1)

7 inches = ***17.5cm***

4lbs = ***1816 grams***

$2\frac{1}{2}$ pints = ***1425ml***

21cm = ***8.4 inches***

$4\frac{1}{2}$kg = ***9.9lbs***

3 litres = ***5¼ pints or 5.25 pints***

1) ***William is the tallest because 54 inches is 135cm, which is 1cm taller than Chen.***

2) ***Shop A is better value for money because 4lbs is approximately 1816g. This means that Shop B is selling a smaller mass of bananas for a more expensive price than Shop A.***

1)

Name: ***Anja***

Name: ***Otto***

Name: ***Freddie***

Name: ***Grace***

2)

$\frac{1}{2}$ pound = ***227g***

$\frac{1}{3}$ pound = ***151g***

$\frac{1}{5}$ pound = ***91g***

$\frac{1}{4}$ pound = ***114g***

mushrooms + peppers = 378g	***mushrooms + pepperoni = 318g***
mushrooms + olives = 341g	***peppers + pepperoni = 242g***
peppers + olives = 265g	***pepperoni + olives = 205g***

1) Convert these measurements from **imperial to metric** using the approximate conversion table.

7 inches

_____cm

4lbs

_____ grams

$2\frac{1}{2}$ pints

_____ml

Imperial Measure	Metric Measure
1 inch	$2\frac{1}{2}$cm
1lb	454g
1 pint	570 millilitres

2) Convert these measurements from **metric to imperial** using the approximate conversion table.

21cm

_____ inches

$4\frac{1}{2}$kg

_____ lbs

3 litres

_____ pints

Metric Measure	Imperial Measure
1cm	0.4 inch
1kg	2.2lbs
1 litre	$1\frac{3}{4}$ pints

1) Here are the heights of two children.

William is the tallest.

Do you agree with this statement? Explain your answer.

_____

_____

_____

1 inch = approximately 2.5cm

William	Chen
54 inches	1.34 metres

2) Here are the prices of bananas at two different shops.

At which shop are the bananas better value for money? Explain how you know.

_____

_____

_____

1lb = approximately 454g

Shop A	Shop B
1.9kg = £2.20	4lbs = £2.50

1) Otto, Freddie, Anja and Grace are packing their suitcases for their holidays. Use the clues to work out who each suitcase belongs to.

1lb = approximately 454g

Name: _____	Name: _____	Name: _____	Name: _____

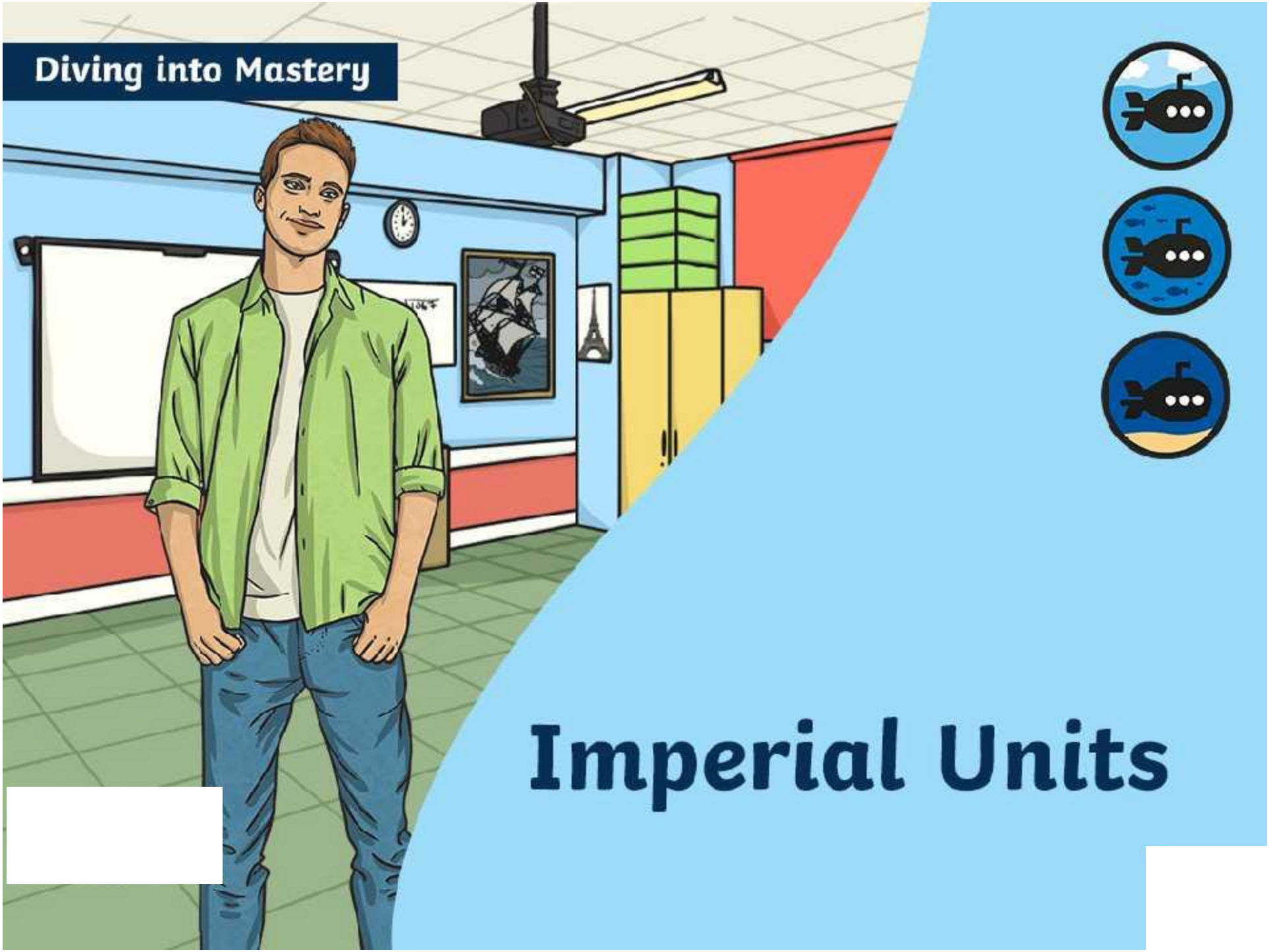
- Grace's suitcase is the heaviest.
- Otto's suitcase is the lightest.
- Freddie's suitcase is heavier than Anja's.

