



Complete the Sentences with Modal Verbs

1. Choose one of these modal verbs to complete each of these sentences – you can use each one more than once if you need to.

can

might

will

should

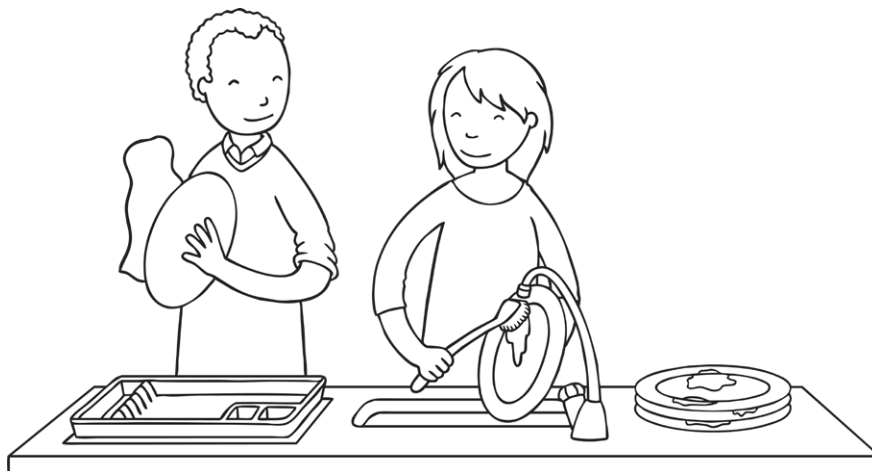
can't

mighn't

won't

shouldn't

- a) Pasha _____ try her hardest at school.
- b) He is so tired, he _____ keep his eyes open.
- c) Tom is a great footballer. He _____ even play in goal!
- d) If she keeps trying hard, she _____ just have a chance.
- e) He is still learning. He _____ do his shoe laces up just yet.
- f) You _____ hurt people or steal things.
- g) When you have finished eating, you _____ wash your plate.
- h) When they get there, they _____ find it waiting for them.
- i) The cold makes it likely there _____ be icy roads tomorrow.
- j) When I am older, I _____ be a millionaire.





Complete the Sentences with Modal Verbs

1. Choose one of these modal verbs to complete each of these sentences.
You may only use each once so cross it off when you have used it!

can

might

will

should

would

can't

may

must

shouldn't

couldn't

- a) Pasha _____ complete her homework.
- b) He was so tired he _____ keep his eyes open.
- c) Tom is a great footballer. He _____ even play in goal!
- d) If she keeps trying hard, she _____ just have a chance.
- e) He is still learning. He _____ do his shoe laces up just yet.
- f) You _____ hurt people or steal things.
- g) When you have finished, you _____ leave the table.
- h) It has been ordered, so when they get there, they _____ find it waiting for them.
- i) The bitter cold makes it certain there _____ be icy roads tomorrow.
- j) I _____ happily swap places with a millionaire.





Complete the Sentences with Modal Verbs

1. In some sentences, there are multiple modal verbs which could be used. In the right hand column of the table below, write down all of the modal verbs which could fit each sentence. Cover the word list to provide an extra challenge!

can

might

will

should

would

can't

may

must

shouldn't

couldn't

a) Pasha _____ do her homework.	
b) He was so tired he _____ keep his eyes open.	
c) Tom is a great footballer. He _____ even play in goal!	
d) If she keeps trying hard, she _____ just have a chance.	
e) He is still learning. He _____ do his shoe laces up just yet.	
f) You _____ hurt people or steal things.	
g) When you have finished, you _____ leave the table.	
h) It has been ordered, so when they get there, they _____ find it waiting for them.	
i) The bitter cold makes is certain there _____ be icy roads tomorrow.	
j) I _____ happily swap places with a millionaire.	



1. Choose one of these modal verbs to complete each of these sentences – you can use each one more than once if you need to.

As these sentences make sense with a variety of modal verbs, the suggested answer is for 'best fit' only.

- a) Pasha should try her hardest at school.
- b) He is so tired, he can't keep his eyes open.
- c) Tom is a great footballer. He can even play in goal!
- d) If she keeps trying hard, she might just have a chance.
- e) He is still learning. He can't do his shoe laces up just yet.
- f) You shouldn't hurt people or steal things.
- g) When you have finished eating, you should wash your plate.
- h) When they get there, they should find it waiting for them.
- i) The cold makes it likely there will be icy roads tomorrow.
- j) When I am older I might be a millionaire.



1. Choose one of these modal verbs to complete each of these sentences. You may only use each once so cross it off when you have used it!

As these sentences make sense with a variety of modal verbs, the suggested answer is for 'best fit' only.

- a) Pasha must complete her homework.
- b) He was so tired he couldn't keep his eyes open.
- c) Tom is a great footballer. He can even play in goal!
- d) If she keeps trying hard, she might just have a chance.
- e) He is still learning. He can't do his shoe laces up just yet.
- f) You shouldn't hurt people or steal things.
- g) When you have finished, you may leave the table.
- h) It has been ordered, so when they get there, they should find it waiting for them.
- i) The bitter cold makes is certain there will be icy roads tomorrow.
- j) I would happily swap places with a millionaire.



1. In some sentences there are multiple modal verbs which could be used. In the right hand column of the table below, write down the modal verbs which would make sense in the sentence given.

Answers are just suggested – there may be some discussion about whether individual words make sense in given sentences.

a) Pasha _____ do her homework.	<i>can, may, might, will, must</i>
b) He was so tired he _____ keep his eyes open.	<i>couldn't, wouldn't</i>
c) Tom is a great footballer. He _____ even play in goal!	<i>can, may, might, will, would, must, should</i>
d) If she keeps trying hard, she _____ just have a chance.	<i>may, might, will, must, should</i>
e) He is still learning. He _____ do his shoe laces up just yet.	<i>can't</i>
f) You _____ hurt people or steal things.	<i>will, can't, shouldn't</i>
g) When you have finished, you _____ leave the table.	<i>may, can, must, might, should, can't, shouldn't</i>
h) It has been ordered, so when they get there, they _____ find it waiting for them.	<i>may, might, will, must, should</i>
i) The bitter cold makes is certain there _____ be icy roads tomorrow.	<i>may, might, will</i>
j) I _____ happily swap places with a millionaire.	<i>would, wouldn't, might, will,</i>

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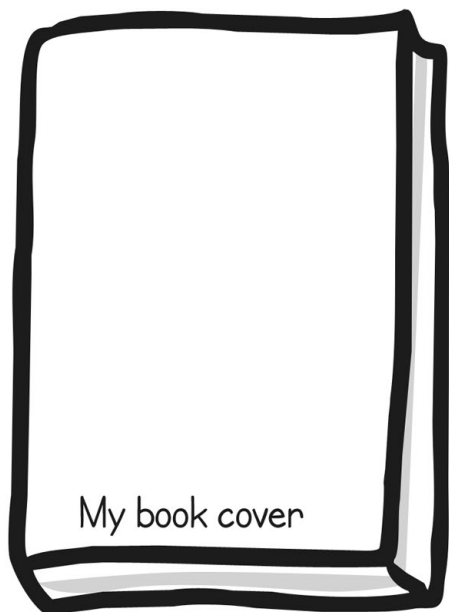
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Book Review

By _____



Book Title

Author _____

Genre (tick as many as apply to your book)

- | | | |
|--------------------------------------|-------------------------------------|---------------------------------------|
| <input type="checkbox"/> fiction | <input type="checkbox"/> scary | <input type="checkbox"/> animal story |
| <input type="checkbox"/> non fiction | <input type="checkbox"/> fairy tale | <input type="checkbox"/> biography |
| <input type="checkbox"/> fantasy | <input type="checkbox"/> adventure | <input type="checkbox"/> historical |
| <input type="checkbox"/> humour | <input type="checkbox"/> sports | <input type="checkbox"/> mystery |
| <input type="checkbox"/> other _____ | | |

Plot

Setting

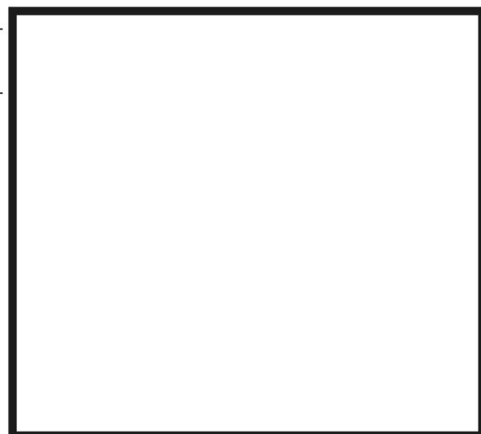
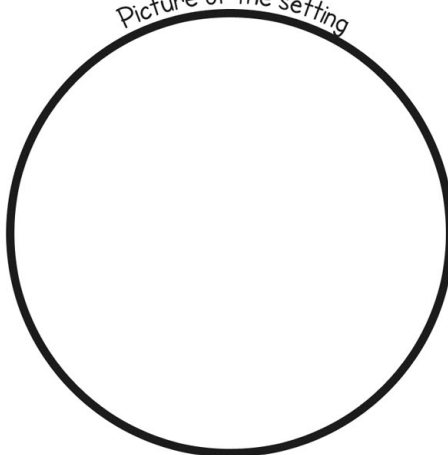
Character

Event 1 _____

Event 2 _____

Event 3 _____

Picture of the setting



Name _____

Personality _____

Physical Appearance _____

Cause and Effect of one of the events in the book

Cause



Effect

My Star Rating



Why I rated the book ____ stars

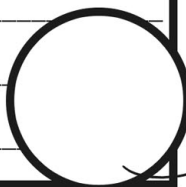
This book made me feel _____

because _____

How I feel about this character and

why _____

draw how you felt!





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Roman Numerals Worksheet



Name: Date:

Translate these Roman numerals. Don't forget to show your working out!

- | | |
|----------------|----------------|
| 1. MD _____ | 4. CXVI _____ |
| 2. MCD _____ | 5. DCLX _____ |
| 3. XXXIV _____ | 6. CXIII _____ |

Write these numbers in Roman numerals.

- | | |
|--------------|--------------|
| 1. 35 _____ | 4. 283 _____ |
| 2. 100 _____ | 5. 570 _____ |
| 3. 99 _____ | 6. 27 _____ |

Arrange these numbers in size order.

XXXV, XL, XXX, LX, LV, L, XLV, LXV

_____, _____, _____, _____, _____, _____, _____, _____

CL, CCC, CCL, C, CD, CC, L, CCCL

_____, _____, _____, _____, _____, _____, _____, _____

Count in hundreds from one hundred.

C, CC, _____, _____, D, _____, _____, _____, _____, _____

Count in five hundreds from five hundred.

D, _____, _____, _____, MMD, _____, _____

Complete these calculations.

- | | |
|--------------------|--------------------|
| 1. CD + DC = _____ | 4. XL + LX = _____ |
| 2. VI + IV = _____ | 5. CM + MC = _____ |
| 3. XI + IX = _____ | 6. CX + XC = _____ |

Roman Numerals Worksheet



Answer Sheet

Name: Date:

Translate these Roman numerals. Don't forget to show your working out!

1. MD $1000 + 500 = 1500$

4. CXVI $100 + 10 + 6 = 116$

2. MCD $1000 + 400 = 1400$

5. DCLX $500 + 100 + 50 + 10 = 660$

3. XXXIV $(3 \times 10) + 4 = 34$

6. CXIII $100 + 10 + (3 \times 1) = 113$

Write these numbers in Roman numerals.

1. 35 XXXV

4. 283 CCLXXXIII

2. 100 C

5. 570 DLXX

3. 99 XCIX

6. 27 XXVII

Arrange these numbers in size order.

35 40 30 60 55 50 45 65
XXXV, XL, XXX, LX, LV, L, XLV, LXV

XXX, XXXV, XL, XLV, L, LV, LX, LXV

150 300 250 100 400 200 50 350
CL, CCC, CCL, C, CD, CC, L, CCCL

L, C, CL, CC, CCL, CCC, CCCL, CD

Count in hundreds from one hundred.

C, CC, CCC, CD, D, DC, DCC, DCCC, CM, M

Count in five hundreds from five hundred.

D, M, MD, MM, MMD, MMM, MMMD

Complete these calculations.

1. CD + DC = M

4. XL + LX = C

2. VI + IV = X

5. CM + MC = MM

3. XI + IX = XX

6. CX + XC = CC

eve

ancient

bargain

deve

criticise

foreign

queue

levan

Spelling List
Activity Book

By _____

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Look and say	Look, say and write	Cover and write	Check and write again
accommodate			
accompany			
according			
achieve			
aggressive			

Fill in the missing word.

1. I am able to _____ 3 people in the car.
2. Would you _____ me to the theatre?
3. We always _____ our best at school.
4. _____ to my mum, I am good at making cups of tea.
5. My rash is very _____ .

Write your own sentences using:

1. accommodate 2. accompany 3. according 4. achieve 5. aggressive

Look and say	Look, say and write	Cover and write	Check and write again
amateur			
ancient			
apparent			
appreciate			
attached			

Fill in the missing word.

1. I _____ the string to the balloon.
2. I act in an _____ dramatic group.
3. I visited the _____ pyramids in Egypt.
4. It was _____ that I needed new glasses.
5. I _____ you helping me.

Write your own sentences using:

1. amateur 2. ancient 3. apparent 4. appreciate 5. attached

Look and say	Look, say and write	Cover and write	Check and write again
twelfth			
variety			
vegetable			
vehicle			
yacht			

Fill in the missing word.

1. I have got my own _____ patch in the garden.
2. The _____ survey showed most people drove cars to work.
3. Brian sailed his _____ on the Hudson River.
4. December is the _____ month of the year.
5. There is a _____ of things to choose from.

Write your own sentences using:

1. twelfth 2. variety 3. vegetable 4. vehicle 5. yacht

Look and say	Look, say and write	Cover and write	Check and write again
system			
temperature			
thorough			
suggest			
symbol			

Fill in the missing word.

1. I would _____ using this program for your computer.
2. The _____ is so hot today!
3. Which _____ do you have on your laptop?
4. I have made a _____ investigation of the events.
5. I chose this _____ for my logo design.

Write your own sentences using:

1. system 2. temperature 3. thorough 4. suggest 5. symbol

Look and say	Look, say and write	Cover and write	Check and write again
available			
average			
awkward			
bargain			
bruise			

Fill in the missing word.

1. I got a big _____ on my leg playing football.
2. These shoes were a _____ !
3. I felt _____ having to ask for my money back.
4. The next _____ train isn't till tomorrow.
5. The _____ age in the class is 10.

Write your own sentences using:

1. available 2. average 3. awkward 4. bargain 5. bruise

Look and say	Look, say and write	Cover and write	Check and write again
category			
cemetery			
committee			
communicate			
community			

Fill in the missing word.

1. Which _____ does this shape go into?
2. I walked through the _____ next to the church.
3. We had to check with the _____ to organise the raffle.
4. I try and _____ clearly and precisely.
5. I am proud of the _____ I live in.

Write your own sentences using:

1. category 2. cemetery 3. committee 4. communicate 5. community

Look and say	Look, say and write	Cover and write	Check and write again
signature			
sincere			
soldier			
stomach			
sufficient			

Fill in the missing word.

1. Please can I have your _____ in my book?
2. I send my _____ apologies for missing your birthday.
3. I hope I have given you _____ information.
4. The _____ marched bravely into battle.
5. My _____ is full after all that food!

Write your own sentences using:

1. signature 2. sincere 3. soldier 4. stomach 5. sufficient

Look and say	Look, say and write	Cover and write	Check and write again
rhyme			
rhythm			
sacrifice			
secretary			
shoulder			

Fill in the missing word.

1. My _____ aches where I was carrying my school bag.
2. The school _____ collects all the information.
3. I will _____ my playtime to help tidy up the classroom.
4. Can you match the _____ of the drum?
5. My favourite nursery _____ is Little Miss Muffet.

Write your own sentences using:

1. rhyme 2. rhythm 3. sacrifice 4. secretary 5. shoulder

Look and say	Look, say and write	Cover and write	Check and write again
competition			
conscience			
conscious			
controversy			
convenience			

Fill in the missing word.

1. The _____ to get to the final was tough.
2. I like the _____ of living next to a grocery store.
3. There was much _____ over that decision.
4. I have a clear _____.
5. I made a _____ decision to work harder this year.

Write your own sentences using:

1. competition 2. conscience 3. conscious 4. controversy 5. convenience

Look and say	Look, say and write	Cover and write	Check and write again
correspond			
criticise			
curiosity			
definite			
desperate			

Fill in the missing word.

1. I am _____ to see my new puppy.
2. It is _____ that we are leaving by 6.
3. Out of _____, where do you live?
4. Try not to _____ your friend's work.
5. I will _____ with you via email.

Write your own sentences using:

1. correspond 2. criticise 3. curiosity 4. definite 5. desperate

Look and say	Look, say and write	Cover and write	Check and write again
queue			
recognise			
recommend			
relevant			
restaurant			

Fill in the missing word.

1. I was stuck in a long _____ at the shop.
2. I don't _____ your sister.
3. I would _____ the pizza place in town.
4. Which _____ shall we eat at tonight?
5. That point isn't _____ to the argument.

Write your own sentences using:

1. queue 2. recognise 3. recommend 4. relevant 5. restaurant

Look and say	Look, say and write	Cover and write	Check and write again
occur			
opportunity			
parliament			
persuade			
physical			

Fill in the missing word.

1. It was a good _____ to take a break.
2. The _____ makes the laws in this country.
3. I will try and _____ mum to let you stay for tea.
4. I enjoy doing _____ exercise.
5. Everyone's birthday will _____ once a year.

Write your own sentences using:

1. occur 2. opportunity 3. parliament 4. persuade 5. physical

Look and say	Look, say and write	Cover and write	Check and write again
determined			
develop			
dictionary			
disastrous			
embarrass			

Fill in the missing word.

1. I am _____ to do my best work.
2. I don't want to _____ myself.
3. We can use the _____ to check the word.
4. My attempt to build a den was _____ !
5. I am trying to _____ my neat handwriting.

Write your own sentences using:

1. determined 2. develop 3. dictionary 4. disastrous 5. embarrass

Look and say	Look, say and write	Cover and write	Check and write again
environment			
equipment			
especially			
exaggerate			
excellent			

Fill in the missing word.

1. I am _____ good at running.
2. I am _____ at reading!
3. My _____ is ready for my experiment.
4. It is important to look after the _____.
5. I tend to _____ how long it took.

Write your own sentences using:

1. environment 2. equipment 3. especially 4. exaggerate 5. excellent

Look and say	Look, say and write	Cover and write	Check and write again
muscle			
necessary			
neighbour			
nuisance			
occupy			

Fill in the missing word.

1. My _____ lives next door.
2. My brother's pet gerbil is a _____.
3. We can _____ this row of seats in the theatre.
4. It is _____ to do the register every morning.
5. I have pulled a _____ in my leg playing football.

Write your own sentences using:

1. muscle 2. necessary 3. neighbour 4. nuisance 5. occupy

Look and say	Look, say and write	Cover and write	Check and write again
language			
leisure			
lightning			
marvellous			
mischievous			

Fill in the missing word.

1. I am learning to speak a new _____.
2. The thunder and _____ brought chaos to the town.
3. I go swimming at the local _____ centre.
4. What a _____ party!
5. My little sister is very _____.

Write your own sentences using:

1. language 2. leisure 3. lightning 4. marvellous 5. mischievous

Look and say	Look, say and write	Cover and write	Check and write again
existence			
explanation			
familiar			
foreign			
forty			

Fill in the missing word.

1. There are _____ children in the school choir.
2. Germany is a _____ country.
3. You look _____ to me.
4. There must be a simple _____.
5. Fossils prove the _____ of dinosaurs.

Write your own sentences using:

1. existence 2. explanation 3. familiar 4. foreign 5. forty

Look and say	Look, say and write	Cover and write	Check and write again
government			
guarantee			
harass			
hindrance			
frequently			

Fill in the missing word.

1. Our _____ runs the country.
2. I got a 12 month _____ on my new phone.
3. I find this more of a _____ than a help.
4. I _____ forget where I put my keys.
5. Please don't _____ me for the information.

Write your own sentences using:

1. government 2. guarantee 3. harass 4. hindrance 5. frequently

Look and say	Look, say and write	Cover and write	Check and write again
identity			
immediate			
individual			
interfere			
interrupt			

Fill in the missing word.

1. Don't _____ me when I am speaking.
2. Each _____ is responsible for their belongings.
3. I don't want to _____ with your situation.
4. Each person has their own _____ in the school.
5. We will do it this way for the _____ future.

