

# Bitesize

## Decimals

### KS3 Maths

**Antoine** Bonjour and welcome to Squeezey Jet. Passports please. Hmm... Ok. Pop your suitcase on here please Madame.

**Mathsmutt** Uh-oh.

**Sophie** But I weighed my case at home. My clothes were 9kg. My gadgets and books were 2kg. And my case was 4kg. That's 15kg!

**Mathsmutt** Let's break it down.

**Sophie** See? My suitcase weighs 4kg!

**Mathsmutt** Wrong Sophie. Look closer. The needle is between 4 and 5, so it's more than 4kg.

We can split each unit into 10 more units, or 'tenths', because there's 10 of them between the 4 and the 5. We write that as "1/10"

**Sophie** A-ha! So it's 4 and 2 tenths.

**Mathsmutt** Yep. And we can call that 4.2kg. Now, let's try your clothes.

**Sophie** Hey, it's not 9kg at all. My clothes weigh 9.3kg!

**Mathsmutt** Hmm. I think we'd better investigate.

We can even split the tenths into 10. And we call those hundredths because there's 100 of them between the 9 and the 10. So your clothes actually weigh 9kg, 3 tenths and 4/100ths. Or, 9.34kg.

**Sophie** Ok. Let's try my gadgets and books.

**Mathsmutt** Wowzers. It's 2kg plus 4/10ths and 8/100ths. That's 2.48kg!

**Sophie** No wonder my suitcase is too heavy.

**Mathsmutt** Let's work out how we add them all together. It's important to keep the decimal points in a vertical

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line, and don't worry about some having more numbers than others.

**Sophie**

Ok. So my suitcase was 4.2kg. My clothes were 9.34kg. And my gadgets and books were 2.48kg. That makes 16.02kg!

**Mathsmutt**

Correctamundo! Elementary my dear Sophie!

But you'll have to take something out. What about that copy of the Gone Direction boy-band annual?

**Sophie**

Errr. What copy of the Gone Direction boy-band annual?

**Antoine**

C'est magnifique! Your tickets Madame. Bon voyage!

**Sophie**

Thanks for your help Mathsmutt... Mathsmutt?

**Mathsmutt**

So, did our investigation help you see the 'point' of decimals?

**Sophie**

Yes Mathsmutt. It was an open and shut case.

Haha

**Antoine**

Ooh la la. J'adore Gone Direction.