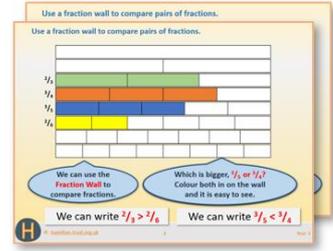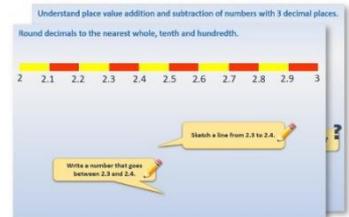# Week 13, Day 1
Add and subtract near multiples of 10, 100, 1000.
Each day covers one maths topic. It should take you about 1 hour or just a little more.
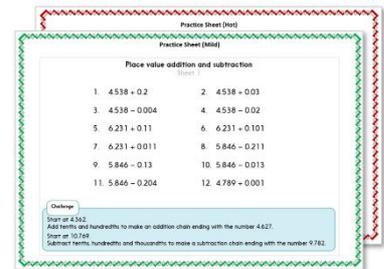
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.
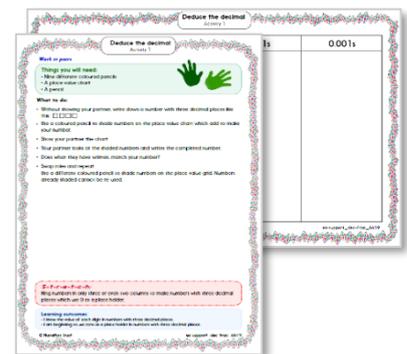
   OR start by carefully reading through the **Learning Reminders**.

2. Tackle the questions on the **Practice Sheet**.
   There might be a choice of either Mild (easier) or Hot (harder)!
   Check the answers.

3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**

4. Think you've cracked it? Whizzed through the Practice Sheets?
   Have a go at the **Investigation**…

Learning Reminders

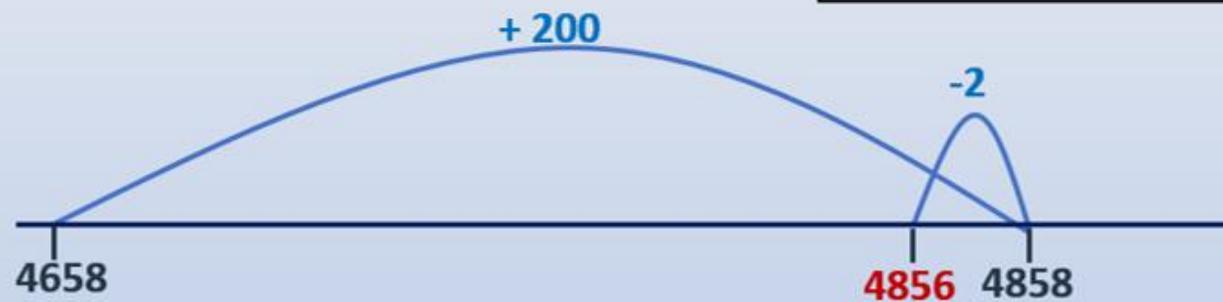Add and subtract near multiples of 10, 100, 1000.

$$4658 + 198 \qquad 4658 + 205$$

198 and 205 are both close to 200.

Let's start with that fact that
$4658 + 200 = 4858...$

To find $4658 + 198$, add 200 then subtract 2 as 198 is 2 less than 200.