2) Otto, Freddie, Anja and Grace are adding toppings to pizzas by choosing two of these different ingredients.

$\frac{1}{2}$ pound	$\frac{1}{3}$ pound	$\frac{1}{5}$ pound	$\frac{1}{4}$ pound

Find the mass of each ingredient to the nearest gram.

Find the mass, in grams, of the all of the possible topping combinations that could be added to the pizzas.


Diving into Mastery
Imperial Units

Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:

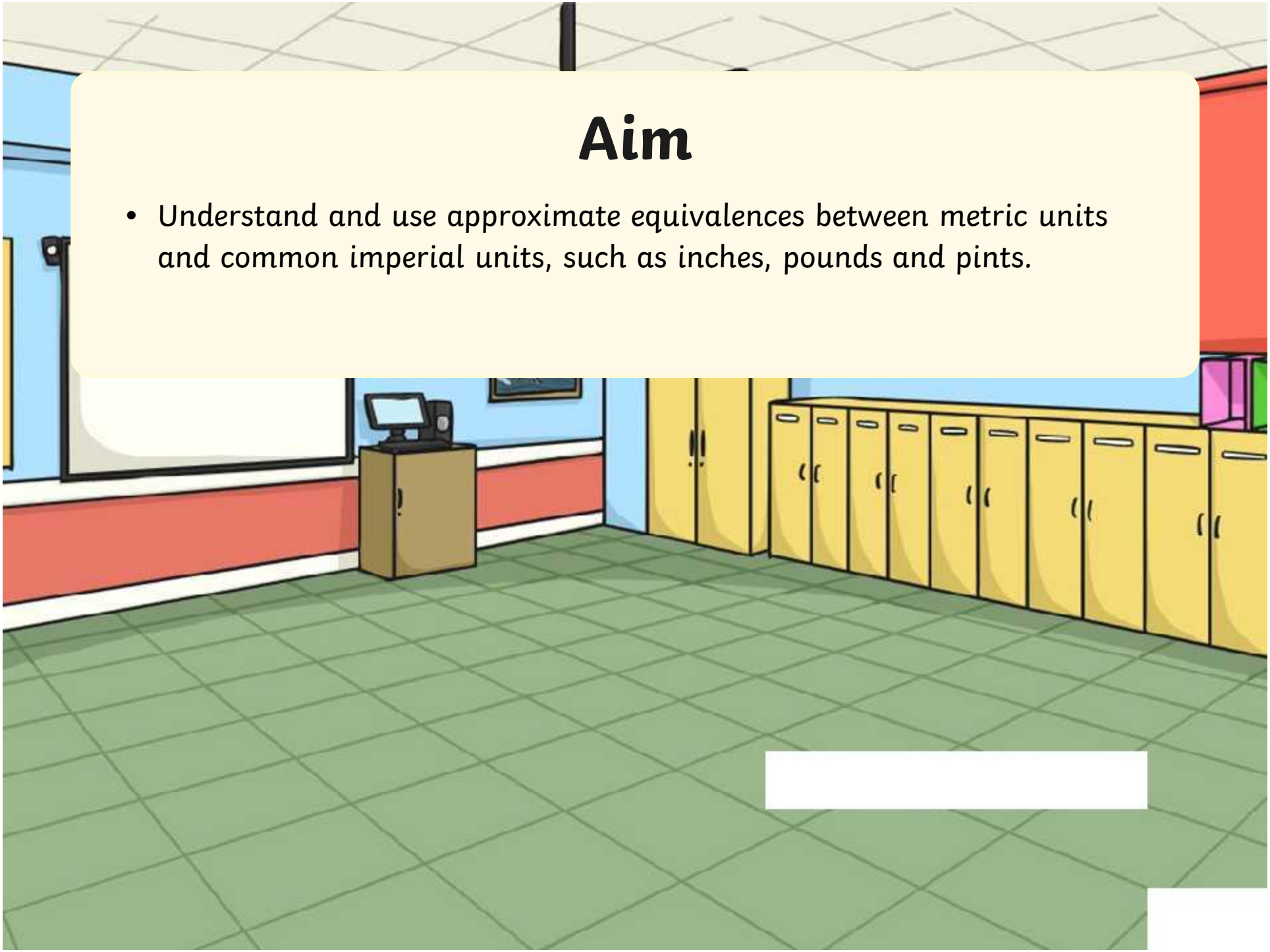
Diving

Deeper

Deepest

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.



Aim

- Understand and use approximate equivalences between metric units and common imperial units, such as inches, pounds and pints.

Imperial Units | **Diving**

Convert these measurements from **metric** to **imperial** using the approximate conversion table.

Imperial Measure	Metric Measure
1 inch	$2\frac{1}{2}$cm
1lb	454g
1 pint	570 millilitres

5 inches

12.5cm

3lbs

1362g or 1.362kg

$1\frac{1}{2}$ pints

855ml or 0.855l

Imperial Units | **Diving**

Convert these measurements from **metric** to **imperial** using the approximate conversion table.