Write your own sentences using:

1. identity 2. immediate 3. individual 4. interfere 5. interrupt

Ultimate Times Table Challenge

Name:

Number Correct:

Time Table:

Previous Score:



$1 \times 1 =$	$11 \times 12 =$	$10 \times 12 =$	$3 \times 5 =$	$1 \times 9 =$	$7 \times 1 =$
$1 \times 5 =$	$1 \times 2 =$	$2 \times 5 =$	$4 \times 1 =$	$2 \times 9 =$	$4 \times 5 =$
$3 \times 1 =$	$3 \times 3 =$	$9 \times 12 =$	$3 \times 7 =$	$6 \times 1 =$	$3 \times 11 =$
$1 \times 4 =$	$4 \times 3 =$	$1 \times 3 =$	$11 \times 7 =$	$4 \times 9 =$	$3 \times 9 =$
$5 \times 1 =$	$8 \times 9 =$	$5 \times 5 =$	$8 \times 12 =$	$2 \times 7 =$	$5 \times 11 =$
$10 \times 3 =$	$6 \times 3 =$	$1 \times 11 =$	$2 \times 11 =$	$11 \times 11 =$	$1 \times 7 =$
$5 \times 3 =$	$9 \times 7 =$	$7 \times 5 =$	$7 \times 7 =$	$7 \times 9 =$	$10 \times 5 =$
$8 \times 1 =$	$10 \times 1 =$	$5 \times 7 =$	$6 \times 5 =$	$3 \times 8 =$	$8 \times 11 =$
$9 \times 1 =$	$9 \times 3 =$	$3 \times 10 =$	$9 \times 9 =$	$4 \times 7 =$	$8 \times 7 =$
$11 \times 9 =$	$6 \times 8 =$	$6 \times 11 =$	$10 \times 7 =$	$10 \times 9 =$	$10 \times 11 =$
$11 \times 1 =$	$11 \times 3 =$	$11 \times 5 =$	$2 \times 3 =$	$4 \times 11 =$	$8 \times 5 =$
$12 \times 5 =$	$12 \times 12 =$	$5 \times 4 =$	$12 \times 7 =$	$12 \times 9 =$	$12 \times 11 =$
$2 \times 1 =$	$8 \times 3 =$	$6 \times 7 =$	$1 \times 12 =$	$1 \times 10 =$	$7 \times 3 =$
$2 \times 2 =$	$9 \times 11 =$	$2 \times 6 =$	$2 \times 8 =$	$2 \times 12 =$	$7 \times 6 =$
$11 \times 4 =$	$3 \times 4 =$	$5 \times 9 =$	$12 \times 2 =$	$2 \times 4 =$	$1 \times 6 =$
$4 \times 2 =$	$4 \times 4 =$	$4 \times 6 =$	$6 \times 9 =$	$4 \times 10 =$	$9 \times 5 =$
$5 \times 2 =$	$10 \times 2 =$	$12 \times 1 =$	$5 \times 8 =$	$3 \times 6 =$	$7 \times 11 =$
$7 \times 4 =$	$6 \times 4 =$	$6 \times 6 =$	$12 \times 3 =$	$6 \times 2 =$	$8 \times 4 =$
$7 \times 2 =$	$9 \times 2 =$	$2 \times 10 =$	$5 \times 10 =$	$1 \times 8 =$	$5 \times 6 =$
$7 \times 8 =$	$6 \times 10 =$	$12 \times 10 =$	$12 \times 4 =$	$8 \times 10 =$	$8 \times 2 =$
$10 \times 4 =$	$9 \times 4 =$	$3 \times 12 =$	$9 \times 8 =$	$12 \times 8 =$	$8 \times 6 =$
$11 \times 6 =$	$9 \times 6 =$	$10 \times 6 =$	$3 \times 2 =$	$4 \times 12 =$	$9 \times 10 =$
$11 \times 2 =$	$6 \times 12 =$	$5 \times 12 =$	$11 \times 8 =$	$11 \times 10 =$	$8 \times 8 =$
$7 \times 12 =$	$10 \times 10 =$	$12 \times 6 =$	$7 \times 10 =$	$4 \times 8 =$	$10 \times 8 =$

Ultimate Times Table Challenge Answers

$1 \times 1 = 1$	$11 \times 12 = 132$	$10 \times 12 = 120$	$3 \times 5 = 15$	$1 \times 9 = 9$	$7 \times 1 = 7$
$1 \times 5 = 5$	$1 \times 2 = 2$	$2 \times 5 = 10$	$4 \times 1 = 4$	$2 \times 9 = 18$	$4 \times 5 = 20$
$3 \times 1 = 3$	$3 \times 3 = 9$	$9 \times 12 = 108$	$3 \times 7 = 21$	$6 \times 1 = 6$	$3 \times 11 = 33$
$1 \times 4 = 4$	$4 \times 3 = 12$	$1 \times 3 = 3$	$11 \times 7 = 77$	$4 \times 9 = 36$	$3 \times 9 = 27$
$5 \times 1 = 5$	$8 \times 9 = 72$	$5 \times 5 = 25$	$8 \times 12 = 96$	$2 \times 7 = 14$	$5 \times 11 = 55$
$10 \times 3 = 30$	$6 \times 3 = 18$	$1 \times 11 = 11$	$2 \times 11 = 22$	$11 \times 11 = 121$	$1 \times 7 = 7$
$5 \times 3 = 15$	$9 \times 7 = 63$	$7 \times 5 = 35$	$7 \times 7 = 49$	$7 \times 9 = 63$	$10 \times 5 = 50$
$8 \times 1 = 8$	$10 \times 1 = 10$	$5 \times 7 = 35$	$6 \times 5 = 30$	$3 \times 8 = 24$	$8 \times 11 = 88$
$9 \times 1 = 9$	$9 \times 3 = 27$	$3 \times 10 = 30$	$9 \times 9 = 81$	$4 \times 7 = 28$	$8 \times 7 = 56$
$11 \times 9 = 99$	$6 \times 8 = 48$	$6 \times 11 = 66$	$10 \times 7 = 70$	$10 \times 9 = 90$	$10 \times 11 = 110$
$11 \times 1 = 11$	$11 \times 3 = 33$	$11 \times 5 = 55$	$2 \times 3 = 6$	$4 \times 11 = 44$	$8 \times 5 = 40$
$12 \times 5 = 60$	$12 \times 12 = 144$	$5 \times 4 = 20$	$12 \times 7 = 84$	$12 \times 9 = 108$	$12 \times 11 = 132$
$2 \times 1 = 2$	$8 \times 3 = 24$	$6 \times 7 = 42$	$1 \times 12 = 12$	$1 \times 10 = 10$	$7 \times 3 = 21$
$2 \times 2 = 4$	$9 \times 11 = 99$	$2 \times 6 = 12$	$2 \times 8 = 16$	$2 \times 12 = 24$	$7 \times 6 = 42$
$11 \times 4 = 44$	$3 \times 4 = 12$	$5 \times 9 = 45$	$12 \times 2 = 24$	$2 \times 4 = 8$	$1 \times 6 = 6$
$4 \times 2 = 8$	$4 \times 4 = 16$	$4 \times 6 = 24$	$6 \times 9 = 54$	$4 \times 10 = 40$	$9 \times 5 = 45$
$5 \times 2 = 10$	$10 \times 2 = 20$	$12 \times 1 = 12$	$5 \times 8 = 40$	$3 \times 6 = 18$	$7 \times 11 = 77$
$7 \times 4 = 28$	$6 \times 4 = 24$	$6 \times 6 = 36$	$12 \times 3 = 36$	$6 \times 2 = 12$	$8 \times 4 = 32$
$7 \times 2 = 14$	$9 \times 2 = 18$	$2 \times 10 = 20$	$5 \times 10 = 50$	$1 \times 8 = 8$	$5 \times 6 = 30$
$7 \times 8 = 56$	$6 \times 10 = 60$	$12 \times 10 = 120$	$12 \times 4 = 48$	$8 \times 10 = 80$	$8 \times 2 = 16$
$10 \times 4 = 40$	$9 \times 4 = 36$	$3 \times 12 = 36$	$9 \times 8 = 72$	$12 \times 8 = 96$	$8 \times 6 = 48$
$11 \times 6 = 66$	$9 \times 6 = 54$	$10 \times 6 = 60$	$3 \times 2 = 6$	$4 \times 12 = 48$	$9 \times 10 = 90$
$11 \times 2 = 22$	$6 \times 12 = 72$	$5 \times 12 = 60$	$11 \times 8 = 88$	$11 \times 10 = 110$	$8 \times 8 = 64$
$7 \times 12 = 84$	$10 \times 10 = 100$	$12 \times 6 = 72$	$7 \times 10 = 70$	$4 \times 8 = 32$	$10 \times 8 = 80$





Using Commas for Embedded Clauses

I can use commas to indicate parenthesis.



When you first start to use paired commas it can be helpful to start the embedded clause with the words:

Where: The city of New York, where you can see the famous Statue of Liberty, is an amazing place to visit.

Who: Mrs. Smith, who was the reception teacher, was asked to take the whole-school assembly.

Which: The city of London, which was where they first met, was the place they had chosen to get married.

When: Many years ago, when my parents were young, the Beatles were a very popular band.

Task:

- Underline the embedded clauses.
- Add the commas into the correct place.

1. The boy who was only seven could play the piano.
2. The beach which was very crowded was hotter than ever.
3. The ball which was kicked by the goal keeper flew through the air.
4. The music which was too loud gave me a headache.
5. The old lady who was carrying lots of bags waited for a taxi.
6. The bus which was speeding went down the street.



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Task: Write the correct embedded clause to add detail to the main clause.

Add the commas into the correct places.

Main Clause	Embedded Clause	Main Clause
The boy		could play the piano.
The beach		was hotter than ever
The ball		flew through the air.
The music		gave me a headache.
The old lady		waited for a taxi.

Embedded Clauses		
which was too loud	which was hard and leather	who was only seven
who had lots of bags		which was very crowded



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Task:

- Re-write each sentence adding in an appropriate embedded clause.
- Use commas to signal the start and end of the embedded clause.

1. The boy could play the piano.

2. The beach was hotter than ever.

3. The ball flew through the air.

4. The music gave me a headache.

5. The old lady waited for a taxi.

6. The bus went down the street.



Underline the embedded clauses.

Add the commas into the correct place.

1. *The boy, who was only seven, could play the piano.*
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Write the correct embedded clause to add detail to the main clause.

Add the commas into the correct places.

The boy, who was only seven, could play the piano.

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The ball, which was hard and leather, flew through the air.

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The old lady, who had lots of bags, waited for a taxi.

What Will My Child Learn In Year 5?

If your child is about to begin Year 5, or is currently working in that year, you might be wondering what they will be learning. This can depend on the school, your child and the time of year, however this document is meant as a general guide, covering the sorts of things that your child might be working on.

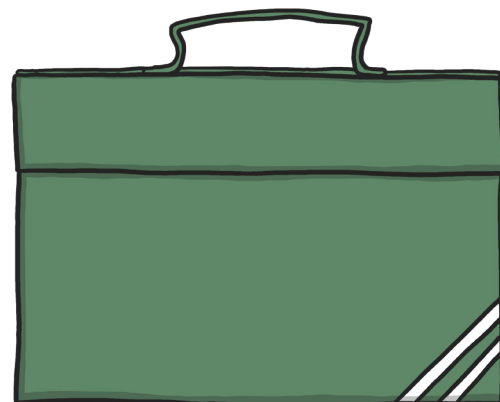
English

Reading Comprehension

- Children in Year 5 will be encouraged to read a wide range of may listen to and discuss a variety of stories, non-fiction texts, poetry, plays and textbooks in order to understand that texts are structured in different ways and written for different purposes.
- Children may be more exposed to traditional stories, myths, legends and books from other cultures, becoming very clear on the structure and typical features of this style of text.
- They might be encouraged to complete book reviews, giving reasons for their opinions and making comparisons with other texts.
- Regarding poetry, they will, at some point in the next two years work on learning different poems off by heart, ready to perform, showing an understanding of how to perform by using the right tone, volume, timing and intonation so that it can be clearly understood by the audience.
- Children will be reminded to check their reading makes sense, discussing their understanding of the meaning of certain vocabulary as they read. They might also be encouraged to ask questions about the text to further develop their understanding of what is going on and draw inference about character actions, speech or motives, providing evidence. Inference involves using the clues in the story or picture to make a good guess. It involves figuring something out which isn't fully explained and draws on a child's existing knowledge of the world.
- Children might be encouraged to make predictions based on what they've already read, summarise key points to show good comprehension and look out for interesting phrases that authors use.
- In Year 5, children will practise distinguishing between fact and opinion, answer questions by referring back to the text and confidently challenge others in an appropriate manner about their opinions.

Handwriting

- By Year 5, your child may have developed their own handwriting style. They will be expected to write legibly and fluently, in accordance with the school's handwriting policy. They may possibly be writing in pen, rather than pencil by this stage and in most cases, should be expected to join all the time. They might still need reminding of certain rules such as – never join capital letters to the following letter!





Writing and Spelling

- Your child may specifically learn how to spell words with silent letters e.g. solemn and knowledge.
- They may also work on spelling a wider range of homophones (words which sound the same but have different meanings), ensuring they use the correct form based on the context of their writing, for example practise /practice, advice /advise.
- Your child may be encouraged to use dictionaries to check the spellings of words and a thesaurus to further develop the use of vocabulary.
- At some point over the next two years, children will learn to spell words ending in the following suffixes: -ant, -ancy, -ance, -ation, -ent, -ence, -ency, -able, -ible, -ably and -ibly.
- Children may also work on learning the spelling rules for adding the endings -fer, -cial, -tial, -cious, -tious and words with the letter string 'ough'.
- Children might also be introduced to the hyphen in words such as co-ordinate and re-enter.
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Writing - Composition

- Planning writing – Your child may be taught how to identify the audience and select the correct style and tone. They might be encouraged to note and develop their ideas and using their reading knowledge to plan interesting characters (if fiction) and settings.
- Drafting and writing – Year 5 children may practise selecting the correct grammar and vocabulary to match the reading audience and work on including dialogue and linking paragraphs together so that their writing flows nicely.
- Children may be taught to carefully select the correct structure for their text, including any necessary features such as bullet points, headings or captions.
- Evaluate and edit – children will be encouraged to regularly assess the effectiveness of their own writing and pieces written by others, focusing specifically on punctuation, grammar, vocabulary and spelling.
- Finally, children will be taught how to use intonation when reading their writing out loud and how they could vary the volume and include movement.



Writing - Vocabulary, Grammar and Punctuation

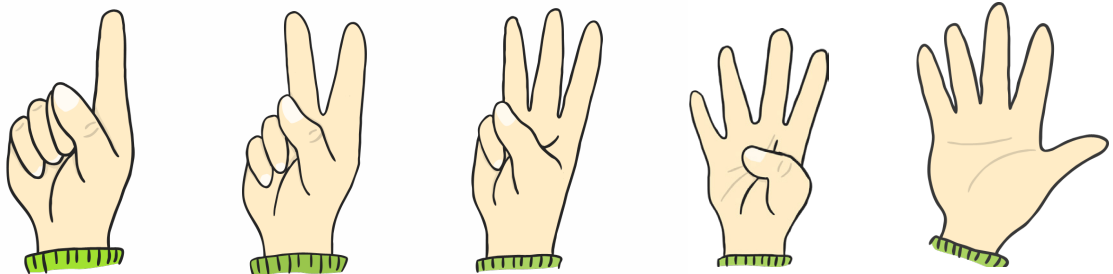
- In Year 5, your child may work on converting adjectives or nouns into verbs using suffixes such as -ify, -ise and -ate and practise adding prefixes for example de-, mis- and re-.
- Your child may also work on relative clauses, clauses beginning with relative pronouns such as where, which, whose, that and who, for example, 'The boy, who fell and grazed his knee, cried.
- Children may also be encouraged to include adverbs such as perhaps and surely as well as modal verbs such as will, must or might in order to indicate degrees of possibility.
- This year children in this year group might work on making sure their writing flows nicely and ideas link cohesively, linking ideas across paragraphs using adverbials of time (later, after, before), number (secondly, thirdly) or place (in the distance).
- They may also learn how to use parenthesis (brackets), colons (:) and semi-colons (;) and refer to these new grammatical terms correctly.

Number - Number and Place Value

- Your child may learn to read, write, compare and order numbers to at least one million, understanding the value of each digit.
- Children might also work on rounding any number to the nearest 10, 100, 1000, 10 000 and 100 000.
- With negative numbers, children may practise counting forwards and backwards across zero.
- Children might learn how to read Roman numerals to 1000, recognising years which are written in these numerals.
- Using all their number knowledge, children might be faced with word problems involving the above.

Number - Addition and Subtraction

- In Year 5, your child may be taught how to use formal column written methods to add and subtract numbers with more than four digits. (The methods and the order in which they are taught can vary between schools, your child's school will probably have a calculation policy that they would be willing to share with you).
- They may also be required to mentally calculate larger numbers e.g. $11\,550 - 4\,300$, using rounding to check answers.
- Finally, children might be faced with solving subtraction and addition problems which involves two or more calculations to solve.



Number - Multiplication and Division

- Your child may work on being able to identify factors (a whole number which divides equally into another whole number so there is never a remainder). They may also look for factor pairs, for example, the factor pairs of 9 are: 1 and 9 and 3 and 3, because $1 \times 9 = 9$ and $3 \times 3 = 9$.
- They may also learn about prime numbers up to 100, numbers which have no positive divisor other than itself and 1, understanding that a composite number is a non-prime number.
- Children might learn how to multiply up to four digits by a one or two-digit number using formal methods, including long multiplication for two-digit numbers. They will also work on multiplying and dividing mentally using their knowledge of number facts.
- Regarding division of numbers, children will divide up to four digits by a one digit number using formal written methods of short division, including remainders. They will also work on multiplying and dividing decimals by 10, 100 and 1000.
- Next may involve learning about square and cube numbers. Square numbers are the answer to a number multiplied by itself e.g. $2 \times 2 = 4$, $3 \times 3 = 9$, $4 \times 4 = 16$. Cube numbers are created by multiplying a digit by itself three times, e.g. $2 \times 2 \times 2 = 8$ and $5 \times 5 \times 5 = 125$.
- Children will then use their knowledge to solve word problems involving multiplication and division.



Number - Fractions

- In Year 5, children may be taught how to compare and order fractions where denominators (lower number in the fraction) are multiples of the same number, e.g. $1/5$, $3/15$, $9/25$.
- Your child might also work on writing equivalent fractions (fractions which have the same value), including tenths and hundredths.
- It is likely that your child will also learn about mixed number fractions which are made up of a whole number and a fraction. The fraction in a mixed number fraction is known as a proper fraction, where the top number (numerator) is smaller than the lower number (denominator).
- They will also learn about improper fractions where the denominator is smaller than the numerator and be taught how to change mixed number fractions into proper fractions and vice versa!
- Your child might also work on adding and subtracting fractions which have the same denominator or denominators that are the multiples of the same number.
- They will also learn how to multiply mixed number fractions and proper fractions by whole numbers.
- Decimals: This year they may learn how to write and read decimals as fractions, e.g. $0.83 = 83/100$. Your child may also be taught how to recognise and use thousandths.
- Children in Year 5 might also work on rounding decimals with two decimal places to one decimal place or the nearest whole number.
- In addition to this, your child may write, read, compare and order numbers with up to three decimal places and solving problems based around these numbers.
- They should begin to recognise the percentage symbol % understanding that 'per cent' means number as part of a hundred. They will write percentages as a fraction e.g. $67\% = 67/100$ and as a decimal, 0.67.
- Finally, the word 'proportion' may be introduced so that children understand that fractions, percentages and decimals all represent proportions of something.



Geometry - Properties of Shape

- They might work on measuring angles in degrees, estimating angles too.
- In addition to this, your child will be drawing angles and working out missing angle and length measurements within shapes.
- Your child may be taught the difference between regular and irregular polygons (a 2D shape with straight lines). To clarify, this means knowing that a regular polygon has equal angles and sides, otherwise it is irregular.
- Finally, teachers may check that your child is secure at naming a wide range of 3D shapes.



Geometry - Position and Direction

- Your child is likely to be taught reflection (creating a symmetrical picture when a mirror line is drawn) and translation (moving a shape into a different position), understanding that the shape hasn't actually changed.

