6,800 ÷ 100	3,100 ÷ 100
1,900 ÷ 100	2,000 ÷ 100	4,500 ÷ 100
7,800 ÷ 100	100 ÷ 100	1,000 ÷ 100

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 1,000	- All digits move 3 places left. - Never move the decimal. - We never 'add three zeros'.	125 x 1,000 = ? - All digits move 3 places left 125 x 1,**000** = 125,**000**

13 x 1,000	25 x 1,000	41 x 1,000
24 x 1,000	32 x 1,000	29 x 1,000
287 x 1,000	83 x 1,000	66 x 1,000
22.5 x 1000	103 x 1,000	110 x 1,000

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide any number by 1,000	• All digits move 3 places right. • We never 'take away three zeros'.	• 5,000 ÷ 1,000 = ? • All digits move 3 places right • 5,000 ÷ 1,000 = 5

13,000 ÷ 1000	2,000 ÷ 1000	1200 ÷ 1000
4,000 ÷ 1,000	16,000 ÷ 1000	3,000 ÷ 1,000
1,000 ÷ 1,000	2,000 ÷ 1000	8,000 ÷ 1,000
7,500 ÷ 1000	100 ÷ 1000	4,500 ÷ 1,000

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 9	• Use the Smart Strategy for multiplying by 10. • Subtract your original number.	• 14 x 9 = ? • 14 x 10 = 140 • 140 – 14 = 126 • 14 x 9 = 126

13 x 9	25 x 9	41 x 9
24 x 9	32 x 9	29 x 9
287 x 9	83 x 9	66 x 9
22.5 x 9	103 x 9	110 x 9

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 99	• Use the Smart Strategy for multiplying by 100. • Subtract your original number.	• 14 x 99 = ? • 14 x 100 = 1,400 • 1,400 – 14 = 1,386 • 14 x 99 = 1,386

13 x 99	25 x 99	41 x 99
24 x 99	32 x 99	29 x 99
287 x 99	83 x 99	66 x 99
22.5 x 99	103 x 99	110 x 99

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 11	• Use the Smart Strategy for multiplying by 10. • Add your original number.	• 14 x 11 = ? • 14 x 10 = 140 • 140 + 14 = 154 • 14 x 11 = 154

13 x 11	25 x 11	41 x 11
24 x 11	32 x 11	29 x 11
287 x 11	83 x 11	66 x 11
22.5 x 11	103 x 11	110 x 11

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide any number by 4	• Halve your original, or divide it by 2. • Halve your answer.	• 500 ÷ 4 = ? • 500 ÷ 2 = 250 • 250 ÷ 2 = 125 • 500 ÷ 4 = 125

1,300 ÷ 4	2,400 ÷ 4	1,200 ÷ 4
4,400 ÷ 4	6,800 ÷ 4	3,100 ÷ 4
1,900 ÷ 4	2,000 ÷ 4	4,500 ÷ 4
7,800 ÷ 4	100 ÷ 4	1,000 ÷ 4

Chapter 5 – Year Four

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 4 (1 - 12 x tables, 5-second recall)	Revise Y1-2 Strategies. Revise Y3 Strategies. Add 9.9 to any number Add 0.9 to any number Subtract 9.9 Subtract 0.9	Revise Y1-2 Strategies. Revise Y3 Strategies. Add or subtract 9.9 Add or subtract 0.9 Adding fractions same denominator Subtracting fractions same denominator	Revise Y1-2 Strategies. Revise Y3 Strategies. Add / subtract 9.9 or 0.9 Adding or subtracting fractions same denom. Find 5% Find 10% Find 20%	As per Spring 1 Multiply by 999 Multiply by 20 Multiply by 21 Multiply by 19	As per Spring 2 Divide any number by 5 Divide any number by 8 Find 1% of any number	As per Summer 1 Multiply by 15 Multiply by 25

- All green concepts are new learning for the half term.
- All black concepts are revision of prior learning.
- There are 18 key concepts to learn and understand during Year Four.
- In addition, the 6, 7, 8, 11 and 12 x Tables will be learned in and out of order and recited as number sentences.
- During Year Four, all Key Stage 1 and Year 3 concepts will be revised and consolidated on a half-termly basis.

