Reasoning and Problem Solving
Step 1: Measure Mass 1

National Curriculum Objectives:

Mathematics Year 3: (3M2b) Measure mass (kg/g)

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing When given information about the weight of an object, determine the weight of another. Increments of 1, 2, 5 or 10 used. All increments labelled.
Expected When given information about the weight of an object, determine the weight of another. Increments of 4, 8, 50 or 100 used. Every other increment labelled.
Greater Depth When given information about the weight of an object, determine the weight of another. Increments of 4, 8, 50 or 100 used, but most increments are not labelled on the scales.

Questions 2, 5 and 8 (Problem Solving)
Developing Identify missing quantities of ingredients needed when measuring mass. Increments of 1, 2, 5 or 10 used. All increments labelled.
Expected Identify missing quantities of ingredients needed when measuring mass. Increments of 4, 8, 50 or 100 used. Every other increment labelled.
Greater Depth Identify missing quantities of ingredients needed when measuring mass. Increments of 4, 8, 50 or 100 used, but most increments are not labelled on the scales.

Questions 3, 6 and 9 (Reasoning)
Developing Decide whether a statement about weighing scales is correct and explain why. Increments of 1, 2, 5 or 10 used. All increments labelled.
Expected Decide whether a statement is correct or incorrect and explain why when measuring mass. Increments of 4, 8, 50 or 100 used. Every other increment labelled.
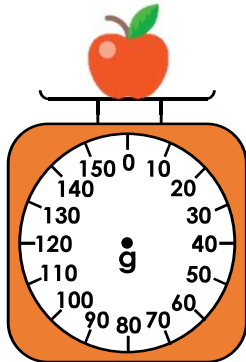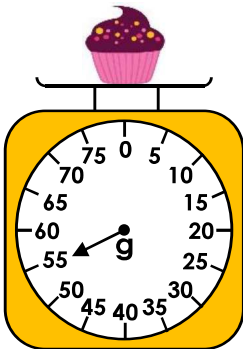**Greater Depth** Decide whether a statement is correct or incorrect and explain why when measuring mass. Increments of 4, 8, 50 or 100 used, but most increments are not labelled on the scales.

More Year 3 Mass and Capacity resources.

Did you like this resource? Don't forget to review it on our website.
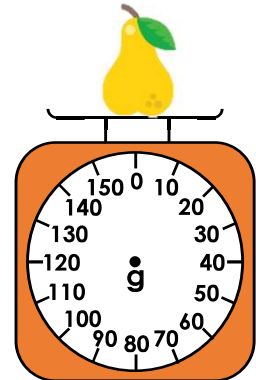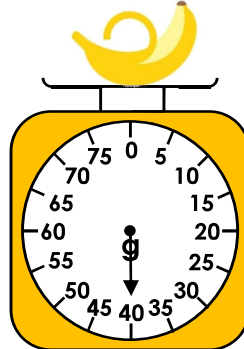
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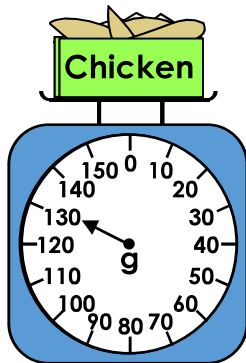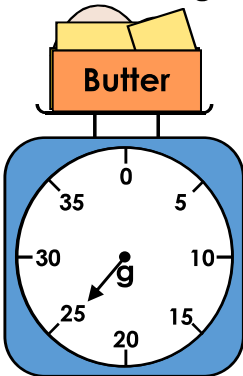**1a.** If two cupcakes weigh the same as one apple, draw an arrow on the scale to show the weight of the apple.

PS

1b. If two bananas weigh the same as one pear, draw an arrow on the scale to show the weight of the pear.

