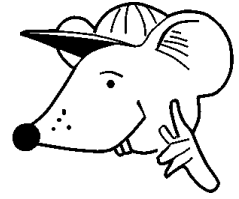


MATHEMATICS



N.S. Yr. 5 P.13

**Round whole numbers to the
nearest 10, 100 or 1000**

Equipment

Paper, pencil

MathSphere

© MathSphere P.O. Box 1234 Worthing BN13 2UJ www.mathsphere.co.uk

Concepts

Numbers to the nearest 10:

When rounding to the nearest ten the key figure is the units digit. If the units are 5 or above, round up. If the units are below 5, round down.

Eg 67 is 70 to the nearest 10 54 is 50 to the nearest 10

(Note that although 65 is half way between 60 and 70, it is usual to round up to 70)

Numbers to the nearest 100

When rounding to the nearest 100 the key figure is the tens digit. If the tens digit is 5 or above, round up. If it is below 5 round down.

Eg 275 is 300 to the nearest 100 245 is 200 to the nearest 100

(Note that it does not matter what the units digit is, it is the TENS digit that must be looked at.)

Numbers to the nearest 1 000

When rounding to the nearest 1 000 the key figure is the hundreds digit. If the hundreds digit is 5 or above, round up. If it is below 5, round down.

**Eg 2 750 is 3 000 to the nearest 1 000.
 2 199 is 2 000 to the nearest 1 000**

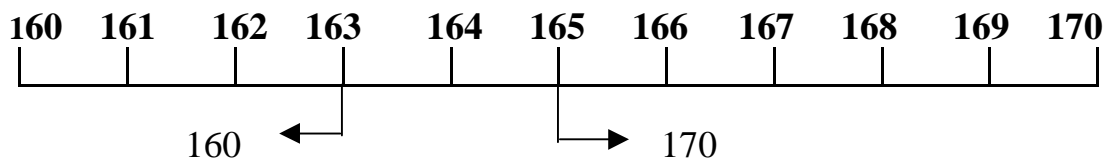
(Note that it does not matter what the tens or units digits are, it is the HUNDREDS digit which must be looked at.

Be careful that when rounding, children do not write:

$$2\,345 = 2\,000$$

because 2 345 does not equal 2 000.

2 345 = 2 000 ‘to the nearest 1 000’ should always be added or it can be written: 2 345 → 2 000



163 is 160 rounded to the nearest whole ten

165 is 170 rounded to the nearest ten

Write these numbers to the nearest whole ten:

1. 247

2. 534

3. 864

4. 745

5. 269

6. 295

7. 302

8. 936

9. 1 245

10. 2 166

11. 2 505

12. 1 908

13. What is the nearest ten to 563 ?

14. What is the nearest ten to 2 325 ?

15. What is the nearest ten to 3 889 ?

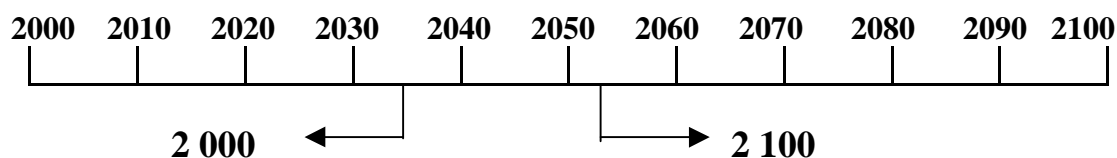
16. Round 756 to the nearest ten.

17. Round 2 457 to the nearest ten.

18. What whole ten is nearest to 2 118 ?

Look at the units when
deciding whether to round
up or down to the nearest 10



Rounding numbers to nearest hundred

2034 is 2 000 rounded to the nearest hundred.

2053 is 2 100 rounded to the nearest hundred.

Write these numbers to the nearest whole hundred:

1. 2 846

2. 3 128

3. 9 202

4. 4 038

5. 1 319

6. 2 560

7. 4 575

8. 9 659

9. 1 059

10. 2 066

11. 4 652

12. 1 918

13. What is the nearest hundred to 4 839 ?

14. What is the nearest hundred to 2 750 ?

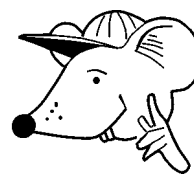
15. What is the nearest hundred to 3 148 ?