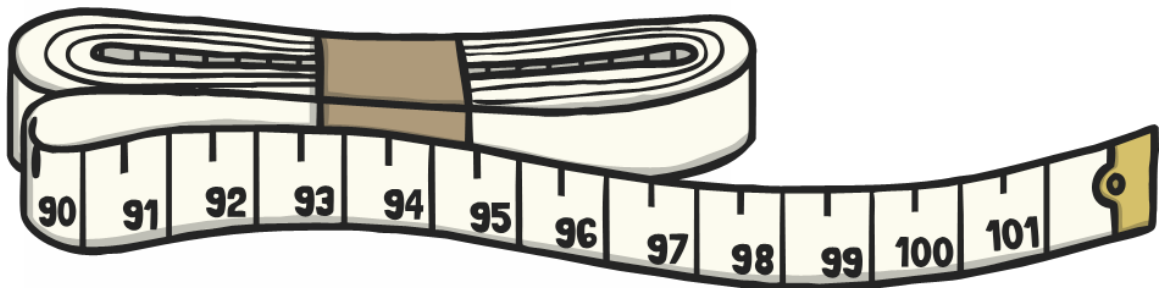


Statistics

- Children might learn to solve problems using information presented in a line graph and interpret information presented in timetables.

Measurement

- This year, children may be taught how to convert between different units of measure for example centimetres and metres, grams and kilograms, metres and kilometres etc.
- They may also learn the equivalence between metric and imperial units such as pints and pounds.
- Regarding perimeter, your child may be taught how to measure and calculate in both centimetres and metres.
- They might also work on calculating the area of shapes using units such as cm^2 (square centimetres) and m^2 (square metres) and also estimate the area of an irregular shape. Children might also do some guess work with volume and capacity.
- Time: Children may be faced with solving time conversion problems such as converting hours into seconds, weeks into days or minutes into hours.
- At some point within Years 5 or 6, children will be expected to attempt problem solving using all four operations involving measures, decimals and scaling.



Science

Working Scientifically

- Science is a great way to find out about the world around us.
- Your child will be encouraged to raise questions, plan and set up fair tests, take accurate measurements, look out for any patterns and record their data in the best way such as tables, scatter graphs or bar graphs.
- They may then use these results to make predictions leading to further tests and finally, reaching conclusions about their original question whilst understanding the level of reliability of their results.
- All of the following topics are taught through the 'working scientifically' science strand.

Animals, Including Humans

- Children may learn about the changes which occur as humans grow old.

Living Things and Their Habitats

- In Year 5, your child may have the opportunity to learn about reproduction in some animals and plants.
- They might also be taught the differences between the life cycles of mammals, amphibians, birds and insects.

Properties and Changes of Materials

- Your child may be taught the meaning of the following terms to help them within this topic: soluble (dissolves in water), insoluble (doesn't dissolve in water) and solubility, transparent (light passes through it), translucent (lets some light through) and opaque (doesn't let through any light at all), transparency, conductor (lets electricity/heat pass through), insulator (doesn't let electricity/heat pass through) and conductivity.
- Using these terms, children may compare and group common materials based on these properties and how they respond to magnets.
- Children may also test and be able to explain the suitability of a material for a purpose.
- Year 5 children may also investigate how some materials can dissolve in liquids to create a solution and how to reverse this change, converting the solution back into a substance.
- They may also discover that some changes can create new materials.
- They may be taught how to apply their prior learning of gases, solids and liquids in order to decide how mixtures can be separated including processes such as filtering, sieving and evaporation.

Forces

- Children in Year 5 may learn about how gravity works in relation to the Earth and space.
- They may also look into how mechanisms such as levers and pulleys enable a smaller force to have a greater effect.
- Finally, children might be taught the effects of air resistance, friction between moving surfaces and water resistance.

Earth and Space

- Children might learn about the movement of the Moon in relation to the Sun, the movement of the Earth (or other planets) in relation to the Sun.
- Please note that Pluto has been reclassified as a 'dwarf planet' and children should be reminded never to look directly at the Sun.
- Finally, children may be taught how the Earth's rotation affects day and night and movement of the Sun across the sky.



Art and Design

Working Process

- Children may be encouraged to use sketch books to record ideas. They might also have the opportunity to learn about a great designer, architect or artist from history.

Drawing

- In Art and Design in Year 5, children may learn how to produce detailed sketches and drawings. Children may be introduced to the concept of perspective, working on different scales. Your child may have the opportunity to work on a variety of textured surfaces and investigate the direction of light shining on an object.

Painting

- Children might also investigate different paint textures, selecting the best brush type /size and technique. They may also experiment with using colour to express feelings or moods.

Textiles

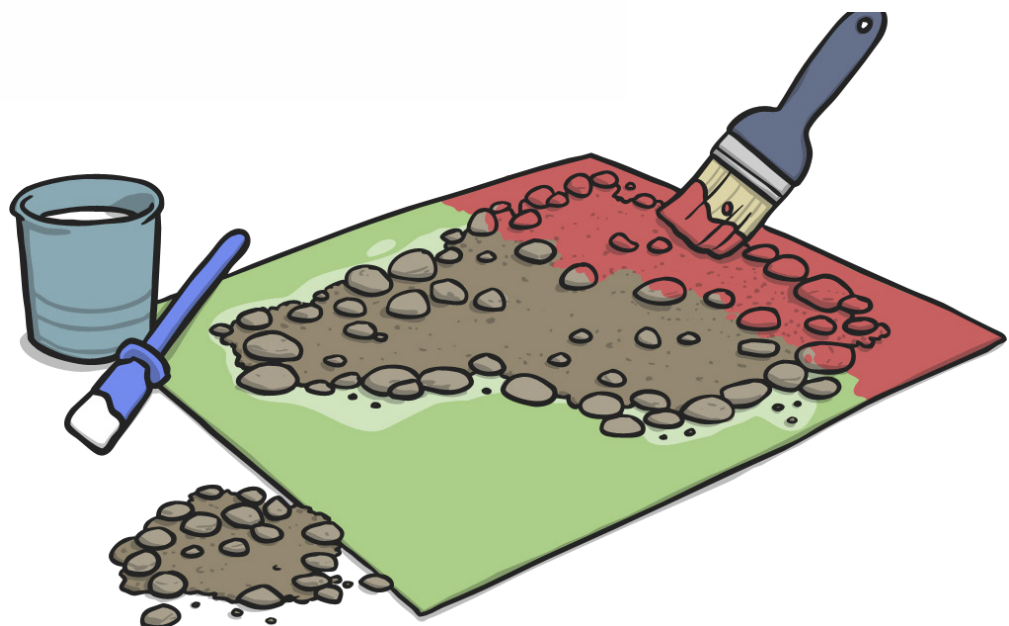
- Regarding textiles, children may learn about how different fabrics are created.

Printing

- This year your child might design prints for a specific purpose, e.g. wallpaper or Christmas wrapping paper.

Evaluation

- Finally, children will be encouraged to say what they like and dislike about their own work and that of their classmates.



Computing

E-Safety

- E-Safety is a very important aspect of Computing in which children learn how to keep themselves safe online as well as being respectful of others.
- Children in Year 5 may learn about the importance of selecting a secure password and appropriate nickname instead of using their own name.
- They might be reminded to never give out their password or personal information online and to tell an adult if they ever have a worry. Your child might already be aware, but may be reminded that there should be a limit to the amount of time they spend on the internet.
- Children may also begin to learn about how to protect laptops, tablets and other devices from viruses.



Working Online

- Children in Year 5 may be taught how to search safely on the internet and consider the accuracy and reliability of the website/information carefully.
- They might be shown how to identify the author of the webpage and may be taught how to know which websites to trust when downloading.
- Finally, children might learn how to describe the ways in which websites advertise their products.

Data

- Children may be taught how to use a spreadsheet and databases to collect and organise data. They may also learn how to search a database for the information they need and be reminded to check for mistakes in data.

Word Processing

- In Year 5, children may work on how to use photo, sound and text editing tools in order to produce the best possible work and review their own work and that of others, suggesting possible improvements.

Programming

- Regarding programming, Year 5 children may be taught how to break up a problem into smaller parts in order to design an algorithm (method of solving a problem) for an outcome and use this to write a program.
- They need reminding to check their programming as they go, de-bugging (solving) any possible problems.

Design and Technology

Children in Year 5 may be encouraged to design, make and evaluate a product which could be used in one of a few different contexts such as within the home or at school.

Design

- In this year group, children might be expected to research similar products to the one they are expected to design, make and evaluate. From this, they will develop a list of criteria which their product must meet, being mindful of the audience. Children may then be encouraged to generate ideas together, communicating ideas through annotated sketches or models.
- At some point with Key Stage 2, children will understand how key individuals and events in DT have helped to shape our world, e.g. the invention of the motor car, microwave and computer.

Make

- Children may learn how to use a range of tools and methods with accuracy, in order to create their product and produce a high quality finish.
- Children will select the right materials or ingredients for the purpose of what they want to achieve.

Evaluate

- Once completed, children will evaluate their finished product saying what they like, dislike and what could be improved in relation to the design criteria.
- Your child will also be encouraged to evaluate the products of others considering the original criteria, suggesting possible improvements.

Technical Knowledge

- Children will apply their knowledge of how to stiffen, strengthen and make structures more stable when making a product.
- They may also have the opportunity to use gears, pulleys, linkages, levers and cams.
- In addition to this, they might extend their science work on electricity to create products with electrical systems which may incorporate bulbs, switches, buzzers and/or motors.
- Finally, children may use computing to control their products.

Cooking and Nutrition

- The new curriculum has a renewed emphasis on cookery and healthy cooking will be covered in both Key Stage 1 and 2.
- This year, your child may be taught to understand the importance of a healthy, balanced diet and apply this to designing and making a dish or snack using a range of cooking techniques.
- Children might learn about seasonality, learning where and how different ingredients are grown, reared, caught and processed.

Geography

Location Knowledge

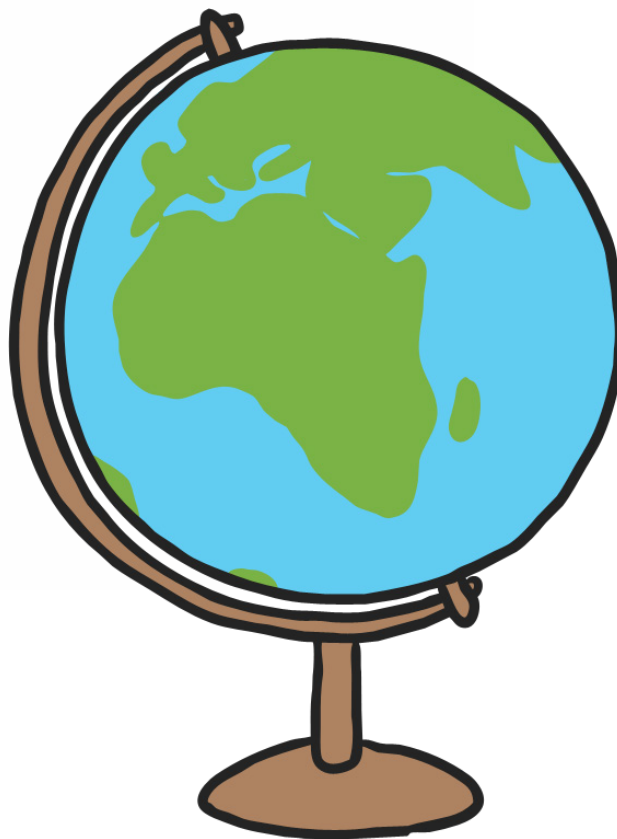
- Children may learn to locate countries within North America, including major cities, learning about key human and physical features.
- They might also learn about the Arctic and Antarctic, Prime /Greenwich Meridian and time zones.

Place Knowledge

- Children may study features of a region of North America through studying its human (man-made) and physical (natural) geography in comparison to a region of the UK.

Human and Physical Geography

- Children might learn about the economic activity of North America including trade links and distribution of natural resources including water, minerals, energy and food around the world.



Geographical Skills and Fieldwork

- In Year 5, your child might be given the opportunity to use globes, maps, atlases and/or computer mapping in order to locate places within North America, and their human and physical features.
- Your child may also learn to use the eight points of a compass, four and six figure grid references and map symbols (including using Ordnance Survey maps).

History

Children may learn about Anglo-Saxons and Scots, Ancient Egypt and take part in a study of an aspect or theme in British History beyond 1066, e.g. The Second World War.

Music

- Your child might be encouraged to improvise melodies and rhythms, performing from notation or memory.
- They may also explore, analyse, compare and refer to musical devices such as dynamics (volume), pitch (high/low sounds), tempo (speed) and timbre (quality of the sound), listening to different music and considering how it can reflect place, time and culture.
- Either in groups or as individuals, they may have the opportunity to compose, taking into account some of the previously mentioned devices and beginning to form notations in order to record their work.
- Before the performance, children may be asked to consider how venue can affect the quality of the sound. As they work, they will be encouraged to make improvements.
- Over the course of Key Stage 2, children will research different styles and periods of music, including great composers.

Physical Education

Games

- Children are encouraged to take part in competitive game play, further developing their attacking and defending skills to make sure your child uses these skills consistently. They may also develop their use of tactics within a specific activity.
- Children may be questioned on the impact that warming up has on our bodies and performance.
- They might also be encouraged to evaluate their own work and that of other teams or individuals, suggesting possible improvements.

Outdoor and Adventurous Activities

- Children love a treasure hunt and orienteering is a great activity to get children working together as a team, following instructions carefully and solving problems such as getting back on track if they take the wrong turn.

Dance

- This year, children may be to explore and improvise different styles of dance working either individually or as part of a group.
- They may get the opportunity to choreograph dances using a mixture of different styles.
- Children may be taught how to perform expressively.
- By Year 5, they may be asked to devise their own warm up and cool down and lead the rest of the class, understanding why this is so important.
- Again, as in the other areas of Physical Education, children will be asked to evaluate their own work throughout the activity, and the work of others.

Gymnastics

- Children in Year 5 may be taught how to perform shapes, actions and balances confidently.
- They might have the opportunity to create sequences in which they will carefully select the skills that they have been taught.
- Children will be taught to understand the importance of warming up and do this thoroughly before every session, understanding the impact it can have on a performance.
- They may discuss the effects which physical activity can have on your health and evaluate their own work and that of others.

Athletics

- Improving the quality and consistency of skills across a number of events such as hurdling, sprinting, long jump or high jump may be the focus this year.
- They may be taught a number of new techniques in order to select the one which leads to their best performance.
- Children might be questioned on the principles of warming up and why exercise is good for us.
- Children may be encouraged to evaluate their own performances and those of others, suggesting possible improvements.



Maths Mastery

Addition and Subtraction Multistep Problems Challenge Cards



On Sunday, Jacob spent 86 minutes on his maths homework and 37 minutes reading. On Tuesday, he spent 69 minutes on his project?

What calculations will you use to find the difference between the time spent on homework on Sunday and Tuesday?



Jacob received £25.90 for his birthday. He spent £8.99 on a book and £7.50 on a computer game. Show three different calculation steps you could use to find how much money he has left.



At the beginning of the day, a grocer has 239 apples. He receives another 144 from his supplier and sells 307 during the day.

Khalid calculates how many apples the grocer has by the end of the day:

$$307 - 239 = 68, 68 + 144 = 212 \text{ apples left.}$$

Explain the mistake Khalid has made.

Come up with your own word problem with a mistake for a partner to spot.



Alisha has £18.35 in her purse. Her father gives her £5 pocket money. She buys a book for £7.99 and a bag for £13.49. How much will she have left?

Naomi says Alisha has £1.87 left.
Jack says Alisha has £3.13 left.
Who is correct and what mistakes have been made?



What other errors might be made?

A pizza shop makes 176 pizza bases before opening. Over the evening, they sell 247 pizzas. During the evening, they make another 80 pizza bases. How many pizza bases will be left at the end of the evening?

Bailey says they have 151 pizza bases left.

Ashleigh says they have 9 pizza bases left.

Who is correct and what mistakes have been made? What other errors might be made?

Write a word problem for which this calculation is used to find the answer.

$$456 + 237 - 598 = 95$$

Check your problem with a partner.
What mistakes might someone make when trying to solve the problem?

Write a word problem for which this calculation is used to find the answer.

$$£9.67 + £8.22 = £17.89$$

$$£3.49 + £5.75 = £9.24$$

$$£17.89 - £9.24 = £8.65$$

Check your problem with a partner.
What mistakes might someone make when trying to solve the problem?

Answers

- $86 + 37 = 123$ minutes on Sunday
 $123 - 69 = 54$ minutes difference
- $£25.90 - £8.99 = £16.91$
 $£16.91 - £7.50 = £9.41$
 $£25.90 - £7.50 = £18.40$
 $£18.40 - £8.99 = £9.41$
 $£8.99 + £7.50 = £16.49$
 $£25.90 - £16.49 = £9.41$
- Khalid began by subtracting the number of apples at the beginning of the day from the number of apples sold. The answer of 68 is then the number of the apples delivered that day that were sold, so the answer would come from $144 - 68 = 76$.

Another way would be to add the number of apples at the beginning of the day to the apples delivered: $239 + 144 = 383$.
Then subtract the number sold from this total: $383 - 307 = 76$
- Alisha is correct: $£18.35 + £5 - £7.99 - £13.49$
Jack is incorrect: $£7.99 + £13.49 - £18.35$. He has missed out the £5 pocket money and subtracted the money in the purse from the amount spent.
- Ashleigh is correct: $176 + 80 - 247 = 9$
Bailey is incorrect: $247 + 80 - 176 = 151$. He has added the number sold to the number of extra bases then subtracted the number of bases they had at the start of the evening.
- Answers will vary
- Answers will vary

Fraction Word Problems

1. Olivia went out for a walk. She walked $\frac{1}{4}$ of a mile and then sat down to take a rest. Then she walked $\frac{1}{4}$ of a mile. How far did she walk altogether?
2. Noah made two types of biscuits. He used $\frac{3}{8}$ cup of sugar for one recipe and $\frac{1}{8}$ cup of sugar for the other. How much sugar (in cups) did he use in all?
3. $\frac{3}{10}$ of the coloured chocolates in a bag are red and $\frac{3}{10}$ are blue. What fraction of the coloured chocolates is red and blue?
4. Emily has $\frac{4}{12}$ of a chocolate bar. Nathan has $\frac{5}{12}$ of the chocolate bar. How much do they have together?
5. Grace ran $\frac{4}{6}$ of a marathon. Anita ran $\frac{5}{6}$ of a marathon. Who ran further? What fraction further?
6. A running track is one kilometre long. If I jog for $\frac{1}{3}$ km and sprint for $\frac{1}{3}$ km, will I complete the full distance of the track?
7. You give $\frac{3}{6}$ of a box of cakes to Anna and $\frac{1}{6}$ of the box of cakes to Haris. How much of the box of cakes did you give away?
8. Peter walks $\frac{7}{8}$ of a mile to school. Layla walks $\frac{5}{8}$ of a mile to school. How much farther does Peter walk than Layla?
9. There is $\frac{7}{10}$ of a pizza in one box and $\frac{3}{10}$ of a pizza in another box. How much more is there in the first box compared to the second box?
10. A jug contains $\frac{5}{8}$ litres of juice. After you pour $\frac{3}{8}$ of a litre into some glasses, how much is left in the jug?
11. At a class party $\frac{3}{8}$ of a vegetarian pizza and $\frac{4}{8}$ of a meat-feast pizza were eaten. How much pizza was eaten altogether?
12. Harry and Dele shared a chocolate bar. Harry ate $\frac{3}{5}$ and Dele ate $\frac{2}{5}$. Who ate more? What fraction more?

Challenge

Write some of your own problems for others to solve.