$$4658 + 198 = 4856$$

+ 200

-2

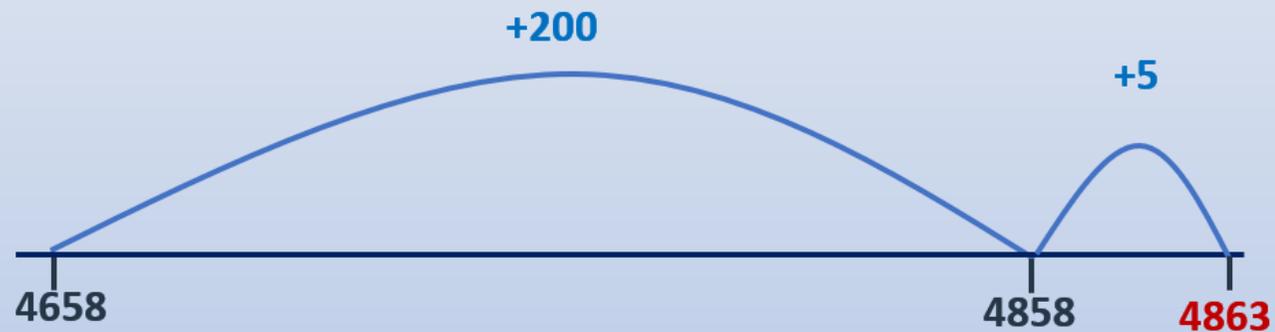4658

4856 4858

Learning Reminders

Add and subtract near multiples of 10, 100, 1000.

4658 + 198   4658 + 205

To find 4658 + 205, add 200 then 5 more as 205 is 5 more than 200.

4658 + 205 = 4863

+200   +5

4658   4858   **4863**

Learning Reminders

Add and subtract near multiples of 10, 100, 1000.

4658 – 2005	4658 – 1998

We know 4658 – 2000 is 2658.

2005 is 5 more than 2000 so
subtract 5 more:
4658 – 2000 = 2658
4658 – 2005 = 2653

1998 is 2 less than 2000 so
add 2 back:
4658 – 2000 is 2658
4658 – 1998 = 2660

Practice Sheet Mild
Add and subtract near multiples of 10, 100, 1000

1. 6545 + 30   6545 + 32   6545 + 28

2. 7365 + 70   7365 + 73   7365 + 67

3. 5352 + 400   5352 + 405   5352 + 395

4. 4578 + 2000   4578 + 2003   4578 + 1999

5. 7472 – 50   7472 – 51   7472 – 49

6. 3843 – 300   3843 – 302   3843 – 298

7. 4270 – 400   4270 – 401   4270 – 399

8. 8452 – 3000   8452 – 3005   8452 – 2995

Practice Sheet Hot
Add and subtract near multiples of 10, 100, 1000

1. $5378 + 51$ $5378 + 48$

2. $6425 - 602$ $6425 - 597$

3. $4635 + 2002$ $4635 + 1995$

4. $24,378 + 405$ $24,378 + 398$

5. $34,651 + 3002$ $34,561 + 2997$

6. $67,384 - 53$ $67,384 - 49$

7. $32,456 - 4002$ $32,456 - 3995$

8. $45,823 + 503$ $45,823 + 496$

9. $32,538 + 410$ $32,538 + 390$

10. $73,256 - 5020$ $73,256 - 4990$

Practice Sheets Answers

Add and subtract near multiples of 10, 100, 1000 (mild)

1.	6545 + 30 = 6575	6545 + 32 = 6577	6545 + 28 = 6573
2.	7365 + 70 = 7435	7365 + 73 = 7438	7365 + 67 = 7432
3.	5352 + 400 = 5752	5352 + 405 = 5757	5352 + 395 = 5747
4.	4578 + 2000 = 6578	4578 + 2003 = 6581	4578 + 1999 = 6577
5.	7472 – 50 = 7422	7472 – 51 = 7421	7472 – 49 = 7423
6.	3843 – 300 = 3543	3843 – 302 = 3541	3843 – 298 = 3545
7.	4270 – 400 = 3870	4270 – 401 = 3869	4270 – 399 = 3871
8.	8452 – 3000 = 5452	8452 – 3005 = 5447	8452 – 2995 = 5457

Add and subtract near multiples of 10, 100, 1000 (hot)

