Discussion Problems
Step 6: Subtracting - Same Decimal Places

National Curriculum Objectives:

Mathematics Year 5: (5F10) Solve problems involving number up to three decimal places
Mathematics Year 5: (5M9a) Use all four operations to solve problems involving measure [for example, money] using decimal notation, including scaling

About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More Year 5 Decimals resources.

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

Subtracting – Same Decimal Places

1. A water cooler contains 10.65 litres of water at the start of the day. Hannah is trying to work out how much water she can drink after her friends have had some.

Holly drinks 2.13 litres during the day.
George drinks 0.37 litres less than Holly.
Kieron drinks twice as much as George.

Hannah says,

> I can drink 0.59 litres more than George and there will still be more than 0.5 litres of water left.

Do you agree with Hannah? Explain why.

DP

2. A factory produces 1.28 million sweets in a year. 0.29 million are sold direct to the public from the factory shop, Jerry's Sweets takes 0.25 million and the rest are distributed between the other 6 shops in different amounts. What different combinations could they have ordered the sweets in?

Jerry's Sweets   Sweet Treats   Sweets Co.

Candy Shop   Sweet's R Us   Candy4U   Candy Tree

DP

# Subtracting – Same Decimal Places

1. A water cooler contains 10.65 litres of water at the start of the day. Hannah is trying to work out how much water she can drink after her friends have had some.

Holly drinks 2.13 litres during the day.
George drinks 0.37 litres less than Holly.
Kieron drinks twice as much as George.

Hannah says,

> I can drink 0.59 litres more than George and there will still be more than 0.5 litres of water left.
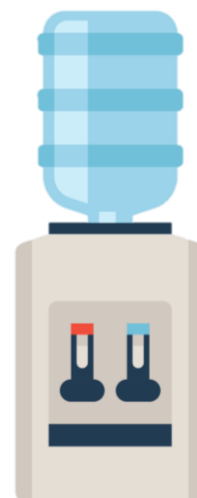
Do you agree with Hannah? Explain why.

Hannah is correct. 2.13 + 1.76 + 3.52 = 7.41 litres of water has been drunk by her friends.
7.41 + 2.35 = 9.76 litres of water has been drunk in total. 10.65 – 9.76 = 0.89 litres of water left in the water cooler.

DP

2. A factory produces 1.28 million sweets in a year. 0.29 million are sold direct to the public from the factory shop, Jerry's Sweets takes 0.25 million and the rest are distributed between the other 6 shops in different amounts. What different combinations could they have ordered the sweets in?

| Jerry's Sweets | Sweet Treats | | Sweets Co. |
| Candy Shop | Sweet's R Us | Candy4U | Candy Tree |

Various possible answers including:
1.28 – 0.29 = 0.99. 0.99 – 0.25 = 0.74 million.   0.11 + 0.15 + 0.18 + 0.16 + 0.01 + 0.13 = 0.74 million

DP

DP

Discussion Problems – Subtracting – Same Decimal Places ANSWERS