PS

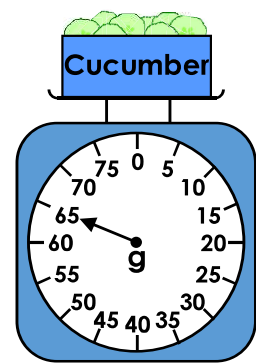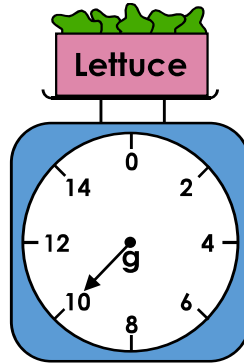**2a.** Matt is making a pie. He needs 30g of butter and 150g of chicken.

Butter

Chicken

How much more of each ingredient does he need?

PS

2b. Tegan is making a salad. She needs 20g of lettuce and 70g of cucumber.
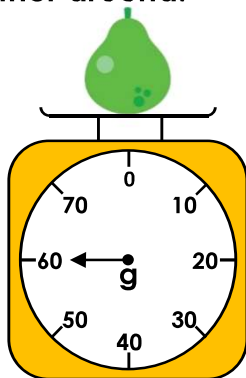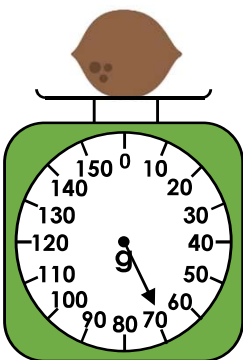
Lettuce

Cucumber

How much more of each ingredient does she need?

PS

3a. Hafsa is weighing different items. She says the pear is heavier because the arrow on the scale is further around.
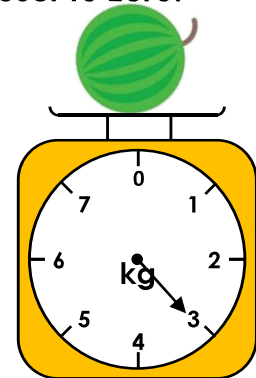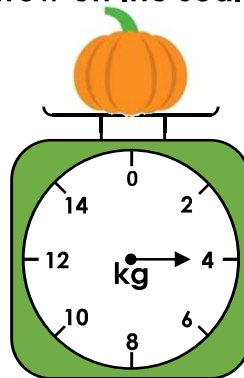
Is she correct? Explain how you know.

R

3a. Gabriel is weighing different items. He says the pumpkin is lighter because the arrow on the scale is closer to zero.
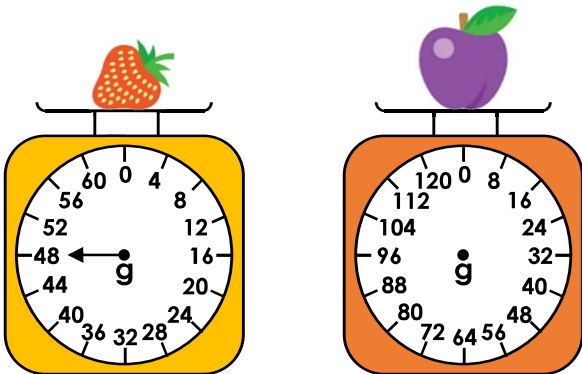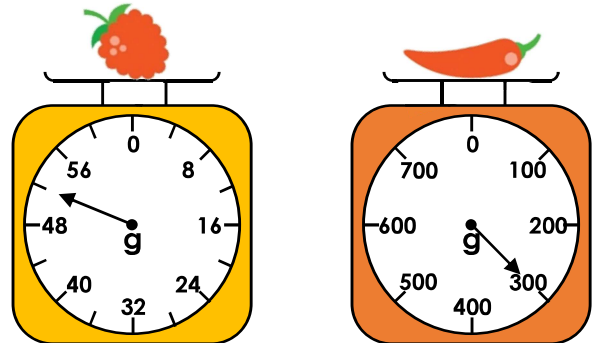
Is he correct? Explain how you know.