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Add 9.9 to any number	• Add 10 to your starting number. • Subtract 0.1.	• 630 + 9.9 = ? • 630 + 10 = 640 • 640 – 0.1 = 639.9 • So, 630 + 9.9 = 639.9

53 + 9.9	4 + 9.9	675 + 9.9
535 + 9.9	234 + 9.9	572 + 9.9
3,522 + 9.9	1,095 + 9.9	3,875 + 9.9
18.8 + 9.9	0.4 + 9.9	0.87 + 9.9

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Subtract 9.9 from any number	• Subtract 10 from your starting number. • Add 0.1 back.	• 286 – 9.9 = ? • 286 – 10 = 276 • 276 + 0.1 = 276.1 • 286 – 9.9 = 276.1

53 - 9.9	24 - 9.9	675 - 9.9
535 - 9.9	234 - 9.9	572 - 9.9
3,522 - 9.9	1,095 - 9.9	3,875 - 9.9
18.9 - 9.9	19.4 - 9.9	487.2 - 9.9

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Add 0.9 to any number	• Add 1 to your starting number. • Subtract 0.1.	• $630 + 0.9 = ?$ • $630 + 1 = 631$ • $631 - 0.1 = 630.9$ • So, $630 + 0.9 = 630.9$

53 + 0.9	4 + 0.9	675 + 0.9
535 + 0.9	234 + 0.9	572 + 0.9
3,522 + 0.9	1,095 + 0.9	3,875 + 0.9
18.8 + 0.9	0.4 + 0.9	0.87 + 0.9

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Subtract 0.9 from any number	- Subtract 1 from your starting number. - Add 0.1 back.	16.3 − 0.9 = ? 16.3 − 1 = 15.3 15.3 + 0.1 = 15.4 - So, 16.3 − 0.9 = 15.4

53 - 0.9	4 - 0.9	675 - 0.9
535 - 0.9	234 - 0.9	572 - 0.9
3,522 - 0.9	1,095 - 0.9	3,875 - 0.9
18.8 - 0.9	1.4 - 0.9	3.87 - 0.9

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Adding fractions together with the same denominator	- Know that a numerator is the 'top value' in a fraction. - Add together the numerators - Leave the denominators alone!	4/7 + 2/7 = ? 4 + 2 = 6 - So, 4/7 + 2/7 = 6/7

4/7 + 2/7	4/9 + 2/9	4/6 + 1/6
2/8 + 5/8	2/10 + 5/10	2/7 + 3/7
2/5 + 1/5	2/11 + 1/11	1/4 + 1/4
2/6 + 4/6	3/5 + 3/5	9/5 + 4/5

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Subtracting fractions with the same denominator	- Know that a numerator is the 'top value' in a fraction. - Subtract the smaller numerator from the larger. - Leave the denominators alone!	- 5/7 - 2/7 = ? - 5 - 2 = 3 - So, 5/7 - 2/7 = 3/7

4/7 - 2/7	4/9 - 2/9	4/6 - 1/6
7/8 - 5/8	9/10 - 5/10	7/7 - 3/7
2/5 - 1/5	2/11 - 1/11	3/4 - 2/5
5/6 - 5/6	3/5 - 3/5	9/15 - 4/15

Can any of your answers be simplified?

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 10% of any number	- Use our Smart Strategy for dividing any number by 10. - Know that 10% = 1/10 and we find this by diving by 10.	- 50 ÷ 10 - All digits move 1 place right - 50 ÷ 10 = 05

10% x 300	10% x 300	10% x 800
450 x 10%	660 x 10%	740 x 10%
10% of 950	10% of 950	10% of 100
10% of 65	10% x 0.85	76 x 10%

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 20% of any number	- Know that 20% = 1/5 and we find this by diving by 5. - Or, divide by 10 then double your answer.	20% of 50 = 50 ÷ 5 50 ÷ 5 = 10 50 ÷ 10 = 5, doubled = 10 20% (or 1/5) of 50 = 10

20% x 300	20% x 300	20% x 800
450 x 20%	660 x 20%	740 x 20%
20% of 950	20% of 950	20% of 100
20% of 65	20% x 0.85	76 x 20%

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 5% of any number	- Use our Smart Strategy for dividing any number by 10. - Halve your answer. - Or, divide by 20 if you can!	5% of 300 = ? 300 ÷ 10 = 30 - Half of 30 = 15 - So, 5% of 300 must be… 15

5% x 300	5% x 300	5% x 800
400 x 5%	660 x 5%	740 x 5%
5% of 900	5% of 720	5% of 100
5% of 840	5% x 84	8.4 x 5%

