Year 6:

Maths Mastery

Place Value Number Problems

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1. Match the statements to the numbers, explaining your choices:

My number has 3 hundreds.	28 672
My number is thirty one thousand to the nearest ten.	29 301
My number is thirty thousand to the nearest ten thousand.	30 092
My number is twenty eight and a half thousand to the nearest five hundred.	31 004

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2. Order these sets of numbers from smallest to largest:

9.9   9.09   9.099   9.99

6.56×10   665   1 tenth of 6556

-5.5   -5.05   -5.55   -5.055

0.12   13÷100   0.011

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3. Calculate 6231+2787 by rounding each number to the nearest:

1000

100

50

10

Which gives the most accurate and least accurate answer?

Mastery Challenge Cards

4. 2700 people visit a cinema in one day. About one third of the visitors are children. The rest are adults. The cost of the tickets are:

    Adults £9.80
    Children £5.40

    Use rounding to estimate how much money the cinema took on that day.

Mastery Challenge Cards
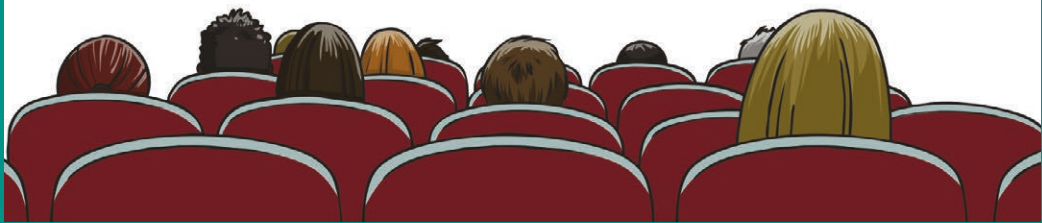
5. Sheffield's Ponds Forge has the deepest diving pool in Europe. The pool is 5.85m deep.

    A diver jumps from the 10m board and falls 14.67 m in total.

    A diver jumps from the 3m springboard and comes within 1.56m of the bottom of the pool.

    Which diver comes closer to the bottom of the pool?

Place Value and Number Problems

1. My number has exactly 300 hundreds in it.   29 301

    My number is thirty one thousand to the nearest ten.   31 004

    My number is thirty thousand to the nearest ten thousand.   30 092

    My number is twenty eight and a half thousand to the nearest five hundred.   28 672

2. 9.09, 9.099, 9.9, 9.99

    6.56×10, 1 tenth of 6556, 665

    −5.55, −5.5, −5.055, −5.05

    0.011, 0.12, 13÷100

3. 6000 + 3000 = 9000

    6200 + 2800 = 9000

    6250 + 2800 = 9050

    6230 + 2790 = 9020

    Rounding to 10 gives the most accurate answer. Rounding 1000 and 100 gives the least accurate answer.

4. Adults 1800 x £10 = £18 000, Children 900 x £5 = £ 4500, Total = £22 500, Other similar answers are possible.

5. The diver from the 10m board (1.18m from bottom).