## Reasoning and Problem Solving Step 3: Compare Decimals

## National Curriculum Objectives:

Mathematics Year 4: (4F8) Compare numbers with the same number of decimal places up to two decimal places
Mathematics Year 4: (4F10b) Solve simple measure and money problems involving fractions and decimals to two decimal places

## Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Work through the maze by comparing decimals to identify the largest or smallest number. Tenths and hundredths; zero is not used as a placeholder.
Expected Work through the maze by comparing decimals to identify the largest or smallest number. Ones, tenths and hundredths; zero is used as a placeholder.
Greater Depth Work through the maze by comparing decimals to identify the largest or smallest number. Tens, ones, tenths and hundredths included; zero is used as a placeholder.

Questions 2, 5 and 8 (Problem Solving)
Developing Use >, < and = to compare partitioned decimals. Tenths and hundredths; zero is not used as a placeholder.
Expected Use >, < and = to compare partitioned decimals. Ones, tenths and hundredths; zero is used as a placeholder.
Greater Depth Use >, < and = to compare partitioned decimals. Tens, ones, tenths and hundredths included; zero is used as a placeholder.

Questions 3, 6 and 9 (Reasoning)
Developing Compare 2 decimal numbers in the context of measurements and identify which child is correct. Explain why. Tenths and hundredths; zero is not used as a placeholder.
Expected Compare 2 decimal numbers in the context of measurements and identify which child is correct. Explain why. Ones, tenths and hundredths; zero is used as a placeholder.
Greater Depth Compare 2 decimal numbers in the context of measurements (simple conversions required) and identify which child is correct. Explain why. Tens, ones, tenths and hundredths included; zero is used as a placeholder.

## More Year 4 Decimals resources.

Did you like this resource? Don't forget to review it on our website.

## Compare Decimals

la．Travel vertically or horizontally through the maze by moving from smaller to larger decimal numbers．

Start

| 0.25 | 0.31 | 0.14 | 0.92 |
| :--- | :--- | :--- | :--- |
| 0.17 | 0.46 | 0.52 | 0.37 |
| 0.65 | 0.23 | 0.79 | 0.46 |
| 0.98 | 0.54 | 0.81 | 0.93 |

2a．Use＞，＜or＝to compare the partitioned decimal numbers．
$0.41+0.32 \square 0.85$
$0.35+0.61 \square 0.92$
lb．Travel vertically or horizontally through the maze by moving from larger to smaller decimal numbers．

| 0.19 | 0.37 | 0.91 | 0.82 |
| :--- | :--- | :--- | :--- |
| 0.76 | 0.65 | 0.53 | 0.76 |
| 0.32 | 0.58 | 0.45 | 0.95 |
| 0.14 | 0.21 | 0.36 | 0.51 |

Finish

Db．Use＞，＜or＝to compare the partitioned decimal numbers．

$$
\begin{aligned}
& 0.78 \square 0.56+0.23 \\
& 0.83 \square 0.25+0.61
\end{aligned}
$$

| Ba．Susie says： |
| :--- |
| I have the tallest plant <br> because it is 0.16 m high． |

I have the tallest plant because it is 0.61 m high．

Akita says：

Who is correct？Explain why．


3b．Stan says：


## Compare Decimals



## Compare Decimals

| 7a. Travel vertically or horizontally through the maze by moving from smaller to larger decimal numbers. <br> Start |  |  |  | 7b. Travel vertically or horizontally through the maze by moving from larger to smaller decimal numbers. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Start |
| 12.09 | 13.23 | 24.18 | 24.08 | 32.97 | 34.01 | 37.01 | 36.99 |
| 11.99 | 13.19 | 24.81 | 24.78 | 32.79 | 33.98 | 34.06 | 35.89 |
| 16.55 | 15.02 | 25.20 | 26.02 | 30.09 | 33.99 | 34.62 | 35.98 |
| 22.99 | 17.09 | 25.19 | 26.99 | 29.98 | 31.99 | 25.34 | 23.66 |
| 价 Finish |  |  |  | Finish |  |  |  |
| 8a. Use $>,<$ or $=$ to compare the partitioned decimal numbers. |  |  |  | 8b. Use >, < or = to compare the partitioned decimal numbers. |  |  |  |
| $10+2.4+0.06$ |  | $10+2.3+0.09$ |  | $14+1.8+0.2$ |  | $14+1.2+0.09$ |  |
| $12+1.3+0.09$ |  | $12+1.1+0.9$ |  | $11+2.8+0.2$ |  | $11+2.9+0.07$ |  |
| $\square$ |  |  |  | ¢0 |  |  |  |
| 9a. Anju says: |  |  |  | 9b. Callum says: |  |  |  |
| I have the longest piece of string because it is 10.01 m long. |  |  |  | I have the most money because I have $£ 12.05$. |  |  |  |
| I have the longest piece of string because it is |  |  |  | I have the most money because I have 1,250p. |  |  |  |
| Who is correct? Explain why. |  |  |  | Who is correct? Explain why. II |  |  |  |
|  |  |  |  |  |  |  |  |

Reasoning and Problem Solving Compare Decimals

8a. >, <
9a. Anju is correct because 10.01 m is longer than $1,000 \mathrm{~cm}(10 \mathrm{~m})$.

## Greater Depth

7a.

| 12.09 | 13.23 | 24.18 | 24.08 |
| :--- | :--- | :--- | :--- |
| 11.99 | 13.19 | 24.81 | 24.78 |
| 16.55 | 15.02 | 25.20 | 26.02 |
| 22.99 | 17.09 | 25.19 | 26.99 |

5a. <, >
6a. Jessica is correct because 1.4 is greater than 1.04.
2a. <, >
3a. Akito is correct because 0.61 is greater than 0.16.

## Expected

4a.

| 0.29 | 0.09 | 0.49 | 0.85 |
| :--- | :--- | :--- | :--- |
| 0.36 | 0.68 | 0.91 | 1.03 |
| 0.19 | 0.35 | 0.89 | 1.12 |
| 2.72 | 1.09 | 0.59 | 1.49 |

## Developing

1b.

| 0.19 | 0.37 | 0.91 | 0.82 |
| :--- | :--- | :--- | :--- |
| 0.76 | 0.65 | 0.53 | 0.76 |
| 0.32 | 0.58 | 0.45 | 0.95 |
| 0.14 | 0.21 | 0.36 | 0.51 |

2b. <, <
3b. Stan is correct because 0.98 is greater than 0.89 .

## Expected

4b.

| 2.73 | 2.09 | 2.89 | 2.98 |
| :--- | :--- | :--- | :--- |
| 1.71 | 1.69 | 2.90 | 2.99 |
| 1.68 | 1.41 | 1.65 | 0.02 |
| 1.06 | 1.28 | 1.29 | 0.20 |

5b. >, =
6b. Jack is correct because 3.64 is greater than 3.46.

## Greater Depth

7b.

| 32.97 | 34.01 | 37.01 | 36.99 |
| :---: | :---: | :---: | :---: |
| 32.79 | 33.98 | 34.06 | 35.89 |
| 30.09 | 33.99 | 34.62 | 35.98 |
| 29.98 | 31.99 | 25.34 | 23.66 |

8b. $>$, $>$
9b. Sara is correct because 1,250 p
( $£ 12.50$ ) is more than $£ 12.05$.
8b. $>$, $>$
9b. Sara is correct because 1,250 p
( $£ 12.50$ ) is more than $£ 12.05$.
8b. >, >
9b. Sara is correct because 1,250 p
( $£ 12.50$ ) is more than $£ 12.05$.

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