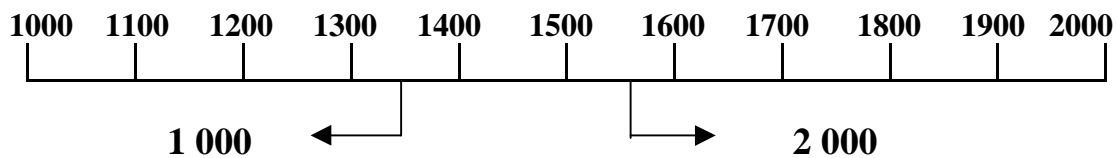
16. Round 5 716 to the nearest hundred.

17. Round 1 455 to the nearest hundred.

18. What whole hundred is nearest to 3 050 ?

Look at the **tens** when
deciding whether to round up
or down to the nearest hundred



Rounding numbers to nearest thousand

1 345 to the nearest 1 000 is 1 000

1 565 to the nearest 1 000 is 2 000

The hundreds digit is the key number to look at when rounding to a thousand.

Round these numbers to the nearest thousand:

1. 3 890 2. 4 211 3. 7 777 4. 1 099 5. 8 501

6. Below is a chart showing some of the highest mountains in the world. Re-draw the table rounding off these heights to the nearest 1 000 metres:

MOUNTAIN	HEIGHT
Mt Everest	8 848 metres
K2	8 611 metres
Aconcagua	6 960 metres
Kilimanjaro	5 896 metres
Matterhorn	4 478 metres

1. Below is a table of the average depths of some of the oceans and seas in the world.

Round off these depths to the nearest 100 metres:

Pacific Ocean	4 028 m
Indian Ocean	3 963 m
Atlantic Ocean	3 926 m
Caribbean Sea	2 677 m
Mediterranean Sea	1 429 m

2. Write down a number between 6 000 and 7 000 which is nearer to 6 000 than 7 000.

3. The Australians scored 356 runs in the first innings and 248 runs in the second innings. Approximately, how many runs did the team score?

4. The distance from London Gatwick to Tel Aviv is 4 455 miles. What is this to the nearest 100 miles?

5. I have driven 437 miles and I am still 678 miles from London. About how far is my total journey to London, to the nearest 100 miles?

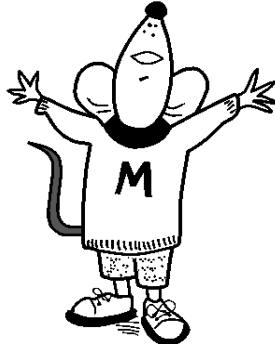
6. New York is 6 798 miles from London. Round this off to the nearest thousand miles.

7. The deepest lake in the world is Lake Baikal , in Siberia, which has a depth of 1 637 metres below sea level. Round this off to the nearest 100 metres.

1. Write down the lengths of these American rivers to the nearest 1 000 kilometres:

Mississippi	3 779 km
Yukon	3 185 km
Rio Grande	2 832 km
Arkansas	2 348 km
Colerado	2 334 km
Red	2 076 km
Columbia	2 001 km

It's the hundreds column you need to look at!



2. Write down a number between 3 000 and 4 000 which is nearer to 3 000 than 4 000.
3. Write down a number between 2 000 and 3 000 which is nearer 2000 than 3 000.
4. The wettest place in the world is a town in India, with an annual rainfall of 1 873 cm of rain. Round this off to the nearest thousand cm.
5. A basketball team scored 1 456 points in a season. Round this total to the nearest 100 points.

1. Which of these is the best approximation for $764 + 298$?

- a. $760 + 290$ b. $700 + 300$ c. $760 + 300$ d. $770 + 300$

2. Which of these is the best approximation for $5\,045 - 256$?

- a. $5\,000 - 200$ b. $5\,050 - 260$ c. $5\,500 - 260$ d. $6\,000 - 300$

3. Which of these is the best approximation for 38×94 ?

- a. 40×90 b. 30×90 c. 40×100 d. 30×100

4. Which of these is the best approximation for $253 \div 37$?

- a. $250 \div 30$ b. $260 \div 30$ c. $250 \div 40$ d. $260 \div 40$

5. Work out approximate answers to the following sums by rounding to the nearest hundred:

a. $6\,018 + 2\,919$

b. $1\,354 + 5\,732$

c. $5\,447 + 3\,558$

d. $2\,505 + 209$

e. $2\,879 + 1\,004$

Remember to look at
the tens when
rounding to whole
hundreds!

