## Fractions: Comparing Decimals

## Aim:

Read, write, order and compare numbers with up to three decimal places.

I can compare numbers with up to three decimal places.

## Key/New Words:

Decimal place, decimal point, tenths, hundredths, thousandths, compare, place value.

## Success Criteria:

I can read and write numbers with up to three decimal places.

I can compare the value of digits in the same place value position.

I can use < and > to compare numbers.
I can compare numbers with different numbers of decimal places.

## Resources:

Lesson Pack
Whiteboards and pens - class set

## Preparation:

Decimal Number Cards - one set per group, cut up

Differentiated Decimal Number Chains Activity Sheets - one per child

Prior Learning: It will be helpful if children understand decimal place value including thousandths.

## Learning Sequence

Decimal Missing Numbers: Identify the decimal number that needs to be added to the number shown on the Lesson
Presentation to total one. Discuss how children could use their knowledge of number bonds to 10 and 100 to help

with this. | Comparing Decimals: Use the text and images displayed on the Lesson Presentation to remind the children that |
| :--- |
| when comparing decimal numbers, we look at the place value of the digits in each number and start with the digits in |
| the largest place value position. Remind the children that if the numbers have the same digit in a place value position, |
| we look at the digits in the next place value column to find a difference. Rehearse using the greater than and less |
| than symbols to compare decimal numbers. |

## Masterit

Jumpit: Children jump as far as they can and measure the distance jumped. They then repeat this so that they have measurements for two jumps. They write a comparison statement about the two jumps. This could be repeated for throwing a beanbag, timing a run or any other activity which can be measured to more than one decimal place.
Makeit: Give children four digits. They use these digits to make as many numbers under 10 as they can and then compare the numbers they have created.


## Maths

## Fractions



## Comparing Decimals



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## Aim

- I can compare numbers with up to three decimal places.


## Success Criteria

- I can read and write numbers with up to three decimal places.
- I can compare the value of digits in the same place value position.
- I can use < and > to compare numbers.
- I can compare numbers with different numbers of decimal places.


## Decimal Missing Numbers



What is the missing number in this decimal number addition calculation?
$0.6+0 ? 4=1$
$0.3+0 ? 7=1$
$0.1+0 ? 9=1$
$0.8+0 ? 2=1$

## Decimal Missing Numbers



## Comparing Decimals

For example, to compare 45.23 and 45.25, we look at the largest digit, the tens, first:

When comparing numbers, we can use symbols to show which is the smaller or larger number.
$45.23<45.25$
the right until we find a difference.


## Comparing Decimals



## Comparing Decimals



## Comparing Decimals



## Comparing Decimals



## Comparing Decimals



## Comparing Decimals



## Whose Number Fits?

## Round 5

- Deal out .
- In each rı



## $<0.803$

statement shown on the slide and decide if you have a card that can complete the statement.

- Score one point for any card that can complete the statement.


## Decimal Number Comparing



## Decimal Number Chains



## Decimal Number Puzzle



Find a way to complete this decimal number statement.

If you find an answer that is different from anyone else's, you score one point.

## 켄




## Aim

- I can compare numbers with up to three decimal places.


## Success Criteria

- I can read and write numbers with up to three decimal places.
- I can compare the value of digits in the same place value position.
- I can use < and > to compare numbers.
- I can compare numbers with different numbers of decimal places.


