Number and Place Value Prior Assessment Question 4:

LO: I can accurately order whole amounts less than one million.

NPV 1: read, write, order and compare numbers up to 1 000 000 and determine the value.

Teacher Input Ideas:

- Dependent on the child's knowledge of number and place value from year 4, you may want the children to further explore numbers and order amounts practically. The children could show with objects or visual representations different 4, 5 and 6 digit amounts. Then they could be ordered by discussing how each amount differs, looking at the hundreds of thousands, tens of thousands, thousands etc.
- Place these 5 numbers on the board, 63537, 635271, 72621, 63527, 100212. Encourage the children to talk through the amounts with a partner and to think about how they would work out the largest amount. How would you order them? Inform the children that you don't want the answers, you want a strategy for ordering. Where would you start? How do you answer questions like this? Some children may benefit from having a blank place value chart in front of them to help. Some children may need to write the amounts down and jot above each digit the value. Some children may count the number of digits to rule out some possibilities.

For those that made errors in question 4, encourage them to use a blank place value table or jottings above. This may need modelling for example:

Hundreds of thousands	Tens of thousands	Thousands	Hundreds	Tens	Ones
4 6	6 3	3 5	5 2	3 7	7 1

Or

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6 3 5 2 7 1

Ensure the children understand to look at the number of digits initially and then to work along the columns to look at the value of each digit. Encourage the children to explain this using a place value chart or visual images of tens, hundreds, thousands.

Practice Activities

Purple Practice: Most suited for children who made errors in Question 4 due to demonstrating a lack of knowledge about comparing numbers by counting the number of digits.

Practical task: There are 2 sheets to this activity so that it can be adapted dependent on the children's needs. The children can either cut all the blocks with the amounts on and choose 4 or 5 blocks to order from smallest to largest. Children could be given a variety of 4, 5 and 6 digit amounts. The children should discuss how they know they have ordered them accurately using their knowledge of the number of digits each amount has and then discuss the value of the digits in each amount.

The second sheet can be used when the children feel confident. They can pick 2 or 3 amounts on the blocks on the first sheet and use the greater and less than symbols on the second sheet to make different number sentences. You may want the children to record these down in words too, to ensure that children are using a variety of symbols and accurate vocabulary.

Green Practice: Most suited for children ready to order 5 and 6 digit amounts, using their knowledge of the value of the different digits.

The children are presented with the distance different cities in Europe are from London. The children have the measurements in metres and are required to order the amounts to find the closest to the furthest city from London.

Suggested challenges:

- Children can use an atlas to locate the places by using this information. Do any of the places and distances surprise the children? Why? Encourage the children to discuss what they notice.
- Children can write in words the amounts that they have ordered.
- Children to work out the difference in distance of 2 of the places.
- Children to locate on a map other places that are near to or in between the places on the sheet. Encourage the children to estimate what they think the distance from London is. Children to explain how they made the estimate.
- Children to convert the measurements from metres to km.

<u>Yellow Practice:</u> Most suited for children who will benefit from ordering amounts that are close in value.

The yellow activity is similar to the green activity above, however the amounts are closer in value so that the children must look carefully at the value of different digits in the amounts to help to order them. Additionally, the amounts are written in words so that they can apply the skill of writing the amounts in figures.

Suggested challenges:

- Children can use an atlas to locate the places using this information. Do any of the places and distances surprise the children? Why? Encourage the children to discuss what they notice.
- Children to work out the difference in distance of 2 of the places.
- Children to locate on a map other places that are near to or in between the places on the sheet. Encourage the children to estimate what they think the distance from London is. Children to explain how they made the estimate and research the actual distances in metres.
- Children to convert the measurements from metres to km.

<u>Mastery</u> For this mastery task, the children are provided with amounts written in words and need to write these in figures to help them to order them. The children are then asked to place the amounts in order on to a blank number line. Encourage the children to think about placing the amounts in accurate positions.

Answers

Green:

Smallest to largest

Oxford, Colchester, Leicester, Manchester, Brussels, Edinburgh

1) Oxford
2) Edinburgh

Yellow:

London to	Distance in metres
Liverpool	346822
Manchester	348632
Brussels	372693
Paris	469893
Amsterdam	545801
Dublin	583346

Mastery:

BRICKWORK Mathematics

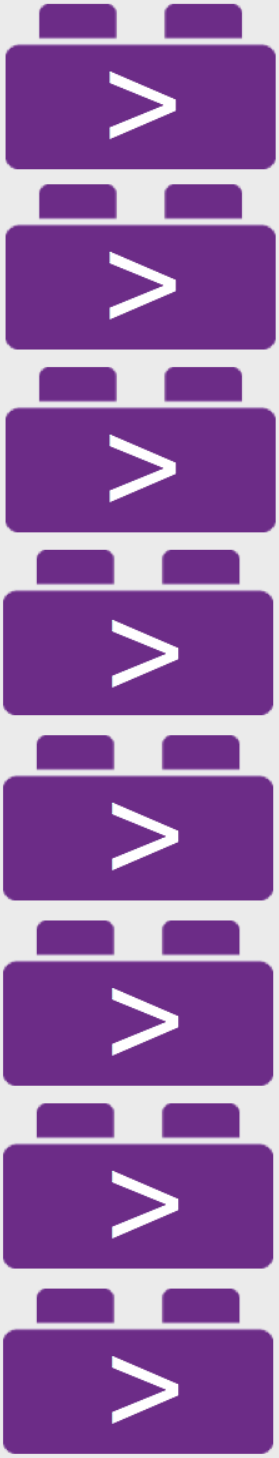
Purple Activity

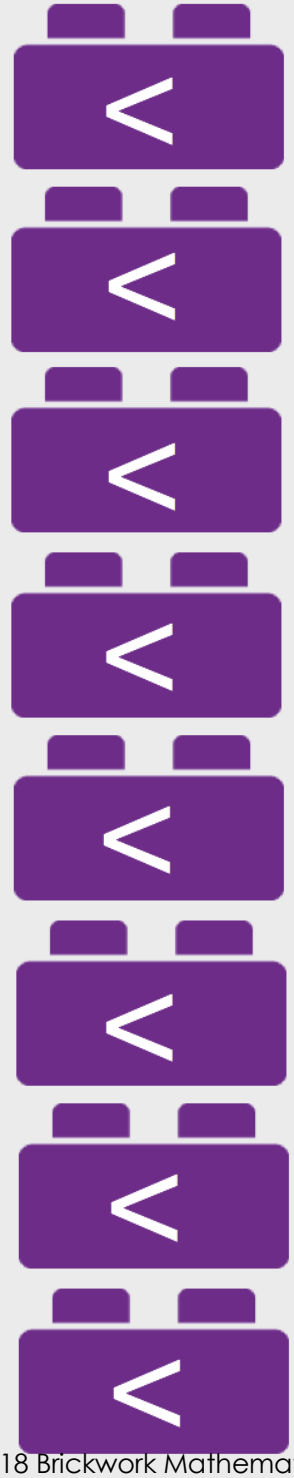
LO: I can order amounts with 4 and 5 digits.

10643	1079	9031
23689	90363	3016
30799	11652	101243
5267	52617	54810
7001	70010	7101

BRICKWORK Mathematics

Practical support sheet





BRICKWORK Mathematics

Green Activity

LO: I can order amounts up to 1 million.

Below are the number of metres from London to different cities in Europe.
Cut out the blocks and order them from the smallest amount of metres to the largest amount of metres.

Edinburgh 666400	Brussels 372693	Colchester 106110
Manchester 348632	Oxford 96345	Leicester 165400

Now use this information to answer the questions below:

1)The closest city to London is...

2)The furthest city from London is...

Challenge:
Look at an atlas. Use this information to help you locate each city.
Find another city and estimate the distance using the above information.

BRICKWORK Mathematics

Yellow Activity

LO: I can order amounts with 6 digits.

Below are blocks with the distance in metres from London to the city named.

Paris
Four hundred and sixty-nine thousand, eight hundred and ninety-three

Amsterdam
Five hundred and forty-five thousand, eight hundred and one

Manchester
Three hundred and forty-eight thousand, six hundred and thirty-two

Dublin
Five hundred and eighty-three thousand, three hundred and forty-six

Brussels
Three hundred and seventy-two thousand, six hundred and ninety-three

Liverpool
Three hundred and forty-six thousand, eight hundred and twenty-two

Fill in the table below starting with the nearest city to the furthest city from London.
Write the city name and distance in metres using digits.

London to	Distance in metres

Challenge: What is the distance of each city in kilometres?

BRICKWORK Mathematics

Mastery

Fluency

Order the amounts below from smallest to largest amount.

three hundred and forty nine thousand, five hundred and twenty six

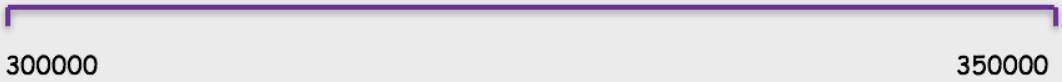
three hundred and four thousand, five hundred and twenty

three hundred and fourteen thousand, two hundred and twelve

three hundred and forty two thousand and eight hundred

three hundred thousand, four hundred and fifty two

Now place the amounts on to the number line below:



Challenge: think of 5 of your own numbers between one hundred thousand and three hundred thousand. Place them on to your own number line.