SHQ: How can I solve problems involving place value?

This week, we will be applying our knowledge of place value and the four operations from the Autumn Term, to solve problems. Each lesson, we will do a quick re-cap over the skills that you will need to solve the problems in the Power Maths resource.

In our first lesson, we need to remember how to express 'more than' and 'less than' using the appropriate sign, and we will be using our knowledge of 'rounding' numbers up and down.

Here are the signs that you will need to know when comparing numbers:

=	When two values are equal we use the "equals" sign	example: **2+2 = 4**
<	When one value is smaller than another we use a "less than" sign	example: **3 < 5**
>	When one value is bigger than another we use a "greater than" sign	example: **9 > 6**

To re-cap on how to round numbers to the nearest 10,100 or 1000, this BBC Bitesize video will help to explain:

https://www.bbc.co.uk/bitesize/topics/zh8dmp3/articles/zpx2qty

Use the following examples to help you:

Rounding to the nearest 10

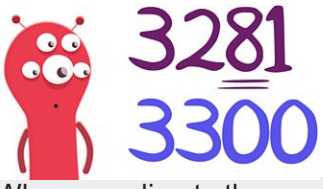
To round a number to the nearest 10, look at the units digit.
If the units digit is **5 or more** , round **up** .
If the units digit is **4 or less** , round **down** .

- The last digit in 356 is 6. So we round it up to 360.
- The last digit of 352 is 2. So we round it down to 350.
- 475 ends in a 5. We always round a 5 up. So 475 rounds up to 480.

Rounding to the nearest 100

To round a number to the nearest 100, look at the tens digit.
If the tens digit is **5 or more** , round **up** .
If the tens digit is **4 or less** , round **down** .

- The tens digit in 3281 is 8. So we round it up to 3300.
- The tens digit of 3216 is 1. So we round it down to 3200



When rounding to the nearest 100, 3281 becomes 3300.

Rounding to the nearest 1000

To round a number to the nearest 1000, look at the hundreds digit.
If the hundreds digit is **5 or more** , round **up** .
If the hundreds digit is **4 or less** , round **down** .

- The hundreds digit in 4559 is 5. So we round it up to 5000.
- The hundreds digit of 4295 is 2. So we round it down to 4000.

Have a go at a few of your own before moving onto the questions.

Using the information above and the skills that you have practiced, have a go at the Power Maths problems on the resource sheet for worksheet 6. If you want a challenge, try Questions 4 and 5. When you have completed the questions you are going to try, look back over your work and try the 'reflect' question at the end. The answers for all the questions can be found in the Week 8 Maths Answers resource