Metric Measure	Imperial Measure
1cm	0.4 inch
1kg	2.2lbs
1 litre	$1\frac{3}{4}$ pints

18cm

7.2 inches

$3\frac{1}{2}$kg

7.7lbs

2 litres

$3\frac{1}{2}$ pints

Imperial Units **Deeper**

Here are the heights of two children.

Lucie

50 inches

Mia

1.3 metres

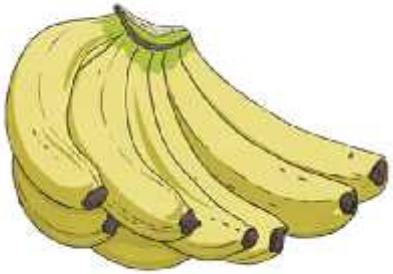
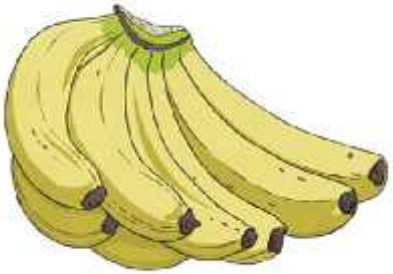
1 inch = approximately 2.5cm

Is the statement correct? Explain your answer.

The statement is correct.
50 inches is equivalent to 125cm which is 5cm shorter than 1.3m.

Imperial Units | **Deeper**

Here are the prices of bananas at two shops. At which shop are the bananas better value for money? Explain how you know.

Shop A	Shop B
	
1.3kg = £2	3lbs = £1.90

1lb = approx. 454g
1kg = approx. 2.2lbs

Shop B is better value for money.
3lbs is approximately 1362g, which is greater than 1.3kg for a cheaper price.

Imperial Units | **Deepest**

Otto, Freddie, Anja and Grace are drinking fruit smoothies.
Use the clues to work out who each drink belongs to.

Use these approximate conversions.

