1)

2 minutes and 16 seconds **136** seconds	1 hour and 43 minutes **103** minutes	2 weeks and 3 days **17** days
9 years and 3 months **111** months	2 days and 6 hours **54** hours	$2\frac{1}{4}$ hours **135** minutes

628 seconds **10** minutes and **28** seconds	200 minutes **3** hours and **20** minutes

1) *Accept a correct explanation that shows that the statement is correct, for example 1095 days is equal to 3 years whereas 37 months equals 3 years and 1 month. Therefore, Henry is older.*

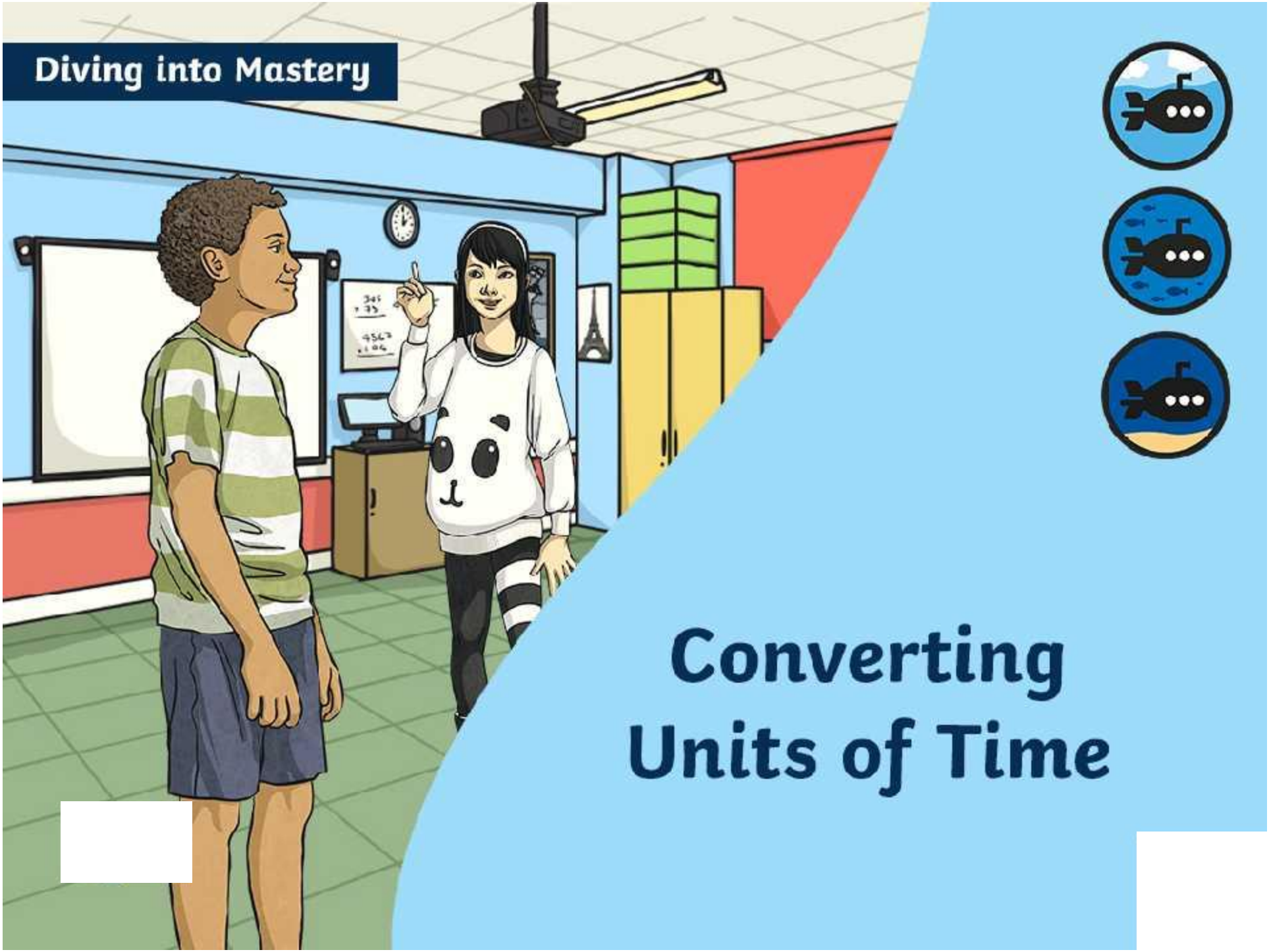
2) *Accept a correct explanation which shows that Noah is incorrect, for example 1¾ hours is equal to 105 minutes, not 145 minutes. The correct total is 388 minutes or 6 hours and 28 minutes.*