Fraction Word Problems

1. Olivia went out for a walk. She walked $\frac{3}{4}$ of a mile and then sat down to take a rest. Then she walked $\frac{1}{8}$ of a mile. How far did she walk altogether?
2. Noah made two types of biscuits. He used $\frac{3}{8}$ cup of sugar for one recipe and $\frac{1}{4}$ cup of sugar for the other. How much sugar (in cups) did he use in all?
3. $\frac{1}{10}$ of the coloured chocolates in a bag are red and $\frac{1}{5}$ are blue. What fraction of the coloured chocolates are red and blue?
4. Emily has $\frac{1}{3}$ of a chocolate bar. Nathan has $\frac{5}{12}$ of the chocolate bar. How much do they have together?
5. Grace ran $\frac{2}{3}$ of a marathon. Anita ran $\frac{5}{6}$ of a marathon. Who ran further? What fraction further?
6. A running track is one kilometre long. If I jog for $\frac{1}{6}$ km and sprint for $\frac{2}{3}$ km will I complete the full distance of the track?
7. You give $\frac{1}{3}$ of a box of cakes to Anna and $\frac{1}{6}$ of the box of cakes to Haris. How much of the box of cakes did you give away?
8. Peter walks $\frac{7}{8}$ of a mile to school. Layla walks $\frac{1}{2}$ of a mile to school. How much farther does Peter walk than Layla?
9. There is $\frac{7}{10}$ of a pizza in one box and $\frac{2}{5}$ of a pizza in another box. How much more is there in the first box compared to the second box?
10. A jug contains $\frac{3}{4}$ litres of orange juice. After you pour $\frac{5}{8}$ of a litre into some glasses, how much is left in the jug?
11. At a class party, $\frac{3}{8}$ of a vegetarian pizza and $\frac{1}{2}$ of a meat-feast pizza were eaten. How much pizza was eaten altogether?
12. Harry and Dele shared a chocolate bar. Harry ate $\frac{2}{5}$ and Dele ate $\frac{3}{10}$. Who ate more? What fraction more?

Challenge

Write some of your own problems for others to solve.

Fraction Word Problems

1. Olivia went out for a walk. She walked $2\frac{3}{4}$ miles and then sat down to take a rest. Then she walked $1\frac{1}{8}$ miles. How far did she walk altogether?
2. Noah made two types of biscuits. He used $1\frac{5}{8}$ cups of sugar for one recipe and $2\frac{1}{4}$ cups of sugar for the other. How much sugar (in cups) did he use in all?
3. $\frac{1}{5}$ of the coloured chocolates in a bag are red and $\frac{3}{10}$ are blue. What fraction of the coloured chocolates are not red or blue?
4. Emily has $\frac{1}{3}$ of a chocolate bar. Nathan has $\frac{5}{12}$ of the chocolate bar. How much of the chocolate bar is left?
5. After three hours, Grace has run $\frac{2}{3}$ of a marathon and Anita has run $\frac{5}{6}$ of a marathon. Who has more to run to finish?
6. A race is five kilometres long. If I jog for $3\frac{5}{6}$ kms and sprint for $\frac{2}{3}$ kms, how much further do I need to run?
7. You give $2\frac{2}{5}$ bottles of water to Anna and $1\frac{7}{10}$ bottles of water to Haris. How many bottles of water did you give away in total?
8. Peter walks $1\frac{7}{8}$ miles to school. Layla walks $2\frac{1}{2}$ miles to school. How much farther does Layla walk than Peter?
9. There is $\frac{9}{10}$ of a pizza in one box and $\frac{1}{2}$ of a pizza in another box. How much more is there in the first box compared to the second box?
10. A jug contains $2\frac{3}{4}$ litres of orange juice. After you pour $1\frac{7}{8}$ litres into some glasses, how much is left in the jug?
11. At a class party, $\frac{3}{8}$ of a vegetarian pizza, $\frac{1}{2}$ of a meat-feast pizza and $\frac{3}{4}$ of a pepperoni pizza were eaten. How much pizza was eaten altogether?
12. Harry, Dele and Christian shared a chocolate bar. Harry ate $\frac{1}{5}$, Dele ate $\frac{3}{10}$ and Christian finished the bar. What fraction did Christian eat?

Challenge

Write some of your own problems for others to solve.

Fraction Word Problems Answers

Lower Ability

1. $\frac{2}{4}$ or $\frac{1}{2}$
2. $\frac{4}{8}$ or $\frac{1}{2}$
3. $\frac{6}{10}$
4. $\frac{9}{12}$ or $\frac{3}{4}$
5. Anita $\frac{1}{6}$
6. No $\frac{1}{3}$ km short
7. $\frac{4}{6}$ or $\frac{2}{3}$
8. $\frac{2}{8}$ of a mile
9. $\frac{4}{10}$
10. $\frac{2}{8}$
11. $\frac{7}{8}$ of a pizza
12. Harry $\frac{1}{5}$

Middle Ability

1. $\frac{7}{8}$
2. $\frac{5}{8}$
3. $\frac{3}{10}$
4. $\frac{9}{12}$ or $\frac{3}{4}$
5. Anita $\frac{1}{6}$
6. No $\frac{1}{6}$ km short
7. $\frac{3}{6}$ or $\frac{1}{2}$
8. $\frac{3}{8}$ of a mile
9. $\frac{3}{10}$
10. $\frac{1}{8}$
11. $\frac{7}{8}$ of a pizza
12. Harry $\frac{1}{10}$

Higher Ability

1. $3\frac{7}{8}$
2. $3\frac{7}{8}$
3. $\frac{5}{10}$ or $\frac{1}{2}$
4. $\frac{3}{12}$ or $\frac{1}{4}$
5. Grace $\frac{1}{3}$
6. $\frac{1}{2}$ km
7. 5 bottles
8. $\frac{5}{8}$ of a mile
9. $\frac{4}{10}$
10. $\frac{7}{8}$
11. $1\frac{5}{8}$ pizzas
12. $\frac{1}{2}$

Challenge

Answers will vary depending on the question. Adult will need to check these.

Years 5 Grammar:

Adverbials for Linking Sentences and Paragraphs (Time, Place and Number)

Learning From Home Activity Booklet

Statutory Requirements	Activity Sheet	Page Number
Pupils should be taught to link ideas across paragraphs using adverbials of time (for example, later), place (for example, nearby) and number (for example, secondly) or tense choices (for example, he had seen her before).	Anna Adverbial	2
	Adverbial Sort	3-4
	Paragraph Linking Hunt	5
	Missing Links 1 (Time)	6
	Missing Links 2 (Place)	7
	Missing Links 3 (Number)	8
	Building Blocks	9, 10, 11
	A Parent's Guide to Terminology	12

Anna Adverbial

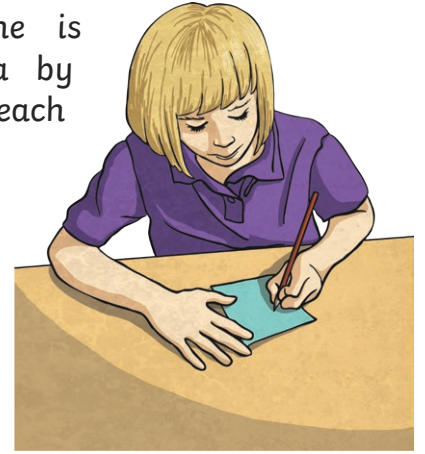
Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

Anna is revising adverbials for a test at school but she is unsure of how to identify them in a sentence. Help Anna by underlining the adverbial phrase or adverbial phrases in each sentence below.

Tip: Adverbial phrases explain **when**, **where** or **how** something happens, for example:

Early in the morning, the tiger went to hunt.

'Early in the morning' is the adverbial phrase here as it explains when the tiger went to hunt.



1. Moments later, a shooting star appeared in the sky.
2. Anna completed her difficult homework at the kitchen table.
3. With a smile on his face, Arturo held up the trophy.
4. Charlotte bought lots of new things at the market.
5. In haste, Jamelia completed her chores because she wanted to go out to play.
6. Every Saturday, Peter ate porridge for his breakfast.

Now rewrite and improve the sentences below with an adverbial phrase of your own. Remember, add adverbials to describe when, where, or how each event happens.

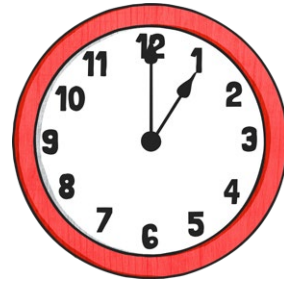
1. The eagle flew.

2. Jake fastened his shoelace.

Adverbial Sort

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

Adverbial phrases can be used to tell the reader when something happens (**time**), where something happens (**place**) and the order that things are happening (**number**). Sort the following adverbs and adverbials into the table below based on their function. The first few have been done for you.



once	as the sun set	in the park	at three o'clock	under the waves
nearby	secondly	behind the tree	under the table	tomorrow
outside	finally	in the cave	later that day	yesterday
lastly	next			

Adverbials of place	Adverbials of time	Adverbials of number
in the park	as the sun set	once

Adverbial Sort

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

Challenge: Now write three sentences of your own that include an adverbial from the each column.

1. _____

2. _____

3. _____



Paragraph Linking Hunt

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

When writing, authors use adverbial phrases to link paragraphs together so that their ideas flow smoothly from one paragraph to another. If you spend time thinking about how to start a new paragraph, you can deliberately choose words in your first sentence that will link it directly to the previous paragraph. This makes it clearer for the reader.



Have a look through your reading books at home. See how the authors use different **adverbial phrases** to start new paragraphs. Find some examples and add them to the table below. This will give you a list of great adverbial phrases that you can use when completing your own independent writing.

Adverbials of place	Adverbials of time	Adverbials of number

Missing Links 1 (Adverbials of Time)

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs



Below is a text about a new animal at the zoo. However, the adverbials for time are missing. Please read the text and add the adverbial that best fits the start of each paragraph.

Soon

Last year

Before being seen by the public

Now

After a month

_____, a new lion was brought to the zoo to help increase their dwindling number. The lion's name was Terence. He had a regal face and a mighty mane of fur – he was sure to bring in many visitors to the zoo.

_____, Terence had to be kept away from large crowds (and even other lions) until he became familiar with his new surroundings. For a period of time, he was kept in an enclosure of his own, which wasn't visible to the public. The zookeepers kept a strict eye on him throughout this period to check that he was healthy and happy.

_____, he was moved to a new enclosure next to the other lions in the zoo, which was also now visible to the public. In this enclosure, he had his own wooden platform to climb and peruse his surroundings. He would often sit, staring longingly at the lionesses on the other side of the fence that separated their two enclosures. Frequently, Terence and the lionesses would greet each other by the fence. They walked in tandem along their own sides of the fence and sniffed the air to catch each other's scent.

_____, the zookeepers thought that Terence was ready to be introduced to the same enclosure as the lionesses. It was a nerve-racking day for them! Initially, they took out the female lions and let Terence in on his own to become familiar with his new surroundings. Then, the females entered the enclosure... the meeting with Terence and the lionesses was a huge success and they have been together ever since.

_____, Terence is a settled and happy lion, who enjoys being in his new enclosure with a pride to call his own.



Missing Links 2 (Adverbials of Place)

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs



Below is a text about a busy street scene. However, the adverbials for place are missing. Please read the text and add the adverbial that best fits the start of each paragraph.

Outside a shop window Everywhere In the heart of the city
Below the glittering streetlights Nearby

_____, was a busy street filled with Saturday shoppers. It was a bleak and bitter day as a cold wind blew through the streets but many undeterred shoppers still braved the severe weather. It was close to Christmas and many of them needed to buy gifts for family and friends.

_____, a sea of colourful, woollen hats paraded as the people wearing them went from shop to shop searching for a bargain.

_____, a man stood peering through the glass at the dazzling jewellery on display. Should he buy the silver brooch his wife wanted? It was on special offer so he decided to enter the building.

_____, a child stood gazing at the toys in a toy shop. He beckoned to his mum to take him inside and reluctantly she gave in to his request. With a smile on his face, he ran ahead to see what wonders he could choose for his Christmas present.

_____, the sound of singing filled the air. A choir stood in the centre of the street performing a range of Christmas carols to cheer up the cold shoppers.



Missing Links 3 (Adverbials of Number)

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

1
2
3

Adverbs and adverbial phrases can also be used to sequence events – they tell the reader what order something happened in. Please read the text below and decide which adverb of number would be best to link the paragraphs together. Write your answer in the space provided.

Next	Finally	Firstly	Secondly
------	---------	---------	----------

After a busy day in the kitchen, the chef had lots to do before he could go home and rest!

_____, he must ensure that all the dirty pots from that evening's service were cleaned. He rinsed all the dishes in the sink before placing them in the dishwasher.

_____, he needed to check the stock he had available and see if he needed to buy anymore. He did this by checking the menu for the next day and then looking in the store cupboard and fridge to see if he had enough ingredients.

_____, he had to clean all the surfaces (ensuring they were free from germs) and sweep the floor. During a busy evening, lots of pieces of food and sauce can splash on the surfaces and on the floor. To maintain a high standard of food hygiene, he needed to clean these surfaces every evening to prevent germs and bacteria.

_____, he could leave to go home and rest. As he was leaving, he must ensure all the doors were locked and put the alarm on to help protect the restaurant.

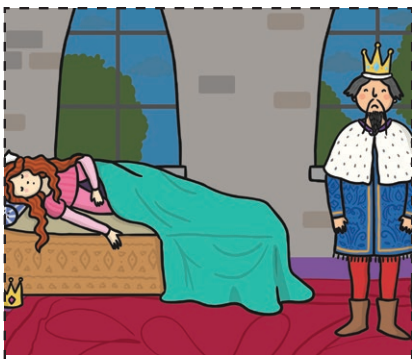


Building Blocks

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

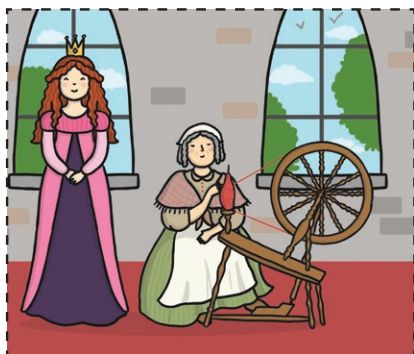
Here are some pictures from the traditional tale 'Sleeping Beauty'. However, you can sort the pictures to make up your own story – it doesn't have to follow the traditional one! Cut the pictures out and sequence them in any order. Each picture will be the focus for one paragraph.

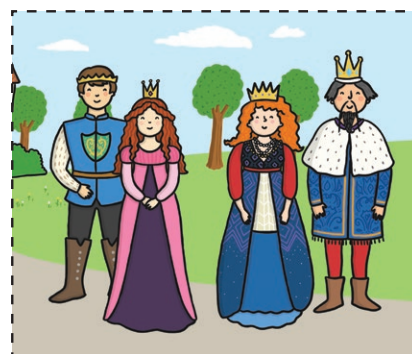
Once you have sequenced the pictures in the order that you want, add an adverbial phrase to each picture that you will use to start that paragraph. You could use the adverbial phrases you have already come across in this booklet or some of your own.











Building Blocks

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

Dashed rectangular box for writing.

Five horizontal lines for writing.

Dashed rectangular box for writing.

Five horizontal lines for writing.

Dashed rectangular box for writing.

Five horizontal lines for writing.

Building Blocks

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs

A large dashed rectangular box intended for students to write their own text or examples.

A second large dashed rectangular box, identical to the first, for additional writing.

Two sets of horizontal lines for writing. The first set consists of six lines, and the second set also consists of six lines, providing space for notes or examples.

A Parent's Guide to Terminology

In Year 5, your child will be taught to add **adverbials** to link paragraphs to help improve the flow of their writing. This sometimes sounds complicated but is in fact quite easy. However, if your child doesn't yet have a secure knowledge of **adverbs** and **adverbial phrases**, it would be best to review these first.

Adverbs: These are words that give more information about verbs, adjectives, other adverbs and clauses. For example:

The boy shouted **angrily**.

The sun is **extremely** bright.

Adverbial phrases: This is when a group of words (a phrase) is used rather than a single adverb to modify clauses (they add more information about the main action taking place). For example:

The birds flew **through the sky**.

I went for a walk **early in the morning**.

The boy ate the chocolate **with a smile on his face**.

Adverbials of time: These tell the reader when something has happened, such as:

Yesterday, I went shopping.

I woke up **early this morning**.

Adverbials of place: These tell the reader where something takes place (happens), such as:

Outside the house, the children played.

In a clearing, wild flowers grew.

Adverbials of number (sequence): These tell the reader what order (the sequence or number) that something occurs in. For example:

Firstly, measure out the liquid.

After that, pour the liquid into the flour and mix.

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs Answers

page 2. Anna Adverbial.

1. **Moments later**, a shooting star appeared **in the sky**.
2. Anna completed her difficult homework **at the kitchen table**.
3. **With a smile on his face**, Arturo held up the trophy.
4. Charlotte bought lots of new things **at the market**.
5. **In haste**, Jamelia completed her chores because she wanted to go out to play.
6. **Every Saturday**, Peter ate porridge for his breakfast.

page 3. Adverbial Sort.

Adverbials of place	Adverbials of time	Adverbials of number
in the park	as the sun set	once
nearby	at three o'clock	secondly
behind the tree	later that day	finally
outside	yesterday	lastly
under the table	tomorrow	next
in a cave		third
under the waves		

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs Answers

page 6. Missing Links 1 (Adverbials of Time).

Last year, a new lion was brought to the zoo to help increase their dwindling number. The lion's name was Terence. He had a regal face and a mighty mane of fur – he was sure to bring in many visitors to the zoo.

Before being seen by the public, Terence had to be kept away from large crowds (and even other lions) until he became familiar with his new surroundings. For a period of time, he was kept in an enclosure of his own, which wasn't visible to the public. The zookeepers kept a strict eye on him throughout this period to check that he was healthy and happy.

After a month, he was moved to a new enclosure next to the other lions in the zoo, which was also now visible to the public. In this enclosure, he had his own wooden platform to climb and peruse his surroundings. He would often sit, staring longingly at the lionesses on the other side of the fence that separated their two enclosures. Frequently, Terence and the lionesses would greet each other by the fence. They walked in tandem along their own sides of the fence and sniffed the air to catch each other's scent.

Soon, the zookeepers thought that Terence was ready to be introduced to the same enclosure as the lionesses. It was a nerve-racking day for them! Initially, they took out the female lions and let Terence in on his own to become familiar with his new surroundings. Then, the females entered the enclosure... the meeting with Terence and the lionesses was a huge success and they have been together ever since.

Now, Terence is a settled and happy lion, who enjoys being in his new enclosure with a pride to call his own.

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs Answers

page 7. Missing Links 2 (Adverbials of Place).

In the heart of the city, was a busy street filled with Saturday shoppers. It was a bleak and bitter day as a cold wind blew through the streets but many undeterred shoppers still braved the severe weather. It was close to Christmas and many of them needed to buy gifts for family and friends.

Below the glittering streetlights, a sea of colourful, woollen hats paraded as the people wearing them went from shop to shop searching for a bargain.

Outside a shop window, a man stood peering through the glass at the dazzling jewellery on display. Should he buy the silver brooch his wife wanted? It was on special offer so he decided to enter the building.

Nearby, a child stood gazing at the toys in a toy shop. He beckoned to his mum to take him inside and reluctantly she gave in to his request. With a smile on his face, he ran ahead to see what wonders he could choose for his Christmas present.

Everywhere, the sound of singing filled the air. A choir stood in the centre of the street performing a range of Christmas carols to cheer up the cold shoppers.

Year 5 Grammar: Adverbials for Linking Sentences and Paragraphs Answers

page 8. Missing Links 3 (Adverbials of Number).

After a busy day in the kitchen, the chef had lots to do before he could go home and rest!

Firstly, he must ensure that all the dirty pots from that evening's service were cleaned. He rinsed all the dishes in the sink before placing them in the dishwasher.

Secondly, he needed to check the stock he had available and see if he needed to buy anymore. He did this by checking the menu for the next day and then looking in the store cupboard and fridge to see if he had enough ingredients.

Next, he had to clean all the surfaces (ensuring they were free from germs) and sweep the floor. During a busy evening, lots of pieces of food and sauce can splash on the surfaces and on the floor. To maintain a high standard of food hygiene, he needed to clean these surfaces every evening to prevent germs and bacteria.

Finally, he could leave to go home and rest. As he was leaving, he must ensure all the doors were locked and put the alarm on to help protect the restaurant.

Measure the Perimeter of Composite Rectilinear Shapes

I can measure the perimeter of simple composite rectilinear shapes.

Use the centimetre grid to measure the length of each side of the shapes, writing the length next to each side. Then add the lengths together to find the perimeter.

1.		2.		3.	
4.		5.			
6.		7.			
8.		9.		10.	

Measure the Perimeter of Composite Rectilinear Shapes

Draw four composite rectilinear shapes with a perimeter of 20cm on this grid.



Draw four composite rectilinear shapes with a perimeter of 28cm on this grid.