1 litre = approximately 1.75 pints
1 pint = approximately 570ml

$\frac{2}{3}$ of a pint

380ml Grace

$\frac{1}{2}$ of a pint

285ml Otto

$\frac{1}{4}$ litre

250ml Anja

$\frac{2}{5}$ litre

400ml Freddie

1. Freddie's drink has the greatest volume.
2. Anja's drink has the smallest volume.
3. Otto's drink has a volume smaller than $\frac{3}{10}$ of a litre.

Imperial Units | **Deepest**

Otto, Freddie, Anja and Grace mix their own drinks by choosing two of these different juices.

Use these approximate conversions.

1 litre = approximately 1.75 pints
1 pint = approximately 570ml

Grape Juice
$\frac{1}{3}$ of a pint

Apple Juice
$\frac{1}{2}$ of a pint

Orange Juice
$\frac{1}{6}$ of a pint

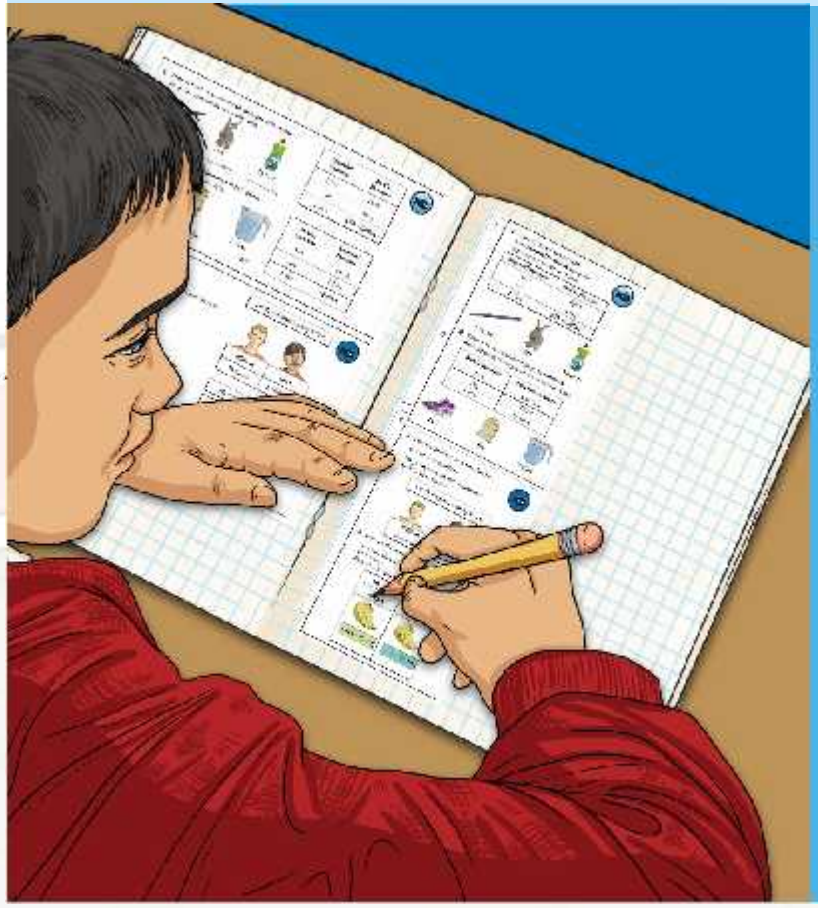
Pineapple Juice
1 pint

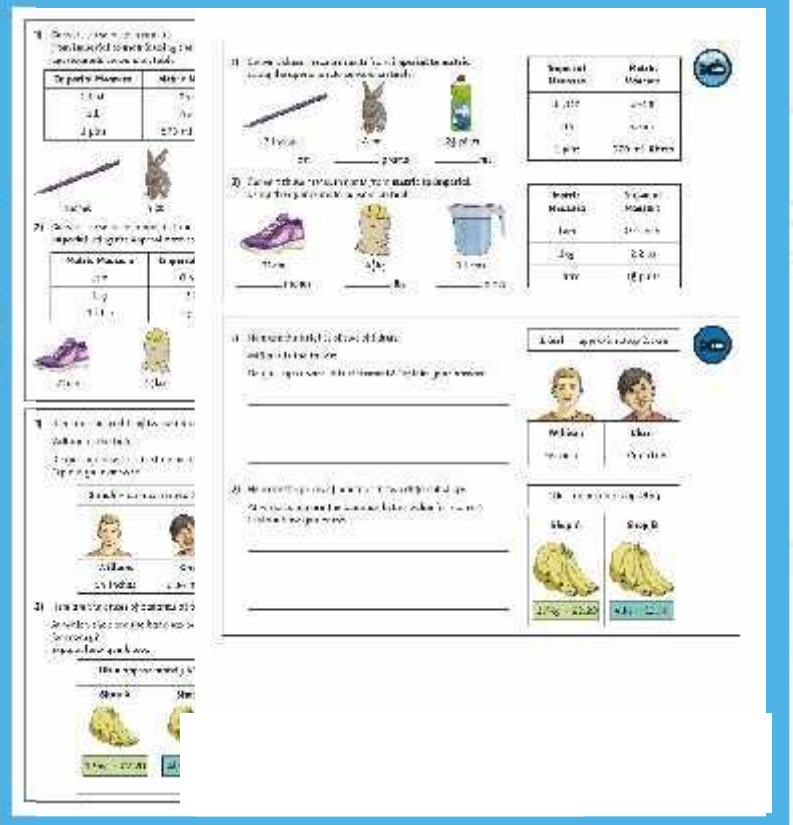
Find the volume, in millilitres, of the possible drinks they can mix.

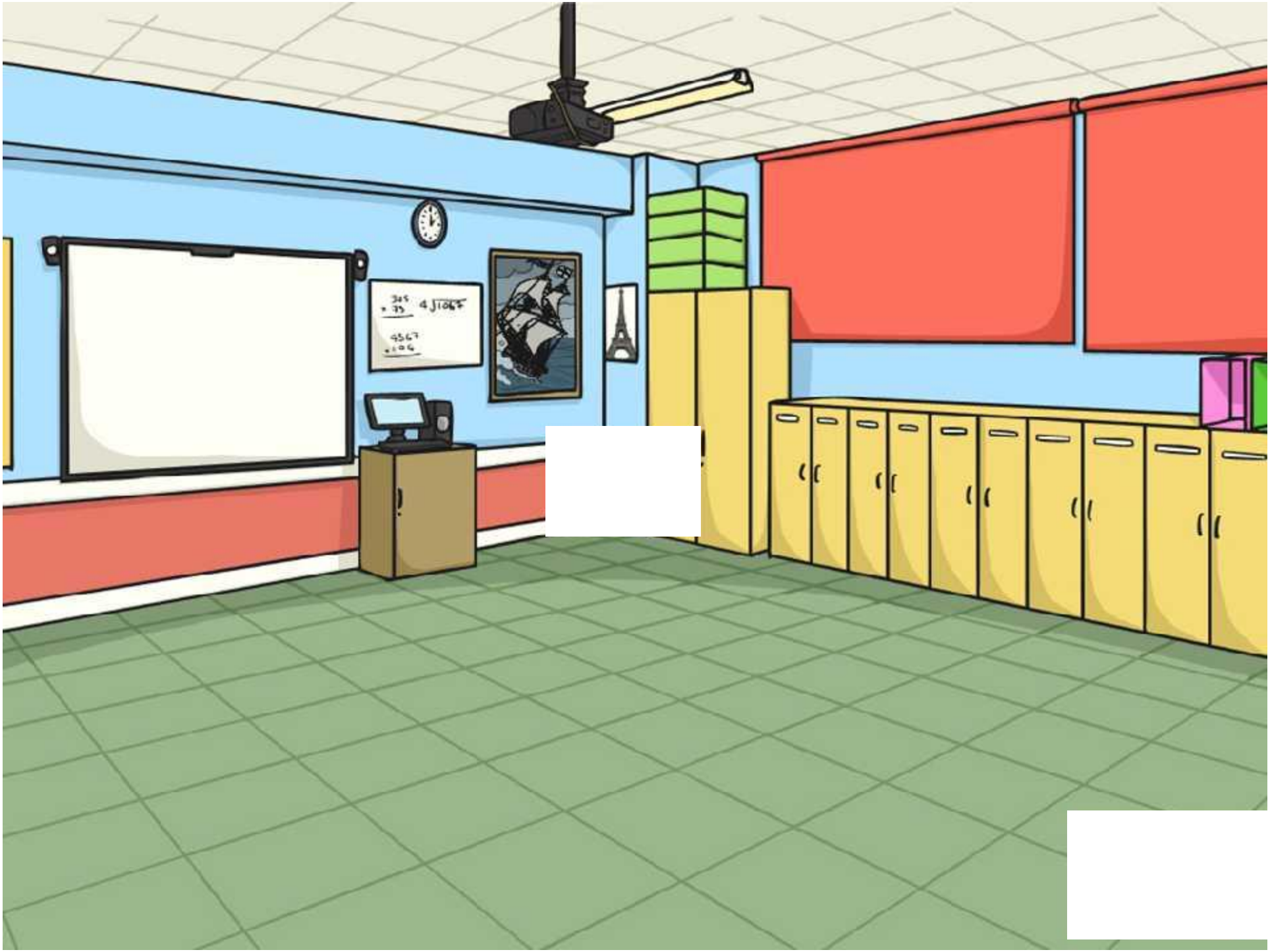
grape juice + apple juice = 190ml + 285ml = **475ml**	grape juice + orange juice = 190ml + 95 ml = **285ml**
grape juice + pineapple juice = 190ml + 570ml = **760ml**	apple juice + orange juice = 285ml + 95 ml = **380ml**
apple juice + pineapple juice = 285ml + 570ml = **855ml**	orange juice + pineapple juice = 95ml + 570ml = **665ml**