1)

a)

Poppy	£4.50
Liam	£6
Lan	£5

b) £69.75


Diving into Mastery
Converting
Units of Time

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:

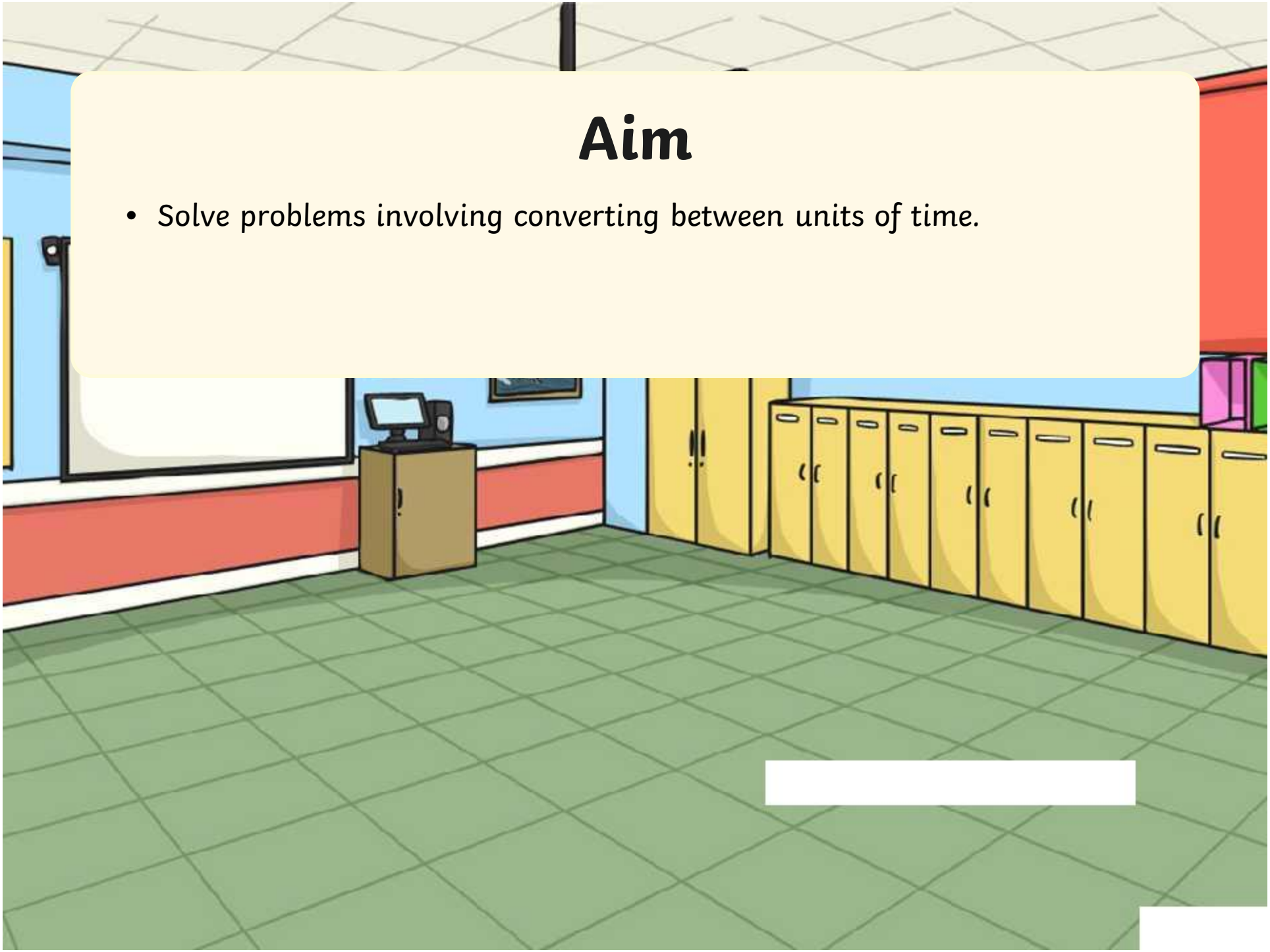
Diving

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

- Solve problems involving converting between units of time.

Converting Units of Time | **Diving**

Convert the units of time.

3 minutes and 9 seconds

189 seconds

1 hour and 25 minutes

85 minutes

3 weeks and 1 day

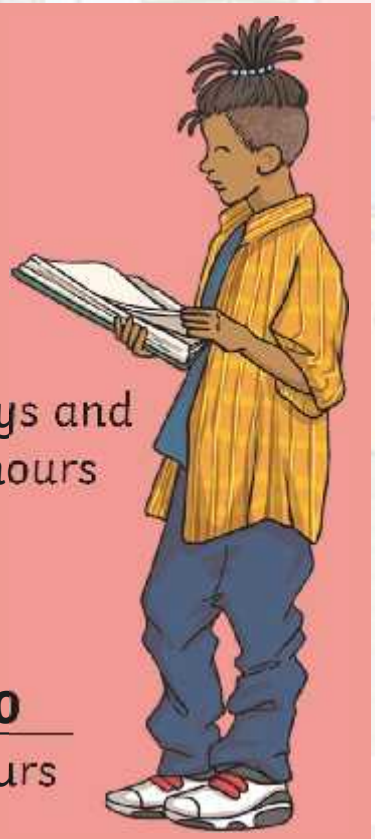
22 days

Converting Units of Time | **Diving**

Convert the units of time.

8 years and
4 months

100 months



3 days and
8 hours

80
hours

$2\frac{3}{4}$ hours

165 minutes

Converting Units of Time | Deeper

Tomek
730 days

Gill
22 months

Gill is the eldest child.

Is Sam correct? Explain your answer.

Sam is incorrect.
730 days equals 2 years and 22 months equals 1 year and 10 months.

Converting Units of Time | **Deeper**

Here are four films and their running times:

Clowning Around
1 hour and 56 minutes

Dance School
100 minutes

Superhero Squad
$1\frac{3}{4}$ hours

Ghost House
1 hour and 38 minutes

Is Sam correct? Explain your answer. Reveal answer

Sam is correct. Ghost House is 98 minutes and Dance School is 100 minutes. This is a difference of 2 minutes, which is equal to 120 seconds.

Converting Units of Time | **Deepest**

Ola is taking part in a sponsored silence for charity.

Three of Ola's friends agree to sponsor her for the following amounts:

Ben

£1 for every 5 minutes

£6

Michael

£1.50 for every 600 seconds

£4.50

Lucie

£2.00 for every quarter of an hour

£4

a) How much will each friend give to Ola after 30 minutes of silence?

Converting Units of Time | **Deepest**

Ola is taking part in a sponsored silence for charity.

Three of Ola's friends agree to sponsor her for the following amounts:

Ben
£1 for every 5 minutes

Michael
£1.50 for every 600 seconds

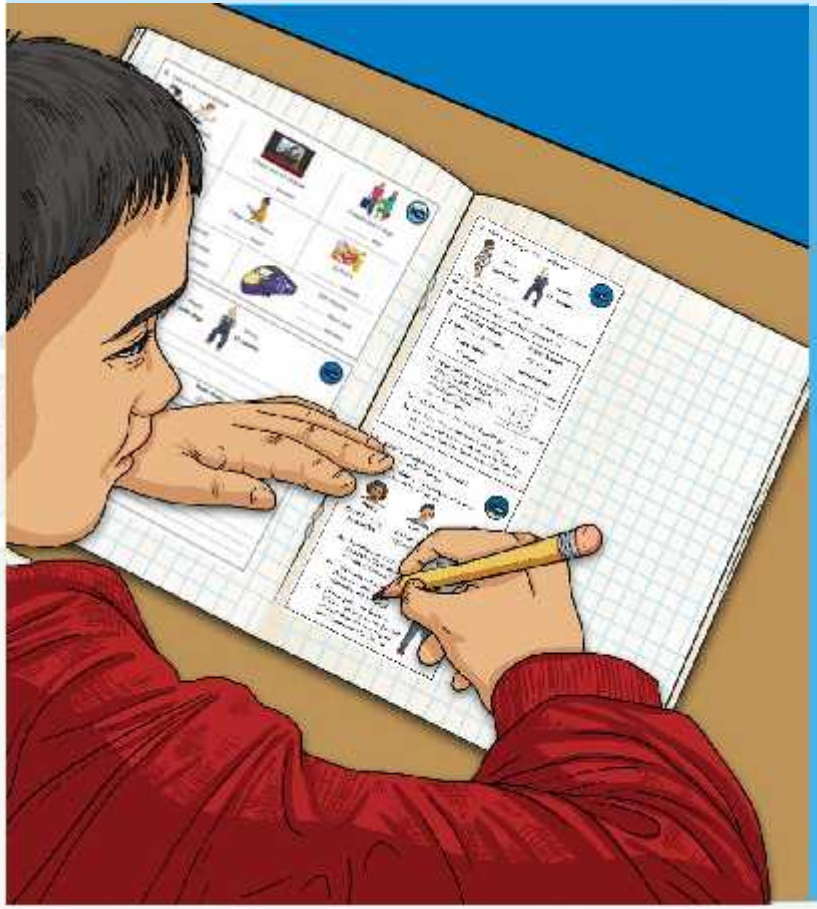
Lucie
£2.00 for every quarter of an hour

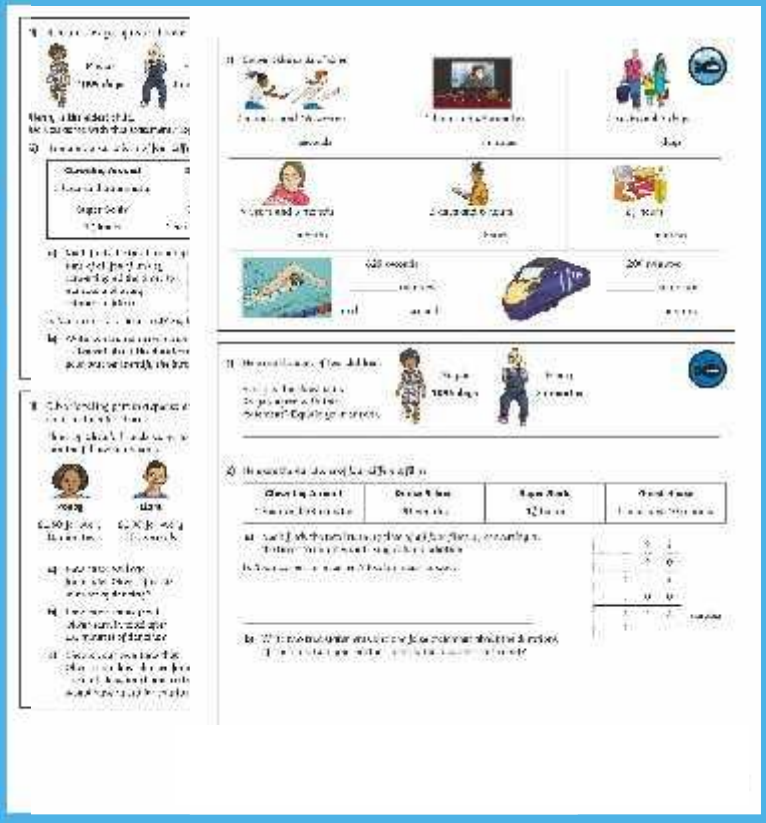
b) How much money will Ola earn in total after 195 minutes of silence?