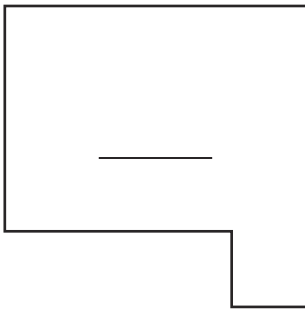


Measure the Perimeter of Composite Rectilinear Shapes

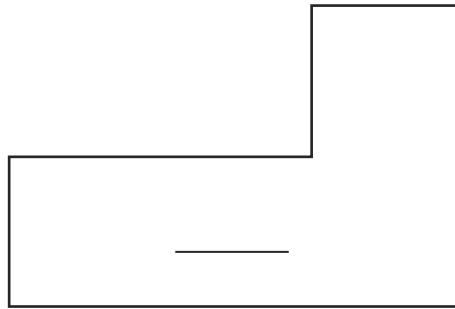
I can measure the perimeter of simple composite rectilinear shapes.

Measure the length of each side of the shapes to the nearest centimetre, writing the length next to each side. Then add the lengths together to find the perimeter.

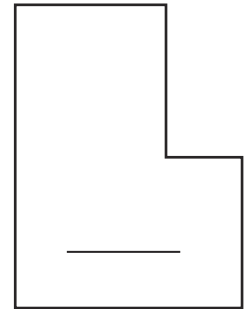
1.



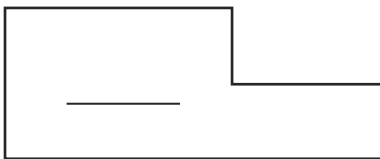
2.



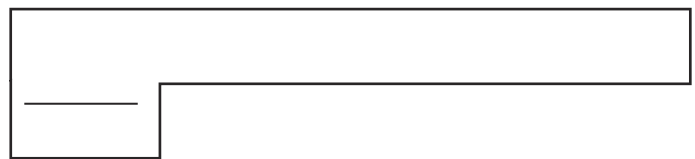
3.



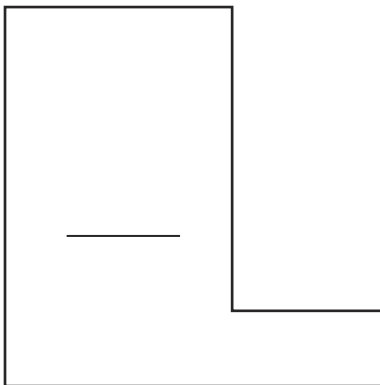
4.



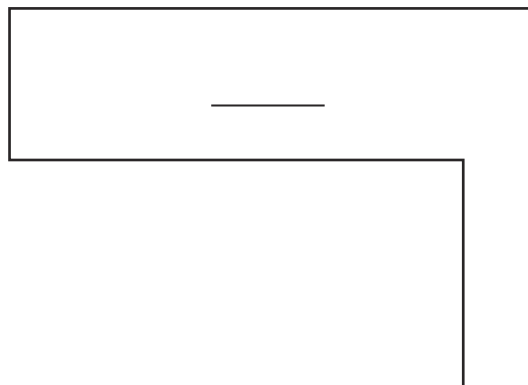
5.



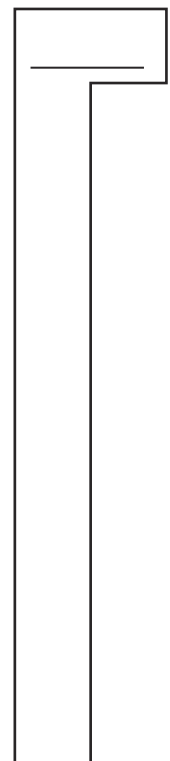
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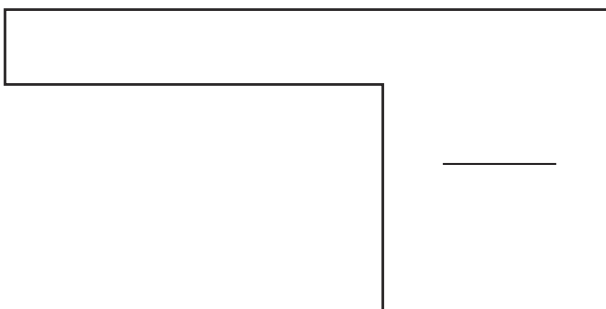
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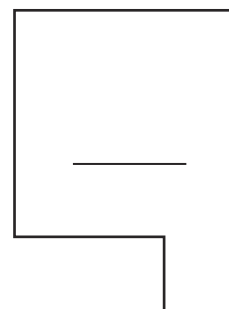
8.



9.



10.



Measure the Perimeter of Composite Rectilinear Shapes

Draw four composite rectilinear shapes with a perimeter of 16cm.

Draw four composite rectilinear shapes with a perimeter of 26cm.

Measure the Perimeter of Composite Rectilinear Shapes

I can measure the perimeter of simple composite rectilinear shapes.

Measure the length of each side of the shapes to the nearest centimetre, writing the length next to each side. Then add the lengths together to find the perimeter.

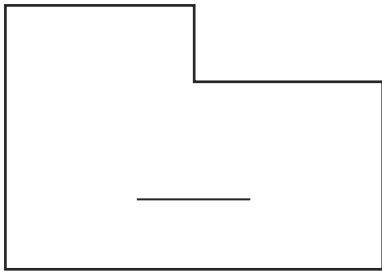
1.		4						2.	2		3.	2			
3		<u>16cm</u>		4				2			4	4		1	
		3	1			2			<u>20cm</u>					<u>14cm</u>	2
				1											
4.		3						5.	6		9			3	
				1	2										1
2		<u>14cm</u>				1		2	<u>22cm</u>		1		7		
				5					2						
6.		3						7.		7				8.	2
						2								<u>24cm</u>	1
															1
5		<u>20cm</u>		4						6			5		
					2						3				
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			5												
9.							8		10.		3		1		
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				5						3					
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Measure the Perimeter of Composite Rectilinear Shapes

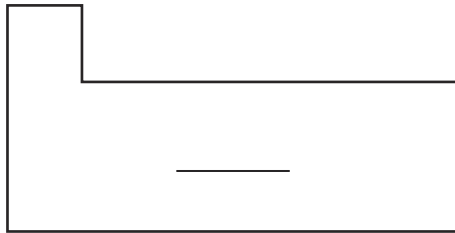
I can measure the perimeter of composite rectilinear shapes.

Measure the length of each side of the shapes to the nearest half-centimetre and add the lengths to find the perimeter.

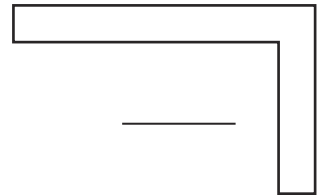
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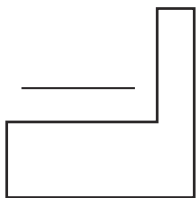
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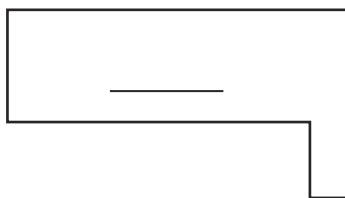
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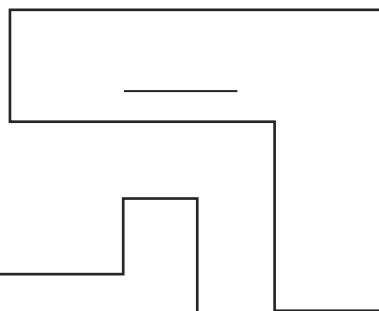
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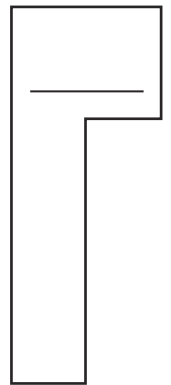
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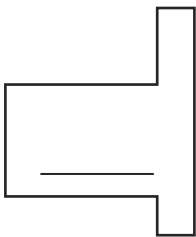
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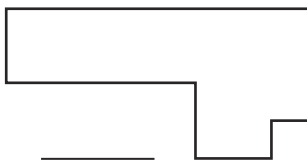
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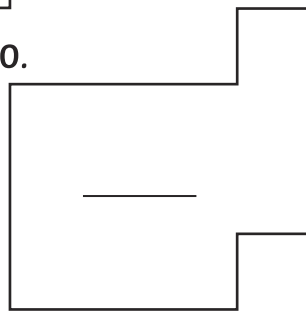
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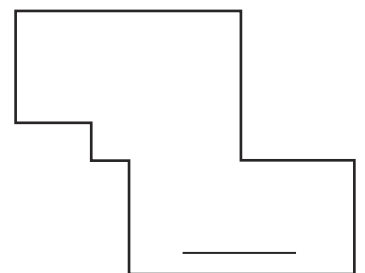
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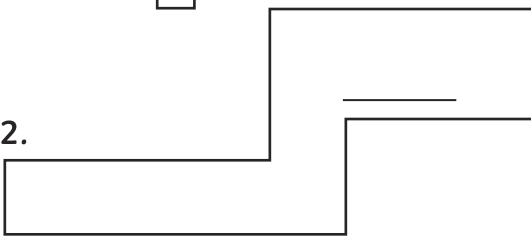
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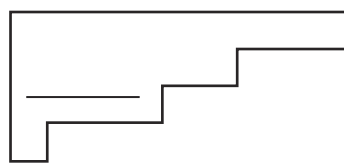
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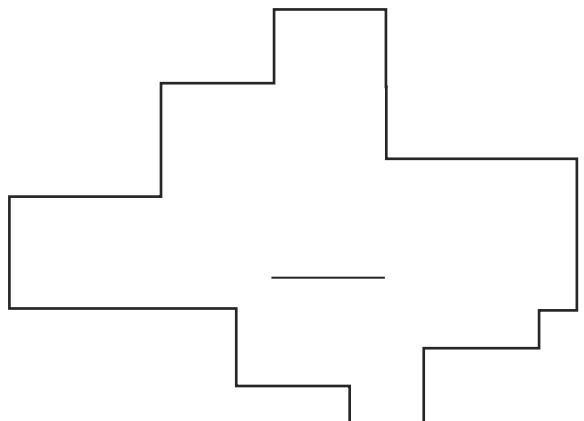
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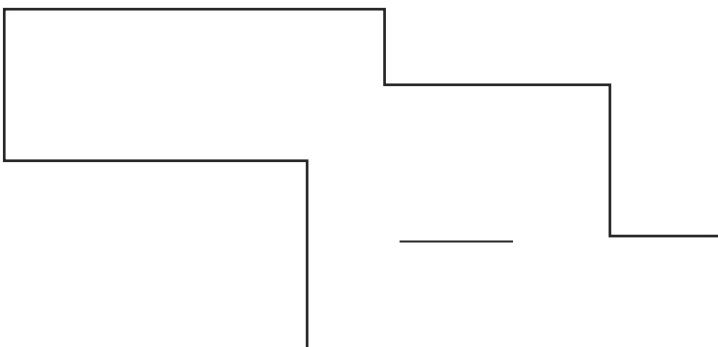
13.



15.



14.



Measure the Perimeter of Composite Rectilinear Shapes

Draw four composite rectilinear shapes with a perimeter of 30cm. Each shape must have at least 12 sides.

Measure the Perimeter of Composite Rectilinear Shapes

I can measure the perimeter of composite rectilinear shapes.

Measure the length of each side of the shapes to the nearest half-centimetre and add the lengths to find the perimeter.

1. 17cm

2. 18cm

3. 13cm

4. 10cm

5. 14cm

6. 18cm

7. 14cm

8. 11cm

9. 12cm

10. 16cm

11. 16cm

12. 20cm

13. 13cm

14. 29cm

15. 26cm

Maths Mastery Challenge Cards



Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 2?

How do you know a number is a multiple of 3?

How do you know a number is a multiple of 4?



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Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 5?

How do you know a number is a multiple of 6?



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Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 9?

How do you know a number is a multiple of 10?



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Multiples and Factors

Commons Factors

Name one common factor of 28 and 54, explaining how you know.



Can you find the highest common factor of 28 and 54?

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Multiples and Factors

Commons Factors

Name one common factor of 35 and 60, explaining how you know.



Can you find the highest common factor of 35 and 60?

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Multiples and Factors

Commons Factors

Name one common factor of 42 and 75, explaining how you know.

Write some numbers for which a partner should find common factors.



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Multiples and Factors

Factor Pairs

Explain how you would find all the factor pairs of 36 to make sure you have found them all.

Compare your answer with a partner.
Can you improve your explanations?



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Maths Mastery Challenge Cards

Answers



Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 2?

The number is even – ends in 0, 2, 4, 6 or 8.

How do you know a number is a multiple of 3?

The digital root is 3, 6 or 9 (add the digits until you get a single digit).

How do you know a number is a multiple of 4?

The last 2 digits are in the 4 times table.

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Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 5?

The last digit is 5 or 0.

How do you know a number is a multiple of 6?

The digital root is 3, 6 or 9 and the number is even.

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Multiples and Factors

Identify Multiples of...

How do you know a number is a multiple of 9?

The digital root is 9.

How do you know a number is a multiple of 10?

The last digit is 0

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Multiples and Factors

Commons Factors

Name one common factor of 28 and 54, explaining how you know.

Can you find the highest common factor of 28 and 54?

Both numbers are even, so 2 is a common factor.

The highest common factor is 2.

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Multiples and Factors

Commons Factors

Name one common factor of 35 and 60, explaining how you know.

Can you find the highest common factor of 35 and 60?

Both numbers end in 5 or 0, so 5 is a common factor.

The highest common factor is 5.

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Multiples and Factors

Commons Factors

Name one common factor of 42 and 75, explaining how you know.

Write some numbers for which a partner should find common factors.

Both numbers end in 5 or 0, so 5 is a common factor.

The highest common factor is 5.

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Multiples and Factors

Factor Pairs

Explain how you would find all the factor pairs of 36 to make sure you have found them all.

Compare your answer with a partner. Can you improve your explanations?

Start with 1 and the number itself - 36. Write either end of the list.

1

36

Work through each number to see if it one of a pair. In this case 2×18 , 3×12 , 4×9 . 5 is not a factor. 6×6 . This is the last pair as the numbers from 1 and from 36 have met at 6.

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Order and Compare Numbers

Aim: I can order and compare numbers.

1. Use the following symbols to compare the following numbers: $<$, $=$ or $>$

2783 2873

3041 3014

9377 9773

2. Order the following sets of numbers from smallest to largest:

3838, 3883, 8388, 8838, 3383

--	--	--	--	--

6701, 6071, 1076, 1067, 7016

--	--	--	--	--

9008, 8009, 908, 8090, 9080

--	--	--	--	--

3. Explain why $6581 > 6518$.

4. Explain how to order the following numbers from smallest to greatest: 4514, 451, 4415, 1445, 4414.

Order and Compare Numbers

Aim: I can order and compare numbers.

A set of single-digit cards is required for these tasks.

Work with a partner, checking your work together.

Compare

1. From a set of single-digit cards, deal four cards each. Use the cards to make a number.

Toss a coin. If the coin lands on heads, the greater number wins a point. If the coin lands on tails, the smaller number wins a point.

Keep a record of your score.

Write the numbers in your books with the relevant comparison symbol to keep a record.

2. Take it in turns to take four digit cards from a set.

Make a four-digit number and place it in the following grid.

Take it in turns to create a number. If a partner cannot put a number in the grid, the other player gains a point. Keep a record of your score.

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

Order and Compare Numbers

Aim: I can order and compare numbers.

1. Use the following symbols to compare the following numbers: $<$, $=$ or $>$

$$34\ 414 \quad \square \quad 34\ 144$$

$$56\ 656 \quad \square \quad 56\ 655$$

$$10\ 010 \quad \square \quad 11\ 010$$

2. Order the following sets of numbers from smallest to largest:

72 727, 27 727, 27 277, 77 227, 72 272

--	--	--	--	--

61 234, 61 423, 6432, 62 431, 62 143

--	--	--	--	--

39 009, 30 090, 30 900, 39 090, 30 009

--	--	--	--	--

3. Explain why $78\ 632 > 78\ 362$.

4. Explain how to order the following numbers from smallest to greatest: 87 878, 88 787, 88 887, 87 787, 78 778.

Order and Compare Numbers

Aim: I can order and compare numbers.

A set of single-digit cards is required for these tasks.

Work with a partner, checking your work together.

Compare

1. From a set of single-digit cards, deal five cards each. Use the cards to make a number.
Toss a coin. If the coin lands on heads, the greater number wins a point. If the coin lands on tails, the smaller number wins a point.

Keep a record of your score.

Write the numbers in your books with the relevant comparison symbol to keep a record.

2. Take it in turns to take four digit cards from a set.

Make a five-digit number and place it in the following grid.

Take it in turns to create a number. If a partner cannot put a number in the grid, the other player gains a point. Keep a record of your score.

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

Order and Compare Numbers

Aim: I can order and compare numbers.

1. Use the following symbols to compare the following numbers: $<$, $=$ or $>$

676 767 677 767

100 010 10 100

782 391 782 481

2. Order the following sets of numbers from smallest to largest:

320 023, 302 023, 323 230, 302 203, 323 203

--	--	--	--	--

110 011, 101 101, 10 101, 10 011, 101 001

--	--	--	--	--

785 392, 857 392, 587 392, 578 392, 758 392

--	--	--	--	--

3. Explain why $382\ 562 > 380\ 652$.

4. Explain how to order the following numbers from smallest to greatest: 656 566, 665 656, 665 565, 655 556, 565 665.

Order and Compare Numbers

Aim: I can order and compare numbers.

A set of single-digit cards is required for these tasks.

Work with a partner, checking your work together.

Compare

1. From two sets of single-digit cards, deal six cards each. Use the cards to make a number.
Toss a coin. If the coin lands on heads, the greater number wins a point. If the coin lands on tails, the smaller number wins a point.
Keep a record of your score.

Order

2. Take it in turns to take six digit cards from a set.
Make a six-digit number and place it in the following grid.
Take it in turns to create a number. If a partner cannot put a number in the grid the other player gains a point. Keep a record of your score.

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

--	--	--	--	--

smallest

greatest

Order and Compare Numbers

Aim: I can order and compare numbers.

Work with a partner, checking your work together.

Compare

1. Each partner writes a number on a small whiteboard or piece of paper, hidden from their partner. Each partner can ask, in turn, three questions of their partner, with yes or no answers. They then estimate whether their number is smaller or greater than their partner's number.

Keep a record of your score.

Write the numbers in your books with the relevant comparison symbol to keep a record.

Order

2. Cut out six small pieces of paper to fit the grid below. The activity is done without talking.

Each partner writes three numbers on a piece of paper, hidden from their partner. Take it in turns to place the numbers on the grid, keeping the numbers on the grid in order from smallest to greatest. If a partner cannot place one of their numbers, they can move an existing number on the grid instead.

The aim is to place all the numbers on the grid in the least amount of turns possible.

--	--	--	--	--

smallest

greatest

Order and Compare Numbers

Answers

Lower Ability

1. $2783 < 2873$
 $3041 > 3014$
 $9377 < 9773$

2.

3383	3838	3883	8388	8838
1067	1076	6071	6701	7016
908	8009	8090	9008	9080

3. Both 6581 and 6518 have six thousands and five hundreds. However, 6581 has eight tens, which is more than the one ten in 6518, so 6581 is greater than 6518.
4. All the numbers have four digits except 451, which only has three, or has no thousands, so is the smallest.

1445 only has one thousand, so is smaller than the other three remaining numbers, which all have four thousands.

The next largest numbers are 4414 and 4415, which have four hundreds, as the other, 4514, has five hundreds. 4414 and 4415 are consecutive numbers with 4414 the smaller as it has four ones and 4415 has five ones.

This leaves 4514 as the largest number. The order is: 451, 1445, 4414, 4415, 4514.

Middle Ability

1. $34\ 414 > 34\ 144$
 $56\ 656 > 56\ 655$
 $10\ 010 < 11\ 010$

2.

27 277	27 727	72 272	72 727	77 227
6432	61 234	61 423	62 143	62 431
30 009	30 090	30 900	39 009	39 090

3. Both 78 632 and 78 362 have seven ten thousands and eight thousands. However 78 632 has six hundreds, which is more than the three hundreds in 78 362, so 78 632 is greater than 78 362.
4. All the numbers have five digits. However, all have eight ten thousands except 78 778, which only has seven ten thousands so is the smallest number.

The two numbers 87 878 and 87 787 have seven thousands, so they are the next numbers in the sequence as the other numbers have eight thousands. 87 787 is smaller than 87 878 because it has seven hundreds compared to eight hundreds.

Of the final two numbers, 88 787 and 88 878, 88 787 is smaller as it has seven hundreds, which is less than the eight hundreds in 88 878.

The order is: 78 778, 87 787, 87 878, 88 787, 88 878.

Order and Compare Numbers

Answers

Higher Ability

1. $676\ 767 < 677\ 767$
 $100\ 010 > 10\ 100$
 $782\ 391 < 782\ 481$

2.