Imperial Units

Dive in by completing your own activity!







1) Convert these measurements from **imperial to metric** using the approximate conversion table.

Imperial Measure	Metric Measure
1 inch	$2\frac{1}{2}$cm
1lb	454g
1 pint	570 millilitres

7 inches

4lbs

$2\frac{1}{2}$ pints

2) Convert these measurements from **metric to imperial** using the approximate conversion table.

Metric Measure	Imperial Measure
1cm	0.4 inch
1kg	2.2lbs
1 litre	$1\frac{3}{4}$ pints

21cm

$4\frac{1}{2}$kg

3 litres

1) Convert these measurements from **imperial to metric** using the approximate conversion table.

Imperial Measure	Metric Measure
1 inch	$2\frac{1}{2}$cm
1lb	454g
1 pint	570 millilitres

7 inches

4lbs

$2\frac{1}{2}$ pints

2) Convert these measurements from **metric to imperial** using the approximate conversion table.

Metric Measure	Imperial Measure
1cm	0.4 inch
1kg	2.2lbs
1 litre	$1\frac{3}{4}$ pints

21cm

$4\frac{1}{2}$kg

3 litres

1) Here are the heights of two children.

William is the tallest.

Do you agree with this statement?
Explain your answer.

1 inch = approximately 2.5cm

William	Chen
54 inches	1.34 metres

2) Here are the prices of bananas at two different shops.

At which shop are the bananas better value for money?
Explain how you know.

1lb = approximately 454g

Shop A	Shop B
1.9kg = £2.20	4lbs = £2.50

1) Here are the heights of two children.

William is the tallest.

Do you agree with this statement?
Explain your answer.

1 inch = approximately 2.5cm

William	Chen
54 inches	1.34 metres

2) Here are the prices of bananas at two different shops.

At which shop are the bananas better value for money?
Explain how you know.

1lb = approximately 454g

Shop A	Shop B
1.9kg = £2.20	4lbs = £2.50

Regent Studies | www.regentstudies.com

1) Otto, Freddie, Anja and Grace are packing their suitcases for their holidays. Use the clues to work out who each suitcase belongs to.

1lb = approximately 454g

- Grace's suitcase is the heaviest.
- Otto's suitcase is the lightest.
- Freddie's suitcase is heavier than Anja's.

2) Otto, Freddie, Anja and Grace are adding toppings to pizzas by choosing two of these different ingredients.

$\frac{1}{2}$ pound

$\frac{1}{3}$ pound

$\frac{1}{5}$ pound

$\frac{1}{4}$ pound

Find the mass of each ingredient to the nearest gram.

Find the mass, in grams, of the all of the possible topping combinations that could be added to the pizzas.

1) Otto, Freddie, Anja and Grace are packing their suitcases for their holidays. Use the clues to work out who each suitcase belongs to.

1lb = approximately 454g

- Grace's suitcase is the heaviest.
- Otto's suitcase is the lightest.
- Freddie's suitcase is heavier than Anja's.

2) Otto, Freddie, Anja and Grace are adding toppings to pizzas by choosing two of these different ingredients.

$\frac{1}{2}$ pound

$\frac{1}{3}$ pound

$\frac{1}{5}$ pound

$\frac{1}{4}$ pound

Find the mass of each ingredient to the nearest gram.

Find the mass, in grams, of the all of the possible topping combinations that could be added to the pizzas.