

Hundredths on a place value chart

Notes and guidance

In this small step, children continue to explore hundredths as decimals by looking at the hundredths column in a place value chart.

Children should be confident with the understanding that 10 hundredths make up 1 tenth. Exchanging ten 0.01 counters for one 0.1 counter in a place value chart will help to reinforce this understanding. It is important that children understand that 0.1 is greater than 0.09 even though 1 is less than 9. This can be seen when putting both numbers in a place value chart and considering the value of each column.

Children use place value counters to flexibly partition decimal numbers involving tenths and hundredths.

Discuss with children why no zero placeholder is needed in the hundredths column if there are no digits after the tenths, for example 1.5, not 1.50

Things to look out for

- Children may not realise that, for example, $0.3 = 0.30$
- Children may see numbers such as 0.45 as greater than 0.5 because 45 is greater than 5
- Children may confuse the words “hundred” and “hundredth”.

Key questions

- What is a hundredth?
- How many hundredths are equivalent to 1 tenth?
- How many hundredths are equivalent to 1 whole?
- Is _____ greater/smaller than _____?
- How can you represent this decimal number on a place value chart?
- How is the hundredths column on a place value chart similar to/different from the _____ column?

Possible sentence stems

- _____ is equal to _____ ones, _____ tenths and _____ hundredths.

National Curriculum links

- Recognise and write decimal equivalents of any number of tenths or hundredths
- Compare numbers with the same number of decimal places up to 2 decimal places

Hundredths on a place value chart

Key learning

- Write the decimal numbers shown in the place value charts.

How many ones, tenths and hundredths are there in each number?

Ones	Tenths	Hundredths
1	0.1 0.1	0.01 0.01 0.01

Ones	Tenths	Hundredths
1 1		0.01 0.01 0.01

Ones	Tenths	Hundredths
1 1 1		0.01 0.01 0.01 0.01

- Use a place value chart and counters to make the numbers.

0.34	2.15	0.03	1.01
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Complete the sentences to describe each number.

There are _____ ones.

There are _____ tenths.

There are _____ hundredths.

The number represented is _____

- Brett uses place value counters to partition 0.23



$$0.23 = 0.2 + 0.03$$



$$0.23 = 0.1 + 0.13$$

Use Brett's method to help you partition the numbers in three different ways.

0.34

0.68

0.92

0.51

- Write <, > or = to complete the statements.

$$0.01 \bigcirc \frac{1}{100}$$

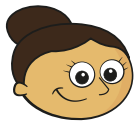
$$0.4 \bigcirc 0.05$$

$$\frac{3}{10} \bigcirc 0.31$$

$$\text{eleven hundredths} \bigcirc 0.11$$

Hundredths on a place value chart

Reasoning and problem solving



0.09 is greater than 0.1 because 9 is greater than 1

Do you agree with Dora?

Use a place value chart to help you explain your answer.



No

Is the statement always true, sometimes true or never true?



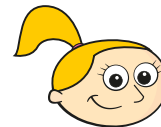
A number with 5 in the hundredths column is smaller than a number with 6 in the tenths column.

Explain your answer.



sometimes true

Eva and Max are each thinking of a number.



Eva

My number can be partitioned into 3 tenths and 24 hundredths.

My number has 5 tenths, so my number must be greater than Eva's.



Max

No

Do you agree with Max?

Explain your answer.