302 023	302 203	320 023	323 203	323 230
10 011	10 101	101 001	101 101	110 011
578 392	587 392	758 392	785 392	857 392

3. Both 382 562 and 380 652 have three hundred thousands and eight ten thousands. However 382 562 has two thousands, which is more than the 0 thousands in 380 652, so 382 562 is greater than 380 652.
4. All the numbers have six hundred thousands except 565 665, so this is the smallest.

Next, looking at the ten thousands, 655 556 and 656 566 have five ten thousand, whereas the other numbers have six ten thousands. The five thousands in 655 556 make it smaller than 656 566.

Finally 665 656 and 665 565 both have five thousands, but 665 565 has five hundreds, which is less than the six hundreds in 665 656.

The order is: 565 665, 655 556, 656 566, 665 565, 665 656.

Planet Earth

Have you ever wondered why humans live on Earth and not the other planets in our Solar System? Well, Earth is the only planet in our solar system that has all the things we need to survive: 21% oxygen in the air to breathe, water to drink and all at just the right temperature warmed by the Sun. Scientists call this the 'Goldilocks Zone' because everything is 'just right'...not too hot, not too cold. Its name is derived from the Old English word 'ertha' and the Anglo-Saxon word 'erda' which means ground or soil.

The Blue Planet

Earth, the third planet from the Sun, is referred to as 'The Blue Planet' because of how it looks from space. This is due to the fact that over $\frac{2}{3}$ of the Earth's surface is covered in oceans and seas.



Did you know?

- Age: approx. 4.54 billion years
- Diameter: 13,000 km
- Distance to Sun: 150,000,000 km
- Surface Temperature: 15°C
- Highest point: Mount Everest 8.8 km
- Lowest point: Challenger Deep 10.9 km below sea level

I'm Spinning Around

The Earth spins on its axis once every 24 hours – that's what gives us day and night. You wouldn't notice but the Earth's spin is actually slowing down by 17 milliseconds per hundred years. Eventually this will lengthen our days but it will take around 140 million years before our day will have increased from 24 to 25 hours. I wonder if children 140 million years from now will have an extra hour at school.

Whilst it is spinning, the Earth is also orbiting the Sun, which takes $365 \frac{1}{4}$ days to do one full circuit. This gives us the length of our years. Our seasons are also dependent on the orbit of the Earth as our planet is tilted at an angle. This means that around one side of the Sun we are tilted towards it – giving us warmer temperatures and longer days...our summer. However, around the other side of the Sun we are tilted away from it giving us less light and cooler temperatures – so this is our winter. All in all, it's a pretty amazing planet and I, for one, am glad to call it home.

Questions

1. What percentage of the air we breathe is not Oxygen?

2. What is the difference between the highest and lowest points on Earth?

3. How long does it take the Earth to spin once on its axis?

4. Will the Earth always spin at this speed? If not, how will it change?

5. How many planets are between us and the Sun and can you name them?

6. Why do we experience summer around one side of the Sun?

7. In the Fact File section the author has written 'approx.', what is the reason for the full stop in this word?

8. In the 'I'm Spinning Around' section, the author writes:

You wouldn't notice but the Earth's spin is actually slowing down by 17 milliseconds per hundred years'

Why does the author say we wouldn't notice?

9. Why do we need to add an extra day to our year every 4 years?

10. Which fact or piece of information has amazed you the most and why?

Answers

1. What percentage of the air we breathe is not Oxygen?
79%
2. What is the difference between the highest and lowest points on Earth?
19.7km (10.9 + 8.8)
3. How long does it take the Earth to spin once on its axis?
24 hours/1 day
4. Will the Earth always spin at this speed? If not, how will it change?
No – it is slowing down
5. How many planets are between us and the Sun and can you name them?
2 (Mercury and Venus)
6. Why do we experience summer around one side of the Sun?
The Earth is tilted towards The Sun
7. In the Fact File section the author has written 'approx.', what is the reason for the full stop in this word?
To abbreviate the word – full word: approximately
Discuss: why do this? Can you think of other examples?
8. In the 'I'm Spinning Around' section, the author writes:
You wouldn't notice but the Earth's spin is actually slowing down by 17 milliseconds per hundred years'
Why does the author say we wouldn't notice?
Discuss: Because the decrease is happening so gradually/slowly
9. Why do we need to add an extra day to our year every 4 years?
Due to the fact we have an extra $\frac{1}{4}$ day every year we orbit The Sun
10. Which fact or piece of information has amazed you the most and why?
Open ended to discuss.

Planet Earth

We all live on Earth...why? Well, Earth is the only planet in our solar system that has all the things we need to survive: 21% oxygen in the air to breathe, water to drink and all at just the right temperature warmed by the Sun. Its name comes from the Old English word 'ertha' and the Anglo-Saxon word 'erda' which means ground or soil.

The Blue Planet

Earth, the third planet from the Sun, is referred to as 'The Blue Planet' because of how it looks from space – blue. This is due to the fact that over $\frac{2}{3}$ of the Earth's surface is covered in water.



Did you know?

- Age: approximately 4.54 billion years
- Diameter: 13,000 km
- Distance to Sun: 150,000,000 km
- Surface Temperature: 15°C
- Highest point: Mount Everest 8.8 km
- Lowest point: Challenger Deep 10.9 km below sea level

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The Earth spins on its axis once every 24 hours – that's what gives us day and night as we spin to face the Sun and then away from it again. You wouldn't notice but the Earth's spin is actually slowing down by 17 milliseconds per hundred years. Eventually this will lengthen our days but it will take around 140 million years before our day will have increased from 24 to 25 hours. I wonder if children 140 million years from now will have an extra hour at school.

Whilst it is spinning, the Earth is also orbiting The Sun, which takes $365 \frac{1}{4}$ days to do one full circuit. This gives us the length of our years. Our seasons are also dependent on the orbit of the Earth as our planet is tilted at an angle. This means that around one side of the Sun we are tilted towards it – giving us warmer temperatures and longer days...our summer. However, around the other side of the Sun we are tilted away from it giving us less light and cooler temperatures – this is our winter. All in all, it's a pretty amazing planet and I, for one, am glad to call it home.

Questions

1. What percentage of Oxygen is in the air we breathe?

2. What is the highest thing on Earth?

3. How long does it take the Earth to spin once on its axis?

4. Will the Earth always spin at this speed? If not, how will it change?

5. How many planets are between us and the Sun and can you name them?

6. Why do we experience summer around one side of the Sun?

7. Why is Earth also called 'The Blue Planet'?

8. What 3 things make it possible for us to survive on Earth?

9. Why do we need to add an extra day to our year every 4 years?

10. Which fact or piece of information has amazed you the most and why?

Answers

1. What percentage of Oxygen is in the air we breathe?
21%
2. What is the highest thing on Earth?
A mountain (the question asks 'what thing')
3. How long does it take the Earth to spin once on its axis?
24 hours/1 day
4. Will the Earth always spin at this speed? If not, how will it change?
No – it is slowing down
5. How many planets are between us and the Sun and can you name them?
2 (Mercury and Venus)
6. Why do we experience summer around one side of the Sun?
The Earth is tilted towards The Sun
7. Why is Earth also called 'The Blue Planet'?
Water makes up 2/3 of the surface so it looks blue from space.
8. What 3 things make it possible for us to survive on Earth?
Water, air (or oxygen), warmth
9. Why do we need to add an extra day to our year every 4 years?
Due to the fact we have an extra $\frac{1}{4}$ day every year we orbit the Sun
10. Which fact or piece of information has amazed you the most and why?
Open ended to discuss.

Planet Earth

Why do we live on Earth? Well, Earth is the only planet in our solar system that has all the things we need to live: oxygen in the air to breathe, water to drink and all at just the right temperature warmed by the Sun.

The Blue Planet

Earth is third planet from the Sun and is also called 'The Blue Planet' because of how it looks from space – blue. This is because over $\frac{2}{3}$ of the Earth's surface is covered in water.



Did you know?

- Age: approximately 4.54 billion years
- Diameter: 13,000 km
- Distance to Sun: 150,000,000 km
- Surface Temperature: 15°C
- Highest point: Mount Everest 8.8 km
- Lowest point: Challenger Deep
10.9 km below sea level

I'm Spinning Around

The Earth spins on its axis once every 24 hours – that's what gives us day and night as we spin to face the Sun and then away from it again. You wouldn't notice but the Earth's spin is actually slowing down by 17 milliseconds per hundred years. Eventually this will lengthen our days but it will take around 140 million years before our day will have increased from 24 to 25 hours. I wonder if children 140 million years from now will have an extra hour at school.

Whilst it is spinning, the Earth is also orbiting the Sun, which takes $365\frac{1}{4}$ days to do one full circuit. This gives us the length of our years. Our seasons are also dependent on the orbit of the Earth as our planet is tilted at an angle. This means that around one side of the Sun we are tilted towards it – giving us warmer temperatures and longer days...our summer. However, around the other side of the Sun we are tilted away from it giving us less light and cooler temperatures – so this is our winter. All in all, it's a pretty amazing planet and I, for one, am glad to call it home.

Questions

1. How high is the highest mountain on Earth?

2. How long does it take the Earth to spin once on its axis?

3. Will the Earth always spin at this speed? If not, how will it change?

4. How many planets are between us and the Sun and can you name them?

5. Why do we experience summer around one side of the Sun?

6. Why is Earth also called 'The Blue Planet'?

7. What 3 things make it possible for us to survive on Earth?

8. Why do we need to add an extra day to our year every 4 years?

9. Which fact or piece of information has amazed you the most and why?

10. Find out more about Challenger Deep on the Internet.

Answers

1. How high is the highest mountain on Earth?
8.8km
2. How long does it take the Earth to spin once on its axis?
24 hours/1 day
3. Will the Earth always spin at this speed? If not, how will it change?
No – it is slowing down
4. How many planets are between us and the Sun and can you name them?
2 (Mercury and Venus)
5. Why do we experience summer around one side of the Sun?
The Earth is tilted towards the Sun
6. Why is Earth also called 'The Blue Planet'?
Water makes up 2/3 of the surface so it looks blue from space.
7. What 3 things make it possible for us to survive on Earth?
Water, air (or oxygen), warmth
8. Why do we need to add an extra day to our year every 4 years?
Due to the fact we have an extra $\frac{1}{4}$ day every year we orbit the Sun
9. Which fact or piece of information has amazed you the most and why?
Open ended to discuss.
10. Find out more about Challenger Deep on the Internet.
Open ended to discuss. May want to do this as a class with the LA group presenting what they have found out.

Read and Write Numbers

LO: I can read and write numbers.

1. Write the following numbers in words:

4819 _____

3008 _____

5191 _____

2. Write the following numbers in numerals:

Three thousand and sixteen

Nine thousand, four hundred and twenty-six

Seven thousand, eight hundred and forty

3. For each number below, explain the mistake in writing the number in words.

2019 = two thousand and ninety

6970 = six hundred and ninety-seven

4. For each number below, explain the mistake in writing the number in numerals.

Six thousand, four hundred and nine = 649

One thousand, four hundred and twenty-one = 1241

Read and Write Numbers

LO: I can read and write numbers.

1. Write the following numbers in words:

56 012 _____

30 070 _____

89 329 _____

2. Write the following numbers in numerals:

Seventeen thousand and sixty

Twenty-four thousand, nine hundred and twenty-two

Ninety thousand, three hundred and fourteen

3. For each number below, explain the mistake in writing the number in words.

40 912 = four thousand, nine hundred and twenty

17 902 = one thousand, seven hundred and ninety-two

4. For each number below, explain the mistake in writing the number in numerals.

Sixty-six thousand, six hundred and sixteen = 66 166

Eighty-one thousand, one hundred and eighteen = 8118

Read and Write Numbers

LO: I can read and write numbers.

Work with a partner, checking your work together.

1. Ask your partner to write three numbers in numerals, of four or five digits. Read the numbers to your partner.

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2. Ask your partner to write three numbers in words, of four or five digits. Read the numbers to your partner and write the number in numerals.

3. Write three numbers of your own in numerals, of four or five digits. Read them in turn to your partner and write them in numerals and words:

My numbers	My partner's numbers	

4. On your partner's sheet, write a number in words and then write it in numerals making a mistake.

On your own sheet explain the mistake made by your partner.

Mistake: _____

Read and Write Numbers

5. On your partner's sheet, write a number in numerals and then write it in words making a mistake.

Mistake: _____

Read and Write Numbers Answers

Page1

- 4819 - four thousand, eight hundred and nineteen
3008 - three thousand and eight
5191 - five thousand, one hundred and ninety-one
- Three thousand and sixteen - 3016
Nine thousand, four hundred and twenty-six - 9426
Seven thousand, eight hundred and forty - 7840
- 2019 = two thousand and ninety - 19 has been written ninety (90) but should be nineteen.
The answer is two thousand and nineteen.
6970 = six hundred and ninety seven - The zero has been ignored so the place value has been misread. The 6 is six thousand not six hundred, the 9 is nine hundred not ninety and the 7 is seventy not seven. The answer is six thousand, nine hundred and seventy.
- Six thousand, four hundred and nine = 649
The zero (no tens) has been missed out. The six thousands and four hundreds have been written as six hundreds and four tens. The answer is 6409.
One thousand, four hundred and twenty-one = 1241
The 2 and 4 have been mixed up. There are four hundreds, but the 2 has been used. There are 2 tens, but the 4 has been used. The answer is 1421.

Page2

- 56 012 - fifty-six thousand and twelve
30 070 - thirty thousand and seventy
89 329 - eighty nine thousand, three hundred and twenty-nine
- Seventeen thousand and sixty- 17 060
Twenty-four thousand, nine hundred and twenty-two- 24 922
Ninety thousand, three hundred and fourteen - 90 314
- 40 912 = four thousand, nine hundred and twenty - The forty (40) thousand has been written as four thousand, and the twelve (12) at the end of the number has been written as twenty (20). The answer is forty thousand, nine hundred and twelve.
17 902 = one thousand, seven hundred and ninety two - The zero has been ignored so the place value has been misread. The 17 is seventeen thousand not one thousand, seven hundred; the 9 is nine hundred not ninety. The answer is seventeen thousand, nine hundred and two.
- Sixty-six thousand, six hundred and sixteen = 66 166
The one has been placed in the wrong place. The sixteen (16) needs to be in the final two places. The answer is 66 616.
Eighty-one thousand, one hundred and eighteen = 8118
The number should have five digits, the answer being 81 118. There are several possible reasons for the incorrect answers: simply missing out a digit (1 in hundreds or tens place), misunderstanding the need to have three digits after the 81 and only putting 18 to represent 118, or reading eighteen as 80 and missing off the 0.

Read and Write Numbers

LO: I can read and write numbers.

1. Write the following numbers in words:

209 817 _____

500 040 _____

120 371 _____

2. Write the following numbers in numerals:

Seventeen thousand and sixty

Twenty-four thousand, nine hundred and twenty-two

Ninety thousand, three hundred and fourteen

3. For each number below, explain the mistake in writing the number in words.

710 981 = seventy one thousand, nine hundred and eighteen

511 007 = fifty-one and one thousand, seven hundred.

4. For each number below, explain the mistake in writing the number in numerals.

Two hundred and six thousand, nine hundred and twenty = 26 900 20

Three hundred thousand, six hundred and sixty = 366

Read and Write Numbers

LO: I can read and write numbers.

Work with a partner, checking your work together.

1. Ask your partner to write three six-digit numbers in numerals. Read the numbers to your partner.

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2. Ask your partner to write three six-digit numbers in words. Read the numbers to your partner and write the number in numerals.

3. Write three six-digit numbers of your own in numerals. Read them in turn to your partner and write them in numerals and words:

My numbers	My partner's numbers	

4. On your partner's sheet, write a six-digit number in words and then write it in numerals making a mistake.

On your own sheet explain the mistake made by your partner.

Mistake: _____

Read and Write Numbers

5. On your partner's sheet, write a number in numerals and then write it in words making a mistake.

Mistake: _____

Read and Write Numbers Answers

1. 209 817 - two hundred and nine thousand, eight hundred and seventeen

500 040 - five hundred thousand and forty

120 371 - one hundred and twenty thousand, three hundred and seventy-one

2. Seven hundred and thirteen thousand and forty-nine - 713 049

One hundred and forty-four thousand, two hundred and ninety-two - 144 292

Six hundred and ninety thousand and seven - 690 007

3. 710 981 = seventy one thousand, nine hundred and eighteen

The zero has been missed out so seven hundred and ten thousand has been written as seventy one thousand. The eighty-one (81) at the end of the number has been written as eighteen (18) mixing up the 8 and 1. The answer is seven hundred and ten thousand, nine hundred and eighty-one.

511 007 = fifty-one and one thousand, seven hundred.

The five hundred and eleven (thousand) has been mistakenly written as fifty-one and one, showing a misunderstanding of the place value of the 5 and first 1, which are hundred thousands and ten thousands. Also the final seven has been written as seven hundred, when it is in the ones place so has a value of seven. The answer is five hundred and eleven thousand and seven.

4. Two hundred and six thousand, nine hundred and twenty = 26 900 20

The zero in two hundred and six (206) has been missed out. The nine hundred has been written without writing the twenty as part of this section of the number. Nine hundred and twenty is written 920 without the extra zeros. The answer is 206 920.

Three hundred thousand, six hundred and sixty = 366

All the zeros are missing. The three hundred thousand is missing the zeros and the six hundred and sixty is written 66, so is also missing a zero, as it should be 660. The combination of this error is that the three is no longer even thousands but simply hundreds. The answer is 300 660.

Read and Write Numbers

LO: I can read and write numbers.

1. Explain possible mistakes that can be made when writing the number three hundred and six thousand, two hundred and fifteen in numerals.

2. Write instructions in the space below showing how to write the number 405 912 in words.

3. Calculate the answer to these without writing the numbers in numerals:

Two hundred and sixty-five thousand, nine hundred and six add four hundred and sixteen thousand and forty-seven equals.

4. What is the difference between three hundred and eighty thousand, two hundred and seventy-four and eight hundred and thirty-seven thousand, three hundred and ninety-one?

Read and Write Numbers

LO: I can read and write numbers.

Work with a partner, checking your work together.

1. Each write three digits. Combine the digits and each write the largest number possible in numerals and words.

Repeat, writing the smallest number in words and numerals.

Repeat writing the number closest to 500 000.

Try closest to other numbers.

2. Each write a six-digit number in numerals. Calculate and write the sum and difference in words.

Each write a six-digit number in words. Calculate and write the sum and difference in words.

Each write a six-digit number in numerals. Calculate and write the number half way between the numbers in words.

Read and Write Numbers **Answers**

1. Answers will vary
2. Answers will vary
3. Six hundred and eighty-one thousand, nine hundred and fifty-three.
4. Four hundred and fifty-seven thousand, one hundred and seventeen.

The Moon

Do you ever look at the Moon at night? Do you wonder what it would be like to visit the moon? Read on to find out more...

Moon and Sun

The Moon shines very brightly, but it does not make its own light. It reflects the light of the Sun. When the Sun comes up for our daytime we think that the Moon goes away but it doesn't, it's just harder to see because the sky is so bright. Sometimes, if you look carefully, you can see the Moon in the sky during the day.



Did you know?

- Day temperature: 107°C
- Night temperature: -153°C
- Distance from Earth: 238 857 miles
- Diameter (from one side to the other): 2160 miles
- Length of Day: 708 hours

Orbit

The Moon is the only thing that naturally goes round (orbits) the Earth – anything that does this is called a satellite. It takes the Moon about 28 days to go round the Earth once, we call this a lunar month.

Did you know we only ever see the same side of the Moon?

The phases of the Moon depend on its position in relation to the Sun and Earth. As the Moon makes its way around the Earth, we see the bright parts of the Moon's surface at different angles. These are called the 'phases' of the Moon.

Moonwalking

Only 12 people have ever walked on the Moon! The first person was Neil Armstrong on 20th July, 1969. There were two other men on the mission: Buzz Aldrin and Michael Collins. Their space shuttle was called Apollo 11. It took them just over 3 days to get there.

You may have seen a film of people walking on the Moon and they bounce along. This is because the Moon's gravity is not as strong as the Earth's so people take longer to come back down when they go up in the air.