R

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Reasoning and Problem Solving – Measure Mass 1 – Year 3 Developing

Measure Mass 1

4a. If two strawberries weigh the same as one plum, draw an arrow on the scale to show the weight of the plum.
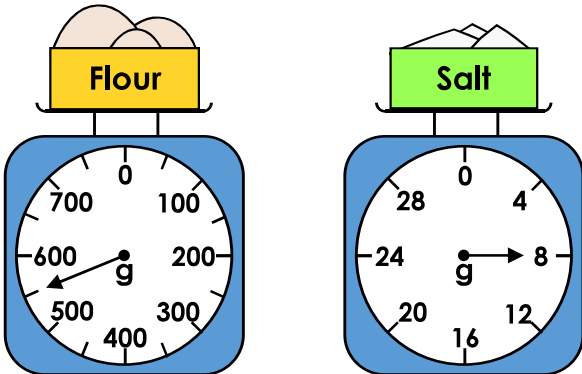
4b. If two raspberries weigh the same as one chilli, draw an arrow on the scale to show the weight of the chilli.

5a. Reema is making a bread. She needs 650g of flour and 10g of salt.
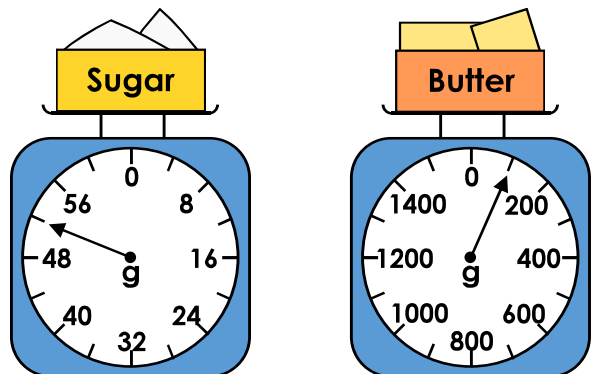
Flour   Salt

How much more of each ingredient does she need?

5b. Jackson is making biscuits. He needs 60g of sugar and 200g of butter.
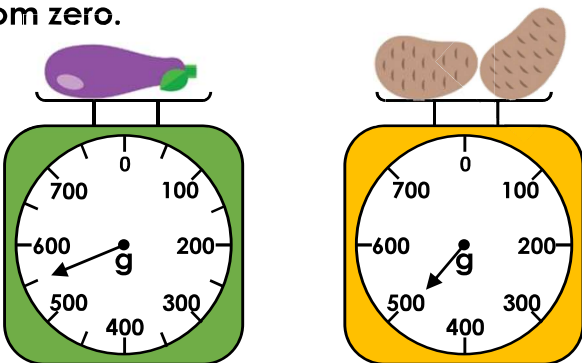
Sugar   Butter

How much more of each ingredient does he need?

6a. Steph is weighing different items. She says the potatoes are heavier because the arrow on the scale is further away from zero.
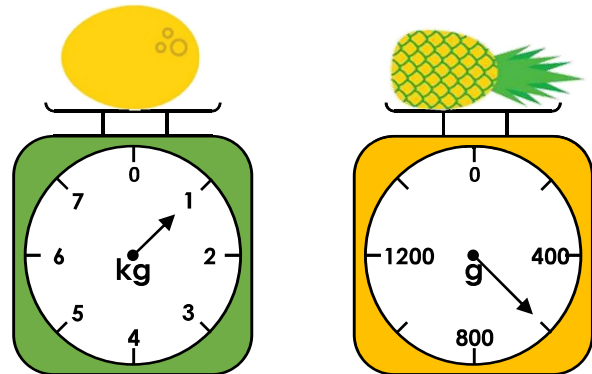
Is she correct? Explain how you know.