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## Next Steps

| T | Teacher | I | Independent |
| :--- | :--- | :--- | :--- |
| PPA | Planning, Preparation and Assessment | AL | Adult Led |
| S | Supply | GP | Guided Practice |


| Aim: I can compare numbers with up to three decimal places. |  |  |  | Date: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Delivered By: |  |  | Support: |  |  |
| Success Criteria | Me | Friend | Teacher | T | PPA | S | I | AL | GP |
| I can read and write numbers with up to three decimal places. |  |  |  | Notes/Evidence |  |  |  |  |  |
| I can compare the value of digits in the same place value position. |  |  |  |  |  |  |  |  |  |
| I can use < and > to compare numbers. |  |  |  |  |  |  |  |  |  |
| I can compare numbers with different numbers of decimal places. |  |  |  |  |  |  |  |  |  |
| Next Steps |  |  |  |  |  |  |  |  |  |


| T | Teacher | I | Independent |
| :--- | :--- | :--- | :--- |
| PPA | Planning, Preparation and Assessment | AL | Adult Led |
| S | Supply | GP | Guided Practice |




3.4

4.03

### 4.08


4.38



## Decimal Number Chains

I can compare numbers with up to three decimal places.

Complete the chains by putting the correct symbol between each pair of numbers.


| 4.3 | 4.6 | 4.1 | 3.1 | 3.3 | 3.7 | 3.2 | 3.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| 9.45 | 9.41 | 9.39 | 9.99 | 9.09 | 9.56 | 9.49 | 9.94 |
|  |  |  |  |  |  |  |  |
| 1.328 | 1.338 | 1.339 | 1.303 | 1.301 | 1.295 | 1.299 | 1.209 |
|  |  |  |  |  |  |  |  |
| 28.61 | 28.16 | 28.26 | 28.29 | 28.19 | 38.29 | 38.38 | 38.36 |
|  |  |  |  |  |  |  |  |
| 33.333 | 33.303 | 33.313 | 33.003 | 30.641 | 30.651 | 30.065 | 30.066 |

## Decimal Number Chains Answers

I can compare numbers with up to three decimal places.

Complete the chains by putting the correct symbol between each pair of numbers.


| 4.3 | $<$ | 4.6 | $>$ | 4.1 | $>$ | 3.1 | $<$ | 3.3 | $<$ | 3.7 | > | 3.2 | $<$ | 3.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9.45 | > | 9.41 | > | 9.39 | $<$ | 9.99 | > | 9.09 | $<$ | 9.56 | > | 9.49 | < | 9.94 |


| 1.328 | $<$ | 1.338 | $<$ | 1.339 | $>$ | 1.303 | $>$ | 1.301 | $>$ | 1.295 | $<$ | 1.299 | $>$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | 1.209


| 28.61 | $>$ | 28.16 | $<$ | 28.26 | $<$ | 28.29 | $>$ | 28.19 | $<$ | 38.29 | $<$ | 38.38 | $>$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | 38.36


| 33.333 | $>$ | 33.303 | $<$ | 33.313 | $>$ | 33.003 | $<$ | 30.641 | $<$ | 30.651 | $>$ | 30.065 | $<$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | 30.066

## Decimal Number Chains

I can compare numbers with up to three decimal places.

Complete the chains by putting the correct 'greater than' or 'less than' symbol between each pair of numbers.

| 15.64 |  | 15.46 |  | 15.49 |  | 16.05 |  | 16.51 |  | 16.32 |  | 16.34 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 72.123 | 72.231 |  | 72.229 |  | 72.204 |  | 72.213 |  | 72.109 |  | 71.999 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 59.51 | 59.5 | 59.403 | 59.42 | 59.423 | 59.09 | 59.009 | 72.909 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 67.059 | 67.053 | 67.1 | 67.103 | 67.134 | 67.13 | 67.03 | 67.3 |

Complete the chains by selecting numbers which will fit between the symbols.

| 20.76 | > | > | < | 20.832 | < | > | > | < | 20.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88.08 | < | > | < | 88.8 | > | < | > | > | 88.7 |

## Decimal Number Chains Answers

## I can compare numbers with up to three decimal places.

Complete the chains by putting the correct 'greater than' or 'less than' symbol between each pair of numbers.