Questions

1. Who was the first man to walk on the Moon?

2. Where does the Moon get its light from?

3. How wide is the Moon?

4. How cold is the Moon at night?

5. What causes the different phases of the Moon?

6. Where does the Moon go in the daytime?

7. How long is a lunar month?

8. What is the distance from us to the Moon?

9. It took the astronauts just over 3 days to get to the Moon – how far could you travel in 3 days?

Answers

1. Who was the first man to walk on the Moon?
Neil Armstrong
2. Where does the Moon get its light from?
It reflects the Sun's light/rays
3. How wide is the Moon?
2160 miles
4. How cold is the Moon at night?
- 153°C
5. What causes the different phases of the Moon?
The changing angle between the Sun, Earth and Moon.
6. Where does the Moon go in the daytime?
Nowhere – it stays in the daytime sky
7. How long is a lunar month?
**About 28 days / 4 weeks / 27.3 days / 29-30 days
(The range is because it depends on the position of the Earth.)**
8. What is the distance from us to the Moon?
238 857 miles
9. It took the astronauts just over 3 days to get to the Moon – how far could you travel in 3 days?
Open ended for discussion to put the journey into perspective and how fast they must have been travelling to get there in such a short time.

The Moon

Do you ever look up in the sky at night and see the Moon shining down and lighting up the night-time town? Do you sometimes wonder what it would be like to visit the Moon or wonder why it shines so bright? Well here's some information that might interest you...

Moon and Sun

The Moon shines very brightly, but is only reflecting the light of the Sun it can't make its own light. When the Sun comes back up for our day time we think that the Moon goes away but it doesn't, it's just harder to see because it is so bright. Sometimes, if you look carefully, you can see the Moon in the sky during the day time.



Did you know?

- Average temperature in the day: 107°C
- Average temperature at night: -153°C
- Distance from Earth: 238 857 miles
- Diameter: 2160 miles
- Length of Day: 708 hours
- Selenophobia is fear of the Moon

Orbit

The Moon is the Earth's only satellite (that means something that orbits a larger object). It takes the Moon about 28 days to orbit the Earth once, we call this a lunar month. During this time, we only ever see the same side of the Moon as it rotates slowly whilst it moves around us.

During its orbit, the angle between the Earth, Moon and Sun changes so the part of the Moon that is lit up can not always be seen from Earth. This is what gives us the phases of the moon, when it is waxing (growing bigger) and waning (getting smaller) with shapes including crescent and gibbous.

Moonwalking

Only 12 people have ever walked on the Moon! The first person to do this was Neil Armstrong on 20th July 1969. There were two other men on the mission: Buzz Aldrin and Michael Collins and they all travelled on the Apollo 11 shuttle.

You may have seen a film of people walking on the Moon and it isn't quite the same as walking on the Earth...walking on the Moon looks bouncy because the Moon's gravity is not as strong as the Earth's, so people take longer to fall back down when they are up in the air.

Questions

1. How many people were on the first moon landing mission?

2. Why does the moon look like it lights up when it doesn't?

3. What is a satellite?

4. How much colder is the Moon at night than in the daytime?

5. What causes the different phases of the Moon?

6. Where does the Moon go in the daytime?

7. How long does it take the Moon to orbit the Earth?

8. How far did Neil Armstrong travel to get to the Moon?

9. Work out how long it would take a car travelling at 70mph to get to the Moon.

a. In whole hours

b. In whole days

Answers

1. How many people were on the first moon landing mission?

Three

2. Why does the moon look like it lights up when it doesn't?

It reflects the Sun's light/rays

3. What is a satellite?

2160 miles

4. How much colder is the Moon at night than in the daytime?

260°C (107 + 153)

5. What causes the different phases of the Moon?

The changing angle between the Sun, Earth and Moon.

6. Where does the Moon go in the daytime?

Nowhere – it stays in the daytime sky

7. How long does it take the Moon to orbit the Earth?

About 28 days / 4 weeks / 27.3 days / 29-30 days

(The range is because it depends on the position of the Earth.)

8. How far did Neil Armstrong travel to get to the Moon?

238 857 miles

Work out how long it would take a car travelling at 70mph to get to the Moon.

a. In whole hours

3412 hours (238857 ÷ 70)

b. In whole days

142 days (3412 ÷ 24)

The Moon

Do you ever look up in the sky at night and see the spherical Moon lighting up the night-time town? Do you sometimes ponder what it would be like to visit the Moon or wonder why it shines so bright? Well here's some facts and figures that might interest you...

Moon and Sun

The Moon shines extremely brightly but is only reflecting the rays of the Sun whilst it is round the other side of the Earth. The Moon cannot make its own light as it is not a star, like the Sun. When we rotate back towards the Sun for our daytime we assume the Moon goes away but it doesn't, it's just harder to see because it is so bright. Sometimes, if you look carefully, you can see the Moon in the sky during the daytime.



Did you know?

- Average surface temperature in the day: 107°C
- Average surface temperature at night: -153°C
- Distance from Earth: 238 857 miles
- Diameter: 2160 miles
- Length of Day: 708 hours
- Selenophobia is fear of the Moon

Orbit

The Moon is the Earth's only natural satellite (an object that orbits a larger object). It takes the Moon approximately 28 days to orbit the Earth once, this is referred to as a lunar month. During this time, we only ever see the same side of the Moon as it rotates slowly whilst it moves around us. The Moon is not quite spherical and is slightly heavier on one side, so gravity keeps the heavier side facing us.

During its orbit, the angle between the Earth, Moon and Sun changes so the part of the Moon that is lit up can not always be seen from Earth. This is what gives us the phases of the Moon, when it is waxing (getting bigger) and waning (getting smaller) with shapes including crescent and gibbous.

Moonwalking

Only 12 people have ever walked on the Moon! The first person to do this was Neil Armstrong on 20th July 1969. There were two other astronauts on the mission: Buzz Aldrin and Michael Collins who travelled on the Apollo 11 shuttle.

You may have seen footage of astronauts walking on the moon and you will notice it looks bouncy. This is because the Moon's gravity is only that of one sixth of the Earth's so people take longer to return to the surface when they are up in the air.

Questions

1. Who was the second man to walk on the Moon? How do you think he felt?

2. How does the moon look like it lights up when it doesn't?

3. Explain how a satellite and an object work together?

4. How much colder is the Moon at night than in the daytime?

5. Why does the Moon have different phases during its cycle?

6. People refer to the 'dark side of the Moon'. What do you think this means?

7. What is the name of someone who has a fear of the Moon?

8. How far did Neil Armstrong travel to get to the Moon and back?

Work out how long it would take a car travelling at 70mph to get to the Moon.

a: In whole hours

b: In whole days

Answers

1. Who was the second man to walk on the Moon? How do you think he felt?
Buzz Aldrin
(Discuss: how he felt, jealous that he wasn't the first? Or excited as he was still the second person ever to walk on the Moon?)
2. How does the moon look like it lights up when it doesn't?
It reflects the Sun's light/rays.
3. Explain how a satellite and an object work together?
The satellite orbits a larger object
4. How much colder is the Moon at night than in the daytime?
260°C (107 + 153)
5. Why does the Moon have different phases during its cycle?
The angle between the Earth, Moon and Sun changes so the part of the Moon that is lit up can not always be seen from Earth.
6. People refer to the 'dark side of the Moon'. What do you think this means?
We always see the same side of the Moon (this is lit up) so there is always the same side of the Moon that gets no light around the back that we don't see. This is the dark side of the Moon. (Interesting fact: also the name of the seminal album by Pink Floyd).
7. What is the name of someone who has a fear of the Moon?
Selenophobic (Note: this is not 'selenophobia' as we are looking for the name of the person, not the fear).
8. How far did Neil Armstrong travel to get to the Moon and back?
477 714 miles (238 857×2)
9. Work out how long it would take a car travelling at 70mph to get to the Moon.
 - a. In whole hours
3412 hours (238857 ÷ 70)
 - b. In whole days
142 days (3412 ÷ 24)

Year 5 Writing Checklist

These Twinkl writing checklists link to the expectations set out in the 2014 English National Curriculum for Writing and also include reference to the guidance set out in English Appendixes 1 & 2. They are split into:

- Working Towards the Expected Standard
- Working at the Expected Standard
- Working at Greater Depth Within the Expected Standard

All of the statements are progressive within and across the year groups, and work on the expectation that the majority of pupils will be working on their own year group's aims. Consequently, Twinkl have tried to ensure that the criteria for Working Towards the Expected Standard in one year group is not the same as the criteria for Working at Greater Depth in the previous year group. The criteria for Working Towards and Working at Greater Depth in any year group is related to that year group's National Curriculum expectations.

It is important to reiterate that there are no DfE-published exemplification assessment documents available for Years 1, 3, 4 and 5, and therefore the Twinkl writing checklists should only be used as a guide for referencing the attainment of pupils within these year groups.

Teachers may feel the need to revisit expectations from earlier years to consolidate knowledge and build on pupils' understanding, or go beyond the aims set out here if they feel it is appropriate for their highest-attaining students.

How to Use the Checklists

The grids can be used to track the attainment of individual pupils or alternatively, could be used to highlight the progress of groups of students who are focusing on the same development areas or writing targets.

They allow teachers to make 'best fit' judgements by ticking and dating relevant criteria as a child/group progresses throughout a term or school year.

The statements with the checklists are set out in colour-coded boxes: **pink** for composition; **green** for grammar and punctuation and **blue** for transcription.

Year 5 Writing Checklist

Working Towards the Expected Standard:

Pupil(s) are beginning to meet the following aims with support:	
To write for a range of purposes and audiences with ideas that are usually sustained, well-paced and logical.	
To select appropriate grammar and vocabulary to match the purpose and audience of their writing.	
To describe settings, characters and atmosphere with increasing awareness of the reader.	
To begin to use dialogue to convey a character and advance the action.	
To use organisational and presentational devices that are relevant to the text type, e.g. headings, bullet points, underlining, etc.	
To create paragraphs that are usually suitably linked (some transitions may be awkward).	
To proofread their work and assess the effectiveness of their own and others' writing and make necessary corrections.	
To use the full range of punctuation from previous year groups.	
To begin to use commas to clarify meaning or to avoid ambiguity.	
To begin to use a wider range of linking words/phrases between sentences and paragraphs to build cohesion including time adverbials, e.g. later; place adverbials, e.g. nearby; and number, e.g. secondly.	
To begin to experiment with relative clauses with support and modelling.	
To begin to use some adverbs and modal verbs to indicate degrees of possibility, e.g. surely, perhaps, should, might, etc.	
To spell some verb prefixes correctly, e.g. de activate, over turn, mis conduct, etc.	
To begin to convert nouns or adjectives into verbs using suffixes, e.g. designate, classify, criticise, etc.	
To spell some complex homophones correctly, e.g. affect/effect, practice/practise, etc.	
To spell some words correctly from the Y5/6 statutory spelling list.	
To write legibly, fluently and with increasing speed.	

Year 5 Writing Checklist

Working at the Expected Standard:

Pupil(s) are beginning to independently apply their knowledge:	
To write for a range of purposes and audiences, confidently selecting structure and organisation of a text depending on audience and purpose.	
To describe settings, characters and atmosphere to consciously engage the reader.	
To use dialogue to convey a character and advance the action with increasing confidence.	
To select and use organisational and presentational devices that are relevant to the text type, e.g. headings, bullet points, underlining, etc.	
To begin to proof-read work to précis longer passages by removing unnecessary repetition or irrelevant details.	
To create paragraphs that are usually suitably linked.	
To proofread their work and assess the effectiveness of their own and others' writing and make necessary corrections and improvements.	
To use the full range of punctuation from previous year groups.	
To use commas to clarify meaning or to avoid ambiguity with increasing accuracy.	
To use a wider range of linking words/phrases between sentences and paragraphs to build cohesion including time adverbials, e.g. later; place adverbials, e.g. nearby; and number, e.g. secondly.	
To use relative clauses beginning with a relative pronoun (who, which, where, when, whose, that), e.g. Professor Scriffle, who was a famous inventor, had made a new discovery.	
To use brackets, dashes or commas to begin to indicate parenthesis.	
To use adverbs and modal verbs to indicate degrees of possibility, e.g. surely, perhaps, should, might, etc.	
To spell many verb prefixes correctly, e.g. de activate, over turn, mis conduct, etc.	
To convert nouns or adjectives into verbs using suffixes, e.g. designate, classify, criticise, etc.	

To spell many complex homophones correctly, e.g. affect/effect, practice/practise, etc.	
To spell many words correctly from the Y5/6 statutory spelling list.	
To write legibly, fluently and with increasing speed.	

Year 5 Writing Checklist

Working at Greater Depth within the Expected Standard:

Pupil(s) are confidently and independently able to apply their knowledge:	
To consistently produce sustained and accurate writing from different narrative and non-fiction genres with appropriate structure, organisation and layout devices for a range of audiences and purposes.	
To describe settings, characters and atmosphere with carefully chosen vocabulary to enhance mood, clarify meaning and create pace.	
To regularly use dialogue to convey a character and advance the action.	
To proof-read work to précis longer passages by removing unnecessary repetition or irrelevant details.	
To consistently link ideas across paragraphs.	
To proofread their work and assess the effectiveness of their own and others' writing and make necessary corrections and improvements.	
To begin to perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.	
To use commas consistently to clarify meaning or to avoid ambiguity.	
To use a wide range of linking words/phrases between sentences and paragraphs to build cohesion including time adverbials, e.g. later; place adverbials, e.g. nearby; and number, e.g. secondly.	
To use relative clauses beginning with a relative pronoun with confidence (who, which, where, when, whose, that, and omitted relative pronouns), e.g. <i>Professor Scriffle, who was a famous inventor, had made a new discovery.</i>	
To use brackets, dashes or commas to indicate parenthesis.	
To use a range of adverbs and modal verbs to indicate degrees of possibility, e.g. surely, perhaps, should, might, etc.	
To spell most verb prefixes correctly, e.g. de activate, over turn, mis conduct, etc.	
To regularly convert nouns or adjectives into verbs using suffixes, e.g. designate, classify, criticise, etc.	
To spell most complex homophones correctly, e.g. affect/effect, practice/practise, etc.	

To spell most words correctly from the Y5/6 statutory spelling list.	
To write legibly, fluently and with increasing speed.	

Year 5 Maths Addition and Subtraction Workbook



Year 5 Maths Addition and Subtraction Workbook

Year 5 Programme of Study – Addition and Subtraction

Statutory Requirements	Worksheet	Page Number	Notes
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).	Addition with 5 digit numbers	3	
	Subtraction with 5 digit numbers	4	
Add and subtract numbers mentally with increasingly large numbers.	Mental Maths Adding Worksheets	5 - 6	
	Subtracting Multiples of 1000	7	
	Adding Multiples of 1000	8	
	Mental Calculations Challenge	9 - 10	
Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Using Rounding to Check Answers	11	
	Rounding in Context	12 - 13	
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Spend Your Lottery Winnings	14 - 15	
	Multi-Step Addition and Subtraction Problems	16 - 17	

Addition With 5 Digit Numbers

1.
$$\begin{array}{r} 56833 \\ + 44105 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 68640 \\ + 28360 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 92195 \\ + 17742 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 28446 \\ + 55824 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 68586 \\ + 75019 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 94929 \\ + 68567 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 84658 \\ + 85858 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 71778 \\ + 88411 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 34522 \\ + 45861 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 99394 \\ + 46453 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 98584 \\ + 52426 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 16373 \\ + 26611 \\ \hline \end{array}$$

Subtraction With 5 Digit Numbers

$$\begin{array}{r} 1. \quad 74321 \\ - 13934 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 52413 \\ - 23120 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 85232 \\ - 71401 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 32653 \\ - 18341 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 53145 \\ - 32672 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 46581 \\ - 13623 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 85913 \\ - 33575 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 29314 \\ - 13023 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 25521 \\ - 12014 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 91789 \\ - 58816 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 73471 \\ - 64342 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 76743 \\ - 62102 \\ \hline \end{array}$$

Mental Maths Adding

Read the problems and answer them in your head.

1. Add together 40p, 70p and 30p.
2. What is the total of 15, 19 and 23?
3. Lauren was given some money for her birthday. Her brother gave her £2.50, her sister gave her £1.00 and her grandma gave her £4.50. How much did she get in total?
4. Omar collects 68 bus tickets and 34 train tickets. How many does he have in total.
5. Caroline has 2 bags of apples. One bag has 13 red apples in and the other bag has 24 green apples. How many apples does she have in total?
6. What is the sum of 38, 20 and 87?
7. Samir buys three chocolate bars. The first costs 62p, the second costs 59p and the last costs 70p. How much did he spend in total?
8. A teacher gives out 16 pencils on Monday, 22 on Tuesday and 29 on Thursday. How many pencils did she give out in total.
9. How much is 84p plus 39p plus 47p?
10. Three sacks of potatoes were delivered to a shop. They weighed 18kg, 35 kg and 27kg. How much did they weigh in total?
11. Hannah has 58p and Max has 74p. How much do they have in total?
12. Jenny runs for 46 seconds and Ali runs for 73 seconds. What was the total time they ran for?
13. A shop has 78 ripe plums and 22 rotten ones. How many plums are there altogether?
14. What is the total when 72 is added to 38?
15. Mohammed finds 73p on his way to school and 12p on his way home. How much did he find in total?
16. Tarek collects drawings of owls. He has 24 drawings and his friend gives him 16. How many drawings does he have now?
17. There are 32 children in one class and 28 children in another. What is the sum of the children in both classes?
18. Scott has 39p and Robert has 84p. What is the total amount of money?
19. Ashton gets 59p pocket money. She then finds 65p under her bed. How much does she have in total?
20. What is the total when 34 is added to 49?

Subtracting Multiples of 1000

1. $6438 - 3000 =$

2. $3049 - 2000 =$

3. $9823 - 5000 =$

4. $6234 - 4000 =$

5. $7905 - 6000 =$

6. $4369 - 2000 =$

7. $6099 - 3000 =$

8. $2997 - 2000 =$

9. $7804 - 6000 =$

10. $9993 - 5000 =$

11. $8661 - 8000 =$

12. $6880 - 5000 =$

13. $4820 - 2000 =$

14. $6713 - 4000 =$

15. $9778 - 9000 =$

16. $11\ 052 - 5000 =$

17. $17\ 993 - 7000 =$

18. $55\ 702 - 6000 =$

19. $89\ 362 - 3000 =$

20. $203\ 905 - 4000$

21. $194\ 641 - 9000 =$

22. $501\ 785 - 3000$

23. $73\ 043 - 3000 =$

24. $604\ 234 - 4000 =$

25. $70\ 382 - 5000 =$

26. $652\ 802 - 6000 =$

27. $91\ 863 - 7000 =$

28. $600\ 788 - 9000 =$

29. $80\ 261 - 7000 =$

30. $1\ 000\ 000 - 10\ 000 =$

Challenge

Can you subtract 2002, 3030 or 4400 or other multiples of 1001, 1010 or 1100 from some of the questions? What about multiples of 10 000?

Adding Multiples of 1000

1. $2358 + 2000 =$

2. $4829 + 3000 =$

3. $8083 + 4000 =$

4. $3850 + 5000 =$

5. $7862 + 3000 =$

6. $3409 + 4000 =$

7. $6749 + 2000 =$

8. $5597 + 4000 =$

9. $1006 + 8000 =$

10. $385 + 7000 =$

11. $8763 + 2000 =$

12. $9015 + 3000 =$

13. $6530 + 3000 =$

14. $1165 + 8000 =$

15. $4708 + 4000 =$

16. $11\ 666 + 8000 =$

17. $13\ 647 + 5000 =$

18. $28\ 902 + 9000 =$

19. $29\ 023 + 4000 =$

20. $300\ 456 + 6000 =$

21. $156\ 982 + 4000 =$

22. $289\ 505 + 8000 =$

23. $56\ 903 + 9000 =$

24. $707\ 034 + 3000 =$

25. $38\ 892 + 7000 =$

26. $579\ 902 + 8000 =$

27. $79\ 672 + 6000 =$

28. $399\ 084 + 7000 =$

29. $60\ 271 + 4000 =$

30. $996\ 000 + 6000 =$

Challenge

Can you add 2002, 3030 or 4400 or other multiples of 1001, 1010 or 1100 to some of the questions? What about multiples of 10 000?

Mental Calculations Challenge

Look at the varied addition and subtraction calculations below and work your way through them. See how many points you can score. You could play against others or set yourself a time limit.

Scoring system:

Score 2 points for every correct answer achieved after using a written method of calculation.

Score 0 points for any incorrect answer achieved after using a written method of calculation.

Score 3 points for every correct answer achieved after a mental calculation

Score 1 point for each incorrect answer achieved after using a mental calculation.

