




Learning Objective
To recognise and use the unit '0.1'

Key Difficulty Point
The decimal point - understanding it just indicates position of the ones/tenths boundary
Seeing tenths as an extension of their knowledge about 1s, 10s, 100s

Models used to explain concept/address difficulty point
Measures: 1kg and 0.1kg pasta, 1m and 0.1m lengths
Base ten: Dienes and PV counters

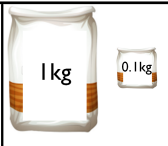
Important language structures
"One is divided into ten equal parts, and one of these parts is one tenth"
"The value of the '2' in 0.2 is two tenths"

Sep 1-21:22

Learning Objective: To understand decimal quantities > 1

Yesterday we learnt to write decimal numbers greater than 1

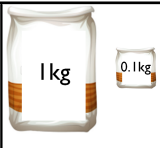


Jun 25-22:39

Learning Objective: To understand decimal quantities > 1

Let's think about this quantity: **3.5kg**

How many 1kg, and how many 0.1kg, is it made up of?
Visualise it in your head!




H T Is $\frac{1}{10}$

3.5 kg = _____ kg + _____ kg

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Learning Objective: To understand decimal quantities > 1

3.5kg



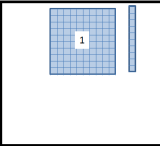
How else can I partition it?

3.5 kg = 3 kg + 0.5 kg

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Learning Objective: To understand decimal quantities > 1

Let's partition 4.3 into 1s and 0.1s



H T Is $\frac{1}{10}$

Now in some different ways...

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Learning Objective: To understand decimal quantities > 1

Section A: Partition each of these as shown, e.g. 2.4kg = 2kg + 0.4kg

3.8 m = _____ m + _____ m

4.5kg = _____

2.6 = _____


3.3 = _____

★ Partition each of these in many different ways,
e.g. 2.4kg = 2kg + 0.4kg = 1kg + 1.4kg = 2.1kg + 0.3kg

Jun 26-08:16

Learning Objective: To understand decimal quantities > 1

Take your paper ruler, and divide it into ten equal parts.




What is the value of each part?
Please label each part correctly.

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Learning Objective: To understand decimal quantities > 1

Take your metre ruler, AND two of your 0.1 lengths.




Tell your partner how much you have.
Use full sentences.
Can you think of many different ways to describe how much you have?

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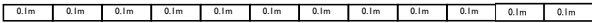
Decimal numbers in 2 ways:

Additive



$1m + 0.2m$

Multiplicative

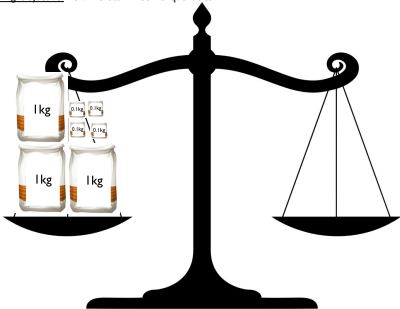




$12 \times 0.1m$

write 3 terms on separate

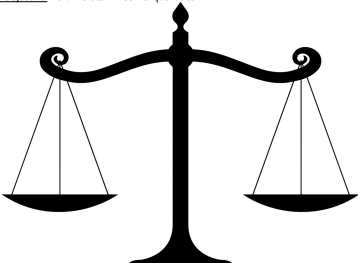


May 10-20:51

Learning Objective: To understand decimal quantities > 1

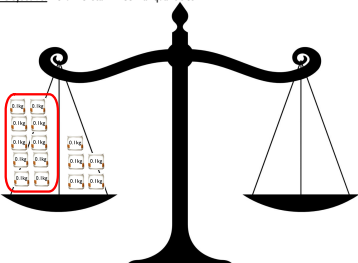


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Section B: Complete the following:

3.4m = $\frac{\quad}{10} \times 0.1\text{m} = \frac{\quad}{10}$ m

4.9m =

0.5 =

16 x 0.1l = _____ l

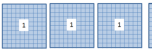
28 x 0.1kg =

31 x 0.1 =

Jun 26-08:18

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★ Sam has written some different ways to describe the picture. Tick or cross to show if he is right or wrong. Where he is wrong, write a correct expression:



(30 x 0.1) + (1 x 0.1)

3 - 0.1

$\frac{40}{10} + \frac{9}{10}$

0.3 + 1

$\frac{31}{10}$

1 + 0.1 + 2

Jun 26-06:48

Learning Objective: To understand decimal quantities > 1

Order from smallest to largest, using < sign to join expressions, e.g. 2 < 4 < 9 < 11

0.4, $\frac{34}{10}$, 2.8, 0.1 x 24, 3, 13 + 0.1, 13 x 0.1

Jun 26-08:18

(This area is blank for student work.)

May 10-23:14