| 15.64 | $>$ | 15.46 | $<$ | 15.49 | $<$ | 16.05 | $<$ | 16.51 | $>$ | 16.32 | $<$ | 16.34 | $>$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 72.123 | $<$ | 72.231 | $>$ | 72.229 | $>$ | 72.204 | $<$ | 72.213 | $>$ | 72.109 | $>$ | 71.999 | $<$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 59.51 | $>$ | 59.5 | $>$ | 59.403 | $<$ | 59.42 | $<$ | 59.423 | $>$ | 59.09 | $>$ | 59.009 | $<$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 67.059 | $>$ | 67.053 | $<$ | 67.1 | $<$ | 67.103 | $<$ | 67.134 | $>$ | 67.13 | $>$ | 67.03 | $<$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Complete the chains by selecting numbers which will fit between the symbols.
Multiple answers possible.

| 20.76 | > | > | < | 20.832 | < | > | > | < | 20.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88.08 | < | > | < | 88.8 | > | < | > | > | 88.7 |


| Decinal Number Cuains |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I can compare numbers with up to three decimal places. |  |  |  |  |  |  |  |
| Complete the chains by putting the correct 'greater than' or 'less than' symbol between each pair of numbers. |  |  |  |  |  |  |  |
| 11.735 | 11.73 | 11.8 | 11.064 | 11.069 | 11.69 | 11.6 | 11.534 |
| 83.8 | 83.764 | 83.77 | 83.707 | 83.79 | 83.081 | 83.196 | 83.2 |
| 20.01 | 20.99 | 20.906 | 20.084 | 20.8 | 20.902 | 19.999 | 19.905 |
| 99.09 | 99.9 | 99.909 | 99.009 | 99.99 | 99.999 | 99.099 | 99.09 |

Complete the chains by selecting numbers which will fit between the symbols.

| 77.76 | > | > |  | < | 77.7 | < |  | > | 77.75 | > | < |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50.1 | < | > | 50.16 | < |  | > | 50.163 | < |  | > | > | 50.1 |

## Decimal Number Chains Answers

## I can compare numbers with up to three decimal places.

Complete the chains by putting the correct 'greater than' or 'less than' symbol between each pair of numbers.

| 11.735 | $>$ | 11.73 | $<$ | 11.8 | $>$ | 11.064 | $<$ | 11.069 | $<$ | 11.69 | $>$ | 11.6 | $>$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 83.8 | $>$ | 83.764 | $<$ | 83.77 | $>$ | 83.707 | $<$ | 83.79 | $>$ | 83.081 | $<$ | 83.196 | $<$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| 20.01 | $<$ | 20.99 | $>$ | 20.906 | $>$ | 20.084 | $<$ | 20.8 | $<$ | 20.902 | $>$ | 19.999 | $>$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 99.09 | $<$ | 99.9 | $<$ | 99.909 | $>$ | 99.009 | $<$ | 99.99 | $<$ | 99.999 | $>$ | 99.099 | $>$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | 99.09 |  |
| :--- |

Complete the chains by selecting numbers which will fit between the symbols.
Multiple answers possible.

| 77.76 | > | > |  | $<$ | 77.7 | $<$ |  | > | 77.75 | > | $<$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50.1 | < | > | 50.16 | < |  | > | 50.163 | < |  | > | > | 50.1 |

Fractions | Comparing Decimals

| I can compare numbers with up to three <br> decimal places. |  |  |
| :--- | :--- | :--- |
| I can read and write numbers with up to <br> three decimal places. |  |  |
| I can compare the value of digits in the <br> same place value position. |  |  |
| I can use < and > to compare numbers. |  |  |
| I can compare numbers with different <br> numbers of decimal places. |  |  |

Fractions | Comparing Decimals

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Fractions | Comparing Decimals

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| :--- | :--- | :--- |
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Fractions | Comparing Decimals

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| :--- | :--- | :--- |
| I can read and write numbers with up to <br> three decimal places. |  |  |
| I can compare the value of digits in the <br> same place value position. |  |  |
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