Fruit Salad

I can solve problems by scaling up and down.

This recipe makes enough fruit salad for 12 people.

Ingredients

4 bananas	**2** large oranges
3 apples	**16** grapes
12 blackberries	**24** blueberries
22 strawberries	**6** kiwi fruit
100ml lemonade	**50ml** fresh orange juice

You are going to scale down the recipe to make enough for **6 people**. Choose the right words to fill the gaps and explain what you need to do.

To make the six portions I need to _____ every ingredient. I need to _____ each ingredient by _____.

double	multiply	halve	divide
four	two	ten	eight

Now scale down the recipe.

bananas - _____   large oranges - _____

apples - _____   grapes - _____

blackberries - _____   blueberries - _____

strawberries - _____   kiwi fruit - _____

lemonade - _____   fresh orange juice - _____

What if you needed 24 portions? Work out how much of each ingredient you would need.

twinkl
planit
visit twinkl.com
Maths | Year 3 | Multiplication and Division | Scaling Problems | Lesson 2 of 3: Fruit Salad

Fruit Salad

I can solve problems by scaling up and down.

Calculate the ingredients for these fruit salads.

32 Portions	16 Portions divide by ____ (How many 16s are in 32?)	8 Portions divide by ____ (How many 8s are in 32?)	4 Portions divide by ____ (How many 4s are in 32?)
32 bananas			
16 large oranges			
8 apples			
64 grapes			
72 blackberries			
80 blueberries			
16 strawberries			
8 kiwi fruit			
640ml lemonade			
720ml fresh orange juice			

Scones

I can solve problems by scaling up and down.

Scale down this recipe to make 6 scones and then 4 scones.

To adjust the recipe for **6** scones I need to:

Divide each ingredient by _____ because 12 ÷ 6 = _____.

To adjust the recipe for **4** scones I need to:

Divide each ingredient by _____ because 12 ÷ 4 = _____.

4 Scones	6 Scones	12 Scones
		240g of plain flour
		1 teaspoon of salt
		1 teaspoon of dried mustard
		6 teaspoons of baking powder
		66g of butter
		120g of mature cheddar cheese
		1 egg, beaten
		150ml milk

Can you work out the ingredients needed to bake **8** scones?

Look at the recipes you've just made to find an easy way to do it!

Fruit Salad Answers

This recipe makes enough fruit salad for 12 people.

Ingredients

4 bananas   **2** large oranges

3 apples   **16** grapes

12 blackberries   **24** blueberries

22 strawberries   **6** kiwi fruit

100ml lemonade   **50ml** fresh orange juice

You are going to scale down the recipe to make enough for **6 people**. Choose the right words to fill the gaps and explain what you need to do.

To make the six portions I need to _____**halve**_____ every ingredient. I need to _____**divide**_____ each ingredient by _____**two**_____.

double	multiply	halve	divide
four	two	ten	eight

Now scale down the recipe. *(Answers in square brackets relate to next section)*

bananas - 2   [8]   large oranges - 1   [4]

apples - 1 $\frac{1}{2}$ [6]   grapes - 8   [32]

blackberries - 6   [24]   blueberries - 12   [48]

strawberries - 11   [44]   kiwi fruit - 3   [12]

lemonade - 50ml   [200ml]   fresh orange juice - 25ml   [100ml]

What if you needed 24 portions? Work out how much of each ingredient you would need.

Answers in square brackets

Fruit Salad Answers

Calculate the ingredients for these fruit salads.

32 Portions	16 Portions divide by **2** (How many 16s are in 32?)	8 Portions divide by **4** (How many 8s are in 32?)	4 Portions divide by **8** (How many 4s are in 32?)
32 bananas	**16 bananas**	**8 bananas**	**4 bananas**
16 large oranges	**8 large oranges**	**4 large oranges**	**2 large oranges**
8 apples	**4 apples**	**2 apples**	**1 apple**
64 grapes	**32 grapes**	**16 grapes**	**8 grapes**
72 blackberries	**36 blackberries**	**18 blackberries**	**9 blackberries**
80 blueberries	**40 blueberries**	**20 blueberries**	**10 blueberries**
16 strawberries	**8 strawberries**	**4 strawberries**	**2 strawberries**
8 kiwi fruit	**4 kiwi fruit**	**2 kiwi fruit**	**1 kiwi fruit**
640ml lemonade	**320ml lemonade**	**160ml lemonade**	**80ml lemonade**
720ml fresh orange juice	**360ml fresh orange juice**	**180ml fresh orange juice**	**90ml fresh orange juice**

twinkl planit
visit twinkl.com
Maths | Year 3 | Multiplication and Division | Scaling Problems | Lesson 2 of 3: Fruit Salad

Scones Answers

Scale down this recipe to make 6 scones and then 4 scones.

To adjust the recipe for **6** scones I need to:

Divide each ingredient by _____**2**_____ because 12 ÷ 6 = _____**2**_____.

To adjust the recipe for **4** scones I need to:

Divide each ingredient by _____**3**_____ because 12 ÷ 4 = _____**3**_____.

4 Scones	6 Scones	12 Scones
80g of plain flour	**120g of plain flour**	240g of plain flour
$\frac{1}{3}$ teaspoon of salt	**$\frac{1}{2}$ teaspoon of salt**	1 teaspoon of salt
$\frac{1}{3}$ teaspoon of dry mustard	**$\frac{1}{2}$ teaspoon of dry mustard**	1 teaspoon of dried mustard
2 teaspoons of baking powder	**3 teaspoons of baking powder**	6 teaspoons of baking powder
22g of butter	**33g of butter**	66g of butter
40g of mature cheddar cheese	**60g of mature cheddar cheese**	120g of mature cheddar cheese
$\frac{1}{3}$ egg, beaten	**$\frac{1}{2}$ egg, beaten**	1 egg, beaten
50ml milk	**75ml milk**	150ml milk

Can you work out the ingredients needed to bake **8** scones?

Look at the recipes you've just made to find an easy way to do it!

Double the 4 scone recipe. 160g, $\frac{2}{3}$, $\frac{2}{3}$, 4, 44g, 80g, $\frac{2}{3}$, 100ml.