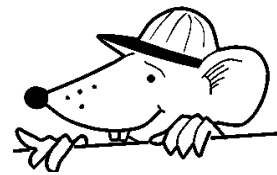


6. What is $7\,532$ to the nearest whole ten?

7. What is $7\,532$ to the nearest whole one hundred?

1. What is the approximate answer for $\frac{342 + 97}{2}$?
2. What is the approximate answer for $\frac{1858 - 299}{2}$?
3. Work out approximate answers to the following sums by rounding to the nearest hundred:
 - a. $6\,339 + 2\,179$
 - b. $1\,202 + 4\,559$
 - c. $4\,879 + 4\,108$
 - d. $3\,125 + 6\,728$
 - e. $1\,707 + 7\,237$
4. What is 4 819 to the nearest thousand?
5. What is 6 506 to the nearest thousand?
6. To the nearest thousand what is half of 3 945?
7. To the nearest thousand what is double 4 199?
8. Round 4 521 to the nearest 10.
9. Round 4 521 to the nearest 100.
10. Round 4 521 to the nearest 1 000.

It's getting easier and easier!



Write down approximate answers to the following, in the same way as the example, by rounding to the nearest hundred:

Eg $2\,456 + 213$ is approximately $2\,500 + 200 \longrightarrow 2\,700$

1. $1\,257 + 240$ 2. $3\,099 + 210$ 3. $4\,993 + 119$ 4. $4\,298 + 152$

5. $4\,899 - 560$ 6. $1\,306 - 990$ 7. $8\,489 - 352$ 8. $4\,444 - 293$

Below is a table of distances between London and a number of other towns and cities, 'as the crow flies' - this means in a straight line.

Round off the distances to the nearest 1 000 miles.

	9. Athens 3 090 miles
	10. Cairo 4 355 miles
	11. Miami 8 826 miles
	12. Istanbul 3 099 miles
	13. Bombay 8 913 miles
	14. Dallas 9 399 miles
	15. New York 6 811 miles

Approximate:

16. $\frac{(509 - 179)}{11}$

17. $\frac{(356 - 119)}{2}$

18. $\frac{(408 - 97)}{3}$

Answers**Page 3**

1. 250 2. 530 3. 860 4. 750 5. 270 6. 300 7. 300 8. 940 9. 1 250 10. 2 170
11. 2 510 12. 1 910 13. 560 14. 2 330 15. 3 890 16. 760 17. 2 460 18. 2 120

Page 4

1. 2 800 2. 3 100 3. 9 200 4. 4 000 5. 1 300 6. 2 600 7. 4 600 8. 9 700
9. 1 100 10. 2 100 11. 4 700 12. 1 900 13. 4 800 14. 2 800 15. 3 100
16. 5 700 17. 1 500 18. 3 100

Page 5

1. 4 000 2. 4 000 3. 8 000 4. 1 000 5. 9 000
6. Mt Everest 9 000 m K2 9 000 m Aconcagua 7 000 m
Kilimanjaro 6 000 m Matterhorn 4 000 m

Page 6

1. Pacific 4 000 m Indian 4 000m Atlantic 3 900m
Caribbean 2 700m Mediterranean 1 400m
2. any number between 6 001 and 6 499 3. 610 4. 4 500 miles
5. 1 100 miles 6. 7 000 miles 7. 1 600 m

Page 7

1. Mississippi 4 000 km Yukon 3 000 km Rio Grande 3 000 km
Arkansas 2 000 km Colorado 2 000 km Red 2 000 km Columbia 2 000 km
2. any number between 3 001 and 3 499 3. Any number between 2 001 and 2 499
4. 2 000 cm 5. 1 500 points

Page 8

1. c. $760 + 300$ 2. b. $5\,050 - 260$ 3. a. 40×90 4. c. $250 \div 40$
5 a. 8 900 b. 7 100 c. 9 000 d. 2 700 e. 3 900
6. 7 530 7. 7 500

Page 9

1. 220 2. 800 3 a. 8 500 b. 5 800 c. 9 000 d. 9 800 e. 8 900
4. 5 000 5. 7 000 6. 2 000 7. 8 000 8. 4 520 9. 4 500 10. 5 000

Page 10 approximate answers - allow some leeway - good discussion points

1. 1 500 2. 3 300 3. 5 100 4. 4 500 5. 4 300 6. 300 7. 8 100 8. 4 100
9. 3 000 10. 4 000 11. 9 000 12. 3 000 13. 9 000 14. 9 000 15. 7 000
16. 30 17. 120 18. 100