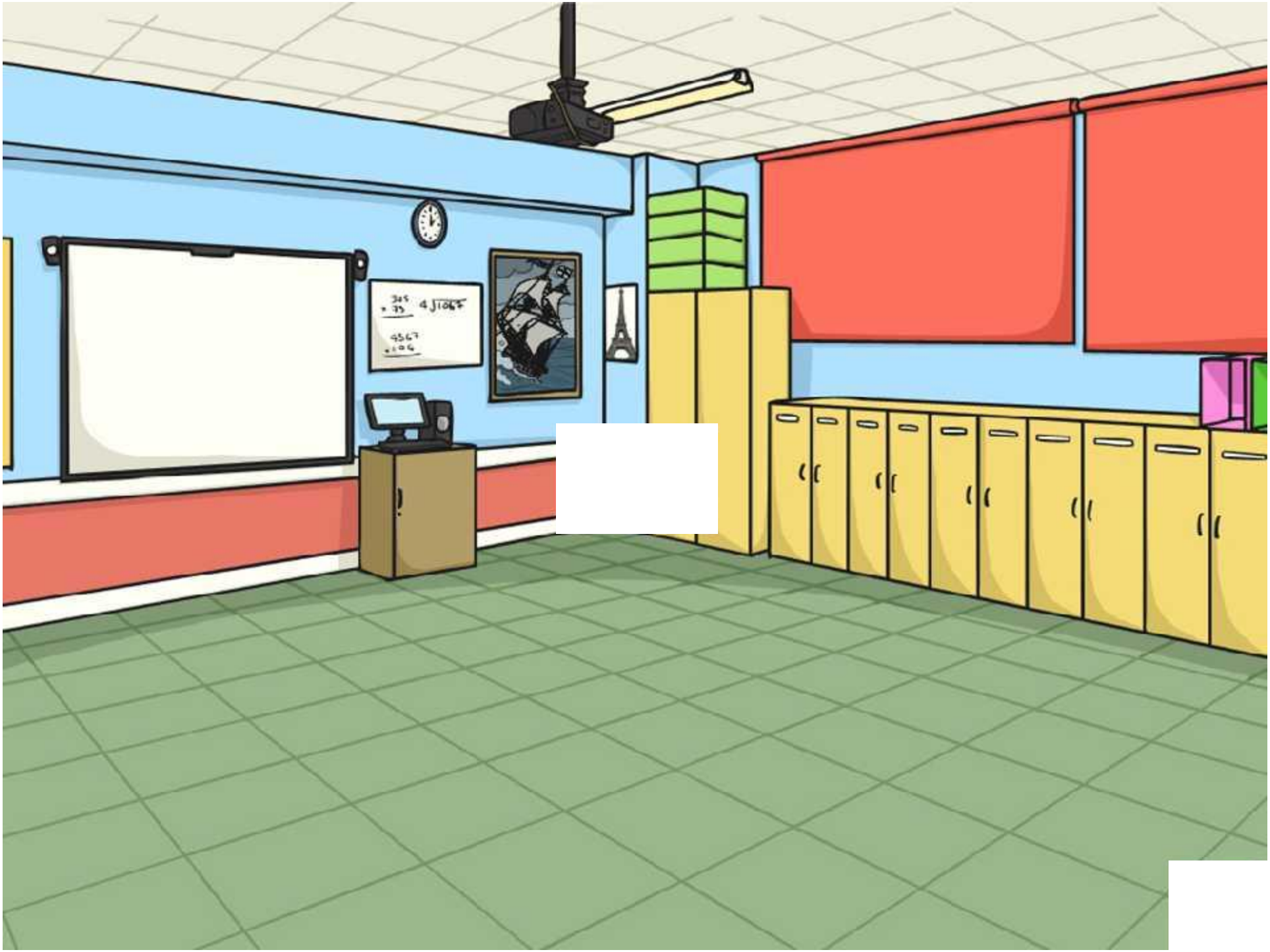
£94.25

Calculating Angles on a Straight Line

Dive in by completing your own activity!