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 999	• Use our Smart Strategy for multiplying by 1000 • Subtract the number you started with.	• 47 x 999 = ? • 47 x 1000 = 47,000 • 47,000 – 47 = 46,953 • So, 47 x 999 = 46,953

4 x 999	32 x 999	13 x 999
20 x 999	17 x 999	60 x 999
27 x 999	8 x 999	1 x 999
6.2 x 999	4.5 x 999	18.1 x 999

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 20	- Use our Smart Strategy for multiplying by 10. - Double your answer.	36 x 20 = ? 36 x 10 = 360 360 x 2 = 600 + 120 = 720 - So, 36 x 20 must be... 720

4 x 20	32 x 20	13 x 20
20 x 20	17 x 20	60 x 20
27 x 20	8 x 20	1 x 20
6.2 x 20	4.5 x 20	18.1 x 20

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 19	• Use our Smart Strategy for multiplying by 20. • Subtract the number you started with.	• 37 x 19 = ? • 37 x 10 = 370 • 370 x 2 = 740 (600 + 140) • 740 – 37 = 703 • So, 37 x 19 = 703

4 x 19	32 x 19	13 x 19
20 x 19	17 x 19	60 x 19
27 x 19	8 x 19	1 x 19
6.2 x 19	4.5 x 19	18.1 x 19

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 21	• Use our Smart Strategy for multiplying by 20. • Add the number you started with.	• 37 x 19 = ? • 37 x 10 = 370 • 370 x 2 = 740 (600 + 140) • 740 – 37 = 703 • So, 37 x 19 = 703

4 x 21	32 x 21	13 x 21
20 x 21	17 x 21	60 x 21
27 x 21	8 x 21	1 x 21
6.2 x 21	4.5 x 21	18.1 x 21

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide any number by 5	- Use bus stop division and your 5x tables to divide by 5. - Or, divide by 10 quickly then double your answer.	840 ÷ 5 = ? 840 ÷ 10 = 84 84 x 2 = 160 + 8 = 168 840 ÷ 5 = 168

1,300 ÷ 5	2,400 ÷ 5	1,200 ÷ 5
4,400 ÷ 5	6,800 ÷ 5	3,100 ÷ 5
1,900 ÷ 5	2,000 ÷ 5	4,500 ÷ 5
7,800 ÷ 5	175 ÷ 5	1,025 ÷ 5

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Divide any number by 8	- Use our Smart Strategy for dividing by 4, then halve your answer. - Or, use your 8x tables to complete a bus stop division.	480 ÷ 8 = ? ½ of 480 = 240 ½ of 240 = 120 ½ of 120 = 60 480 ÷ 8 = 60 (what is 6 x 8?)

320 ÷ 8	240 ÷ 8	120 ÷ 8
4,400 ÷ 8	6,800 ÷ 8	3,200 ÷ 8
1,800 ÷ 8	2,000 ÷ 8	4,200 ÷ 8
14,800 ÷ 8	16.16 ÷ 8	11,000 ÷ 8

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Find 1% of any number	• Use our Smart Strategy for dividing by 100. • Know that 1% is the same as the fraction 1/100	• 1% of 700 • 1% = 1/100 • 700 ÷ 100 = 7 • 1% of 700 = 7

1% x 300	1% x 300	1% x 800
450 x 1%	600 x 1%	700 x 1%
1% of 900	1% of 4,000	1% of 100
1% of 65	1% x 0.85	76 x 1%

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 15	- Use our Smart Strategy to quickly multiply by 10. - Halve this and add it to your answer.	84 x 15 = ? 84 x 10 = 840 ½ of 840 = 420 (84 x 5) 84 x 15 = 840 + 420 = 1,260

13 x 15	25 x 15	41 x 15
24 x 15	32 x 15	29 x 15
280 x 15	83 x 15	66 x 15
22.5 x 15	103 x 15	110 x 15

AIM	SMART STRATEGY (Tell me)	EXAMPLE (Show Me)
Multiply any number by 25	- Use our Smart Strategy to quickly multiply by 15. - Multiply your starting number by 10. - Add the two together!	84 x 25 = ? 84 x 15 = 1,260 (see above) 84 x 10 = 840 1,260 + 840 = 2,100 - So, 84 x 25 = 2,100

13 x 25	25 x 25	41 x 25
24 x 25	32 x 25	29 x 25
280 x 25	83 x 25	66 x 25
22.5 x 25	103 x 25	110 x 25