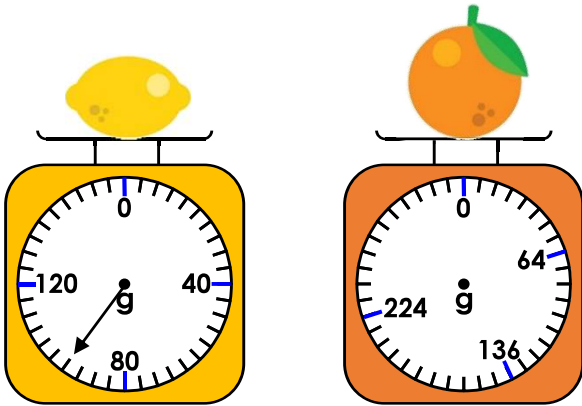**6b.** Sean is weighing different items. He says the melon is lighter because the arrow on the scale is closer to zero.
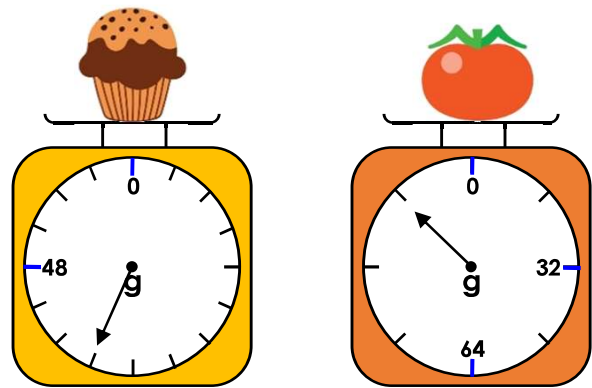
Is he correct? Explain how you know.

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Reasoning and Problem Solving – Measure Mass 1 – Year 3 Expected

7a. If two lemons weigh the same as one orange, draw an arrow on the scale to show the weight of the orange.

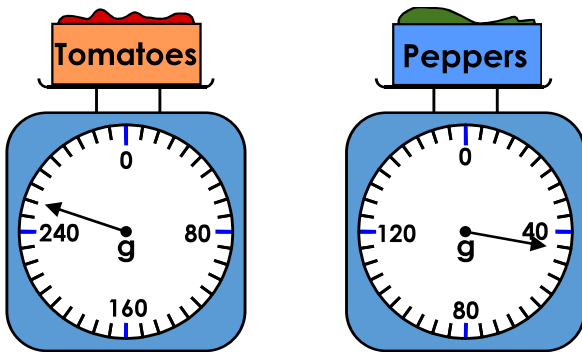**7b.** If two cupcakes weigh the same as one tomato, draw an arrow on the scale to show the weight of the tomato.

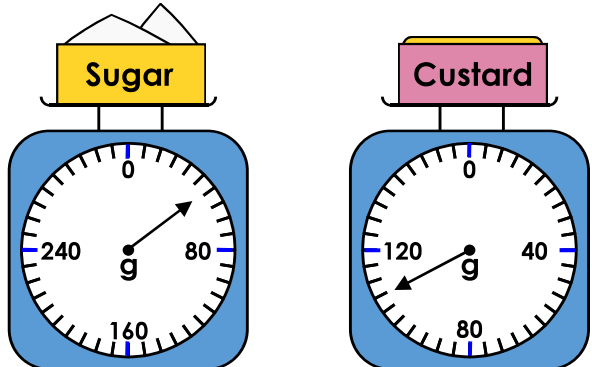**8a.** Ruth is making a sauce. She needs 280g of tomatoes and 60g of peppers.

How much more of each ingredient does she need?

8b. Keenan is making a dessert. He needs 60g of sugar and 120g of custard.

How much more of each ingredient does he need?

9a. Alice is weighing different items. She says the pears are heavier because the arrow on the scale is further away from zero.
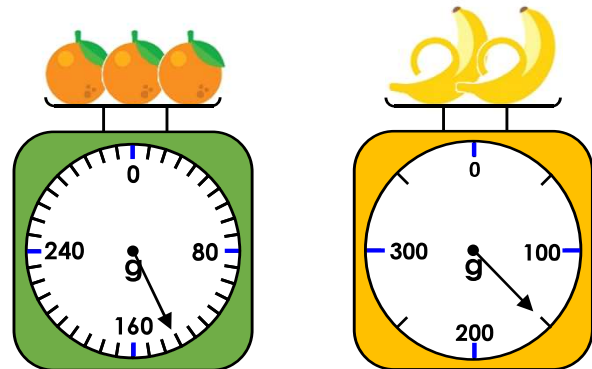
Is she correct? Explain how you know.

9b. Josh is weighing different items. He says the bananas are lighter because the arrow on the scale is closer to zero.

Is he correct? Explain how you know.

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Reasoning and Problem Solving – Measure Mass 1 – Year 3 Greater Depth