1) Convert the units of time.

2 minutes and 16 seconds

_____ seconds

1 hour and 43 minutes

_____ minutes

2 weeks and 3 days

_____ days

9 years and 3 months

_____ months

2 days and 6 hours

_____ hours

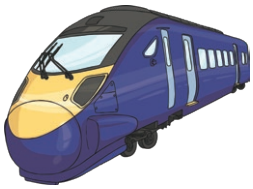
$2\frac{1}{4}$ hours

_____ minutes

628 seconds

_____ minutes

and _____ seconds



200 minutes

_____ hours and

_____ minutes

1) Here are the ages of two children:

Henry is the eldest child.
Do you agree with this statement? Explain your answer.

Magda

1095 days

Henry

37 months

_____

_____

2) Here are the durations of four different films

Clowning Around	Dance School	Super Sonic	Ghost House
1 hour and 33 minutes	90 minutes	$1\frac{3}{4}$ hours	1 hour and 40 minutes

a) Noah finds the total running time of all four films by converting all the times to minutes and using column addition.

Is Noah correct or incorrect? Explain your answer.

_____

_____

_____

		9	3	
		9	0	
	1	4	5	
+	1	0	0	
	4	2	8	minutes
	2			

b) Write two true statements and one false statement about the durations of the films. Can your partner identify the incorrect statement?

_____

_____

_____

1) Oliver is taking part in a sponsored dance-a-thon for charity.

Three of Oliver's friends agree to sponsor him the following amounts:

Poppy

£1.50 for every 10 minutes

Liam

£1.00 for every 300 seconds

Lan

£2.50 for every quarter of an hour

a) How much will each friend give Oliver after 30 minutes of dancing?

Poppy	
Liam	
Lan	

b) How much money will Oliver earn in total after 135 minutes of dancing?

c) Choose your own time that Oliver could have danced for and calculate how much money he would have raised for charity.

1) Convert the units of time.

2 minutes and 16 seconds

_____ seconds

9 years and 3 months

_____ months

1 hour and 43 minutes

_____ minutes

2 weeks and 3 days

_____ days

2 days and 6 hours

_____ hours

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

_____ minutes

628 seconds

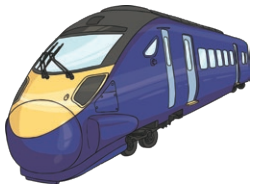
_____ minutes

and _____ seconds

200 minutes

_____ hours and

_____ minutes



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9 years and 3 months

_____ months

1 hour and 43 minutes

_____ minutes

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2 days and 6 hours

_____ hours

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

_____ minutes

628 seconds

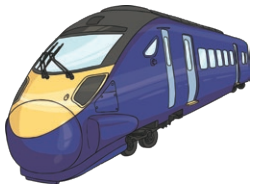
_____ minutes

and _____ seconds

200 minutes

_____ hours and

_____ minutes



1) Here are the ages of two children:

Magda

1095 days

Henry

37 months

Henry is the eldest child.
Do you agree with this statement? Explain your answer.

2) Here are the durations of four different films

Clowning Around	**Dance School**
1 hour and 33 minutes	90 minutes
Super Sonic	**Ghost House**
$1\frac{3}{4}$ hours	1 hour and 40 minutes

a) Noah finds the total running time of all four films by converting all the times to minutes and using column addition.

		9	3	
		9	0	
	1	4	5	
+	1	0	0	
	4	2	8	minutes
	²			

Is Noah correct or incorrect? Explain your answer.

b) Write two true statements and one false statement about the durations of the films. Can your partner identify the incorrect statement?

1) Oliver is taking part in a sponsored dance-a-thon for charity.

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Liam

£1.00 for every 300 seconds

Lan

£2.50 for every quarter of an hour

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b) How much money will Oliver earn in total after 135 minutes of dancing?

c) Choose your own time that Oliver could have danced for and calculate how much money he would have raised for charity.

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