1.	5378 + 51 = 5429	5378 + 48 = 5426
2.	6425 – 602 = 5823	6425 – 597 = 5828
3.	4635 + 2002 = 6637	4635 + 1995 = 6630
4.	24,378 + 405 = 24,783	24,378 + 398 = 24,776
5.	34,651 + 3002 = 37,653	34,561 + 2997 = 37,558
6.	67,384 – 53 = 67,331	67,384 – 49 = 67,335
7.	32,456 – 4002 = 28,454	32,456 – 3995 = 28,461
8.	45,823 + 503 = 46,326	45,823 + 496 = 46,319
9.	32,538 + 410 = 32,948	32,538 + 390 = 32,928
10.	73,256 – 5020 = 68,236	73,256 - 4990 = 68,266

A Bit Stuck?
Adding multiples of 10 and 100 and multiples +1, -1

Sketch an empty number line for each question.
It will help you to visualise which way to adjust each addition.

1. 156 + 20   156 + 19   156 + 21   6. 435 + 300   435 + 299   435 + 301

2. 347 + 40   347 + 39   347 + 41   7. 726 + 100   726 + 99   726 + 101

3. 661 + 30   661 + 29   661 + 31   8. 412 + 400   412 + 399   412 + 401

4. 346 + 100   346 + 99   346 + 101   9. 189 + 30   189 + 29   189 + 31

5. 257 + 200   257 + 199   257 + 201   10. 275 + 40   275 + 39   275 + 41

A Bit Stuck?
Answers

Adding multiples of 10 and 100 and multiples +1, -1

1. 156 + 20 = 176   156 + 19 = 175   156 + 21 = 177
2. 347 + 40 = 387   347 + 39 = 386   347 + 41 = 388
3. 661 + 30 = 691   661 + 29 = 690   661 + 31 = 692
4. 346 + 100 = 446   346 + 99 = 445   346 + 101 = 447
5. 257 + 200 = 457   257 + 199 = 456   257 + 201 = 458
6. 435 + 300 = 735   435 + 299 = 734   435 + 301 = 736
7. 726 + 100 = 826   726 + 99 = 825   726 + 101 = 827
8. 412 + 400 = 812   412 + 399 = 811   412 + 401 = 813
9. 189 + 30 = 219   189 + 29 = 218   189 + 31 = 220
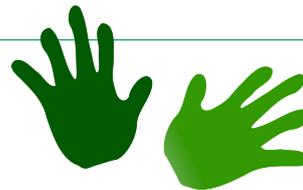10. 275 + 40 = 315   275 + 39 = 314   275 + 41 = 316

Investigation
Add and subtract near multiples

Things you will need:
- Add and subtract near multiples:
  Set 1 and Set 2

Start with 5468

- Add near multiples to this number, then subtract near multiples from it.
- **Cut up and spread out** Set 1 of the 'Add and subtract near multiples' cards.
- Choose an **addition** card and decide what multiple of 10, 100 or 1000 it would be useful to add to 5468.

  > **e.g.**
  > Choose '+ 305 and + 299' add 300.
  > 5468 + 300 = 5768

- Now calculate 5468 + 305 (add 5 more to 5768) and 5468 + 299 (subtract 1 from 5768). *You can draw a number line to help: no adding in columns!*
- Repeat with three different addition cards, each time starting with 5468.
- Can you predict what the *difference* will be between your two answers?
- Repeat for **subtractions**.

  > **e.g.**
  > Choose '− 1005 and − 995'.
  > Subtract 1000: 5468 − 1000 = 4468
  > How will you find 5468 − 1005 and 5468 − 995?

- Repeat for 3 more **subtraction** cards, each time starting with 5468.

Challenge

Start with 23,456 and use Set 2 of the 'Add and subtract near multiples' cards.

Investigation
Add and subtract near multiples: Set 1

+23 +19	+51 +48	+102 +98
+305 +299	+2000 +1997	+1006 +995
-43 -38	-71 -69	-104 -99
-202 -198	-1005 -995	-2001 -1999

Investigation
Add and subtract near multiples: Set 2

+8002 +7998	+4005 +3997	+304 +299
+601 +599	+98 +104	+83 +79
-4001 -3998	-2004 -1995	-303 -298
-703 -697	-45 -39	-73 -68