1. $68 + 45 + 17 =$

2. $14.6 + 6.14 =$

3. $78 - 53 =$

4. $42 + 43 + 44 =$

5. $9999 + 3 =$

6. $456 - 111 =$

7. $0.73 + 0.37 =$

8. $100 - 0.1 =$

9. $28.2 + 99 =$

10. $134 + 375 =$

11. $4586 - 1471 =$

12. $47\ 001 - 59 =$

13. $27 - 53 =$

14. $100\ 000 - 10\ 000 =$

15. $5362 + 99 =$

16. $408 - 19 =$

I scored points.

Using Rounding to Check Answers

Round these numbers to the nearest 100 and perform a mental calculation. Decide if your answer is close enough to the answer given to suggest that it is correct.

	Calculation	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
e.g.	$325.7 + 485.4 = 911.1$	$300 + 500 = 800$	No	811.1
1.	$615 + 391 = 906$			
2.	$872 + 211 - 1083$			
3.	$235.3 + 258.9 = 512.12$			
4.	$475.23 + 596.98 = 1172.21$			
5.	$4567 + 3219 = 7786$			
6.	$5387.3 + 2418.8 = 7806.1$			
7.	$4879.54 + 2712.89 = 7952.43$			
8.	$97433 + 87679 = 181152$			

Round these numbers to the nearest ten and perform a mental calculation. Decide if your answer is close enough to the answer given to suggest that it is correct.

	Calculation	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
e.g.	$456 + 242 = 698$	$460 + 240 = 700$	Yes!	
1.	$371 + 287 = 558$			
2.	$548 + 342 = 890$			
3.	$784 + 329 = 1113$			
4.	$234.8 + 172.9 = 307.7$			
5.	$896.6 + 402.7 = 1299.3$			
6.	$345.45 + 378.31 = 623.76$			
7.	$1762.99 + 37.22 = 2100.11$			
8.	$4873.23 + 151.82 = 5025.05$			

Rounding in Context

Look at the answers to these word problems. Can you suggest what a sensible rounded answer would be and why?

Question	Calculation	Units	Rounded Answer	Reasoning
<p>e.g. If George wants to buy a tablet that costs £112 and he has 27 weeks to save up for it – how much should he save per week?</p>	$112 \div 27 = 4.14811481$	Pounds	£4.15	I have rounded it to the nearest actual sum of money above what he needs so he can save real money and still have enough.
<p>1. Charlie wants to make a rope bridge in his garden. He has calculated that he will need 6 pieces of rope each 1.23 cm long. The shop sells rope by the metre – how much will he need to buy?</p>	$1.23 \times 6 = 7.38$			
<p>2. There are 137 people going on the trip to zoo and each minibus can take 13 passengers. How many buses will need to be booked for the trip?</p>	$137 \div 13 = 10.538461$			

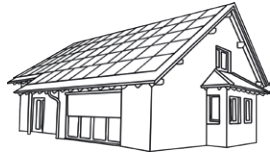
<p>1. Tina is reading a book which is 449 pages long – if she reads 17 pages a night before she falls asleep, how long will it take her to finish the book?</p>				
<p>2. Hamza wants to know what the population of the UK is for a quiz question. He finds out the following: England 53 124 565, Scotland 5 128 954, Wales 3 165 438, and Northern Ireland 1876031. What should the answer be in the quiz?</p>				
<p>3. David's dad wanted to buy him new carpet for his bedroom. First David's dad measured his bedroom and found that it was 3.25m long and 2.96m wide. Then he contacted the shop who told him that carpet was sold in square metres (m²). How many square metres of carpet did they need?</p>				
<p>4. Jemma's family drive to their holiday destination. They drive until lunchtime which takes them 2 hrs 44 mins and 15 seconds. After lunch it takes another 3 hrs 12 mins and 44 seconds to reach their hotel. How long might they say the journey took if they were asked?</p>				

Spend Your Lottery Winnings

Congratulations – You have won £1 000 000 on the lottery. Which of the following items will you buy and how much will you have left? How close can you get to spending everything? You can buy more than one of each thing!



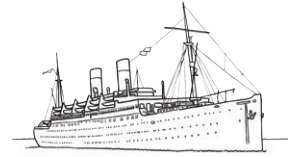
Fast Car
£49 995



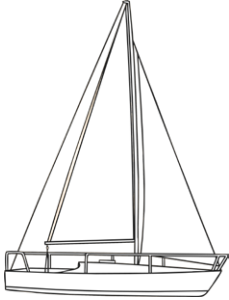
House
£459 356



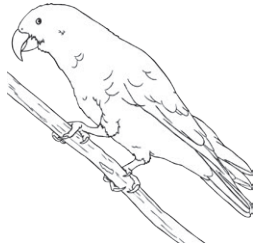
Giant TV
£2876



Round the World Cruise
£24 328



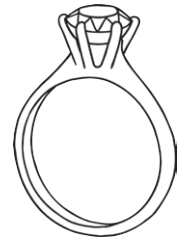
Sailing Boat
£119 345



Exotic Pet
£19 875



Entire wardrobe of clothes
£16 291



Diamond Ring
£11 853



Donation to charity
£25 000



Personal Assistant for 10 years
£212 592



Household Robot
£37 649



Video Games
£7842

Use this space to record your shopping list and your working and fill out the total you have remaining at the bottom.

Multi-Step Addition and Subtraction Problems

No.	Question	Calculation required (Do brackets first!)	Method	Answer
E.g.	The stadium has 25 000 seats – 11 348 adults and 2767 children come to see the game. How many empty seats are there?	$25000 - (11348 + 2767) =$		10 885
1.	Dorothy's family are saving money for a holiday costing £1845 – if they have already saved £490 and then raise £146 from a car boot sale, how much more do they need to save?			
2.	A study of 32 164 people found that 25 412 were right handed, 3849 were left handed and the remainder were ambidextrous (could use either hand) How many were ambidextrous?			

3.	<p>The crisp factory needs to make 85 000 bags an hour. If a machine breaks down and the factory only makes 47 233 bags in one hour, how many does it need to make in the next hour to catch up?</p>		<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																																																																																																																																																																																																			
4.	<p>Dave earns £19 385 a year as a bus driver and his wife earns £28 460 as a teacher. If Dave gets a pay rise of £217 a month how much less than his wife does he earn?</p>		<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																																																																																																																																																																																																			
5.	<p>If Cleopatra was born in 69 BC and lived to be 39 years old – how many years ago did she die?</p>		<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																																																																																																																																																																																																			

Addition With 5 Digit Numbers: Answers

question	answer
1	100 938
2	97 000
3	109 937
4	84 270
5	143 605
6	163 496
7	170 516
8	160 189
9	80 383
10	145 847
11	151 010
12	42 984

Subtraction With 5 Digit Numbers: Answers

question	answer
1	60 387
2	29 293
3	13 831
4	14 312
5	20 473
6	32 958
7	52 338
8	16 291
9	13 507
10	32 973
11	9129
12	14 641

Mental Maths Adding: Answers

question	answer
1	£1.40 or 140p
2	57
3	£8.00
4	102
5	37
6	145
7	£1.91 or 191p
8	67
9	170
10	80kg
11	£1.32 or 132p
12	119 seconds
13	100
14	110
15	85p
16	40
17	60
18	£1.23 or 123p
19	£1.24 or 124p
20	83

Subtracting Multiples of 1000: Answers

question	answer
1	3438
2	1049
3	4823
4	2234
5	1905
6	2369
7	3099
8	997
9	1804
10	4993
11	661
12	1880
13	2820
14	2713
15	778
16	6052
17	10 993
18	49 702
19	86 362
20	199 905
21	185 641
22	498 785
23	70 043
24	600 234
25	65 382
26	646 802
27	84 863
28	591 788
29	73 261
30	990 000

Adding Multiples of 1000: Answers

question	answer
1	4358
2	7829
3	12 083
4	8850
5	10 862
6	7409
7	8749
8	9597
9	9006
10	7385
11	10 763
12	12 015
13	9530
14	9165
15	8708
16	19 666
17	18 647
18	37 902
19	33 023
20	306 456
21	160 982
22	297 505
23	65 903
24	710 034
25	45 892
26	587 902
27	85 672
28	406 084
29	64 271
30	1 002 000

Mental Calculations Challenge: Answers

question	answer
1	130
2	20.74
3	25
4	129
5	10 002
6	345
7	1.1
8	99.9
9	127.2
10	509
11	3115
12	46 942
13	-26
14	90 000
15	5461
16	389

Using Rounding to Check Answers: Answers

question	answer		
	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
1	$600 + 400 = 1000$	No	1006
2	$900 + 200 = 1100$	Yes	
3	$200 + 300 = 500$	Yes	
4	$500 + 600 = 1100$	No	1072.21
5	$4600 + 3200 = 7800$	Yes	
6	$5400 + 2400 = 7800$	Yes	
7	$4900 + 2700 = 7600$	No	7592.43
8	$97400 + 87700 = 185100$	No	185112
	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
1.	$370 + 290 = 560$	Yes	
2.	$550 + 340 = 890$	Yes	
3.	$780 + 330 = 1110$	Yes	
4.	$230 + 170 = 400$	No	407.7
5.	$900 + 400 = 1300$	Yes	
6.	$350 + 380 = 730$	No	723.76
7.	$1760 + 40 = 1800$	No	1800.21
8.	$4870 + 150 = 5020$	Yes	

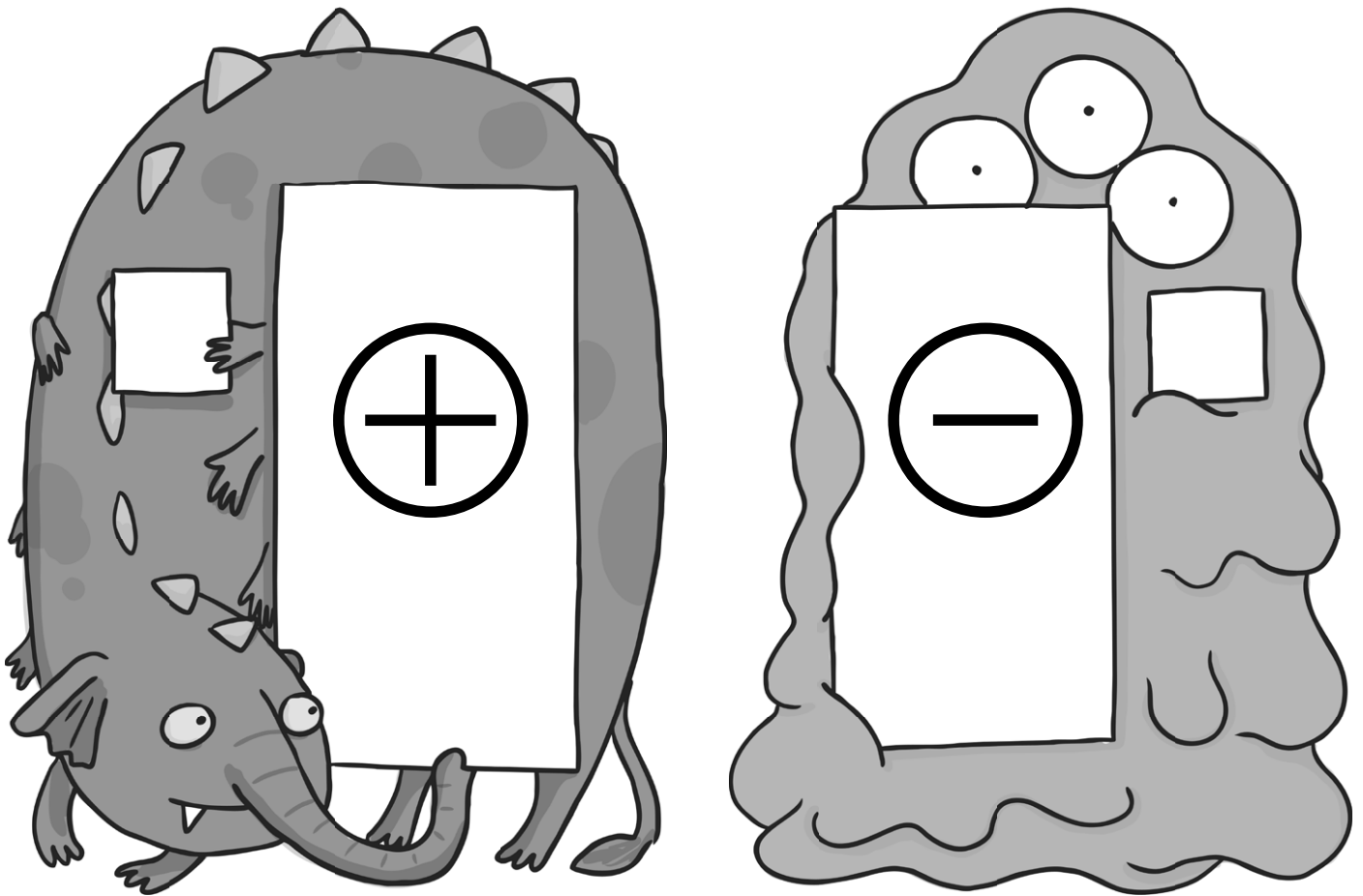
Rounding in Context: Answers

question	answer		
	Units	Rounded Answer	Reasoning
1	metres	8 metres	If the shop sells rope in metre lengths only, Charlie will have to round his answer up to make sure he has enough.
2	minibuses	11 minibuses	The answer needs to be rounded up to ensure everyone can get on a bus.
3	nights	27 nights	The answer needs to be rounded up because even though she reads fewer pages on the last night, she still needs that last night to get to the end of the book.
4	people	63 million	Here the answer can be rounded to the nearest million to make it simpler for a quiz. Also as people are being born and dying all the time, there cannot be a single exact answer.
5	Square metres	10 square metres	The answer needs to be rounded up to make sure David's dad has enough carpet to cover the floor.
6	Hours/minutes/seconds	6 hours	Answer is rounded to the nearest hour because anyone asking them would most likely not be interested in the exact minutes and seconds, just an idea of how long the journey took.

Multi-Step Addition and Subtraction Problems: Answers

question	answer	
1	$1845 - (490 + 146)$	£1209
2	$32164 - (25412 + 3849) =$	2903 people
3	$(85000 - 47233) + 85000 =$	122 767 bags
4	$28640 - ((12 \times 217) + 19385)$	£6471
5	$69 \text{ BC} + 39 = 30 \text{ BC}$ - $30 + ? = 2015$ (Answer depends on current year - 2015 has been used for this answer)	2045 years ago

Year 5 Maths Addition and Subtraction Workbook



Year 5 Maths Addition and Subtraction Workbook

Year 5 Programme of Study – Addition and Subtraction

Statutory Requirements	Worksheet	Page Number	Notes
add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	Addition with 5 digit numbers	3	
	Subtraction with 5 digit numbers	4	
add and subtract numbers mentally with increasingly large numbers	Mental Maths Adding Worksheets	5 - 6	
	Subtracting Multiples of 1000	7	
	Adding Multiples of 1000	8	
	Mental Calculations Challenge	9 - 10	
use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	Using Rounding to Check Answers	11	
	Rounding in Context	12 - 13	
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Spend Your Lottery Winnings	14 - 15	
	Multi-Step Addition and Subtraction Problems	16 - 17	

Addition With 5 Digit Numbers

$$\begin{array}{r} 1. \quad 56833 \\ + 44105 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 68640 \\ + 28360 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 92195 \\ + 17742 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 28446 \\ + 55824 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 68586 \\ + 75019 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 94929 \\ + 68567 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 84658 \\ + 85858 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 71778 \\ + 88411 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 34522 \\ + 45861 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 99394 \\ + 46453 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 98584 \\ + 52426 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 16373 \\ + 26611 \\ \hline \end{array}$$

Subtraction With 5 Digit Numbers

$$\begin{array}{r} 1. \quad 74321 \\ - 13934 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 52413 \\ - 23120 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 85232 \\ - 71401 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 32653 \\ - 18341 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 53145 \\ - 32672 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 46581 \\ - 13623 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 85913 \\ - 33575 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 29314 \\ - 13023 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 25521 \\ - 12014 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 91789 \\ - 58816 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 73471 \\ - 64342 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 76743 \\ - 62102 \\ \hline \end{array}$$

Mental Maths Adding Worksheet 1

Read the problems and add the answer in your head.

1. Add together 40p, 70p and 30p.

2. What is the total of 15, 19 and 23?

3. Lauren was given some money for her birthday. Her brother gave her £2.50, her sister gave her £1.00 and her grandma gave her £4.50. How much did she get in total?

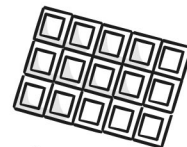


4. Omar collects 68 bus tickets and 34 train tickets. How many tickets does he have in total?



5. Caroline has 2 bags of apples. One bag has 13 red apples in and the other bag has 24 green apples. How many apples does she have in total?

6. What is the sum of 38, 20 and 87?



7. Samir buys three chocolate bars. A Mars that cost 62p, a Snickers that cost 59p and a Milky Way that cost 70p. How much did he spend in total?

8. A teacher gives out 16 pencils on Monday, 22 on Tuesday and 29 on Thursday. How many pencils did she give out in total?

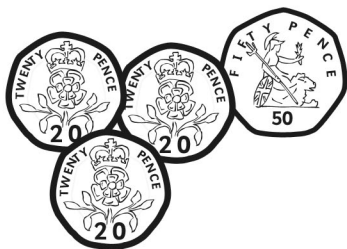
9. How much is 84p plus 39p plus 47p?

10. Three sacks of potatoes were delivered to a shop. They weighed 18kg, 35kg, 27kg. How much did they weigh in total?

Mental Maths Adding Worksheet 2

Read the problems and add the answer in your head.

1. Hannah has 58p and Max has 74p. How much do they have in total?
2. Jenny runs for 46 seconds and Ali runs for 73 seconds. What was the total time they ran for?
3. A shop has 78 ripe plums and 22 rotten ones. How many plums are there together?
4. What is the total when 72 is added to 38?
5. Mohamed finds 73p on his way to school and 12p on his way home from school. How much did he find in total?
6. Tarek collects drawings of owls. He has 24 drawings and his friend gives him 16. How many drawings does he have all together?
7. There are 32 children in one class and 28 children in another. What is the sum of the children in both classes?
8. Scott has 39p and Robert has 84p. What is the total amount of money?
9. Ashton gets 59p pocket money. She then finds 65p under her bed. How much does she have in total?



10. What is total when 34 is added to 49?

Subtracting Multiples of 1000

1. $6438 - 3000 =$

2. $3049 - 2000 =$

3. $9823 - 5000 =$

4. $6234 - 4000 =$

5. $7905 - 6000 =$

6. $4369 - 2000 =$

7. $6099 - 3000 =$

8. $2997 - 2000 =$

9. $7804 - 6000 =$

10. $9993 - 5000 =$

11. $8661 - 8000 =$

12. $6880 - 5000 =$

13. $4820 - 2000 =$

14. $6713 - 4000 =$

15. $9778 - 9000 =$

16. $11\,052 - 5000 =$

17. $17\,993 - 7000 =$

18. $55\,702 - 6000 =$

19. $89\,362 - 3000 =$

20. $203\,905 - 4000$

21. $194\,641 - 9000 =$

22. $501\,785 - 3000$

23. $73\,043 - 3000 =$

24. $604\,234 - 4000 =$

25. $70\,382 - 5000 =$

26. $652\,802 - 6000 =$

27. $91\,863 - 7000 =$

28. $600\,788 - 9000 =$

29. $80\,261 - 7000 =$

30. $1\,000\,000 - 10\,000 =$

Challenge

Can you subtract 2002, 3030 or 4400 or other multiples of 1001, 1010 or 1100 from some of the questions? What about multiples of 10 000?

Adding Multiples of 1000

1. $2358 + 2000 =$

2. $4829 + 3000 =$

3. $8083 + 4000 =$

4. $3850 + 5000 =$

5. $7862 + 3000 =$

6. $3409 + 4000 =$

7. $6749 + 2000 =$

8. $5597 + 4000 =$

9. $1006 + 8000 =$

10. $385 + 7000 =$

11. $8763 + 2000 =$

12. $9015 + 3000 =$

13. $6530 + 3000 =$

14. $1165 + 8000 =$

15. $4708 + 4000 =$

16. $11\ 666 + 8000 =$

17. $13\ 647 + 5000 =$

18. $28\ 902 + 9000 =$

19. $29\ 023 + 4000 =$

20. $300\ 456 + 6000 =$

21. $156\ 982 + 4000 =$

22. $289\ 505 + 8000 =$

23. $56\ 903 + 9000 =$

24. $707\ 034 + 3000 =$

25. $38\ 892 + 7000 =$

26. $579\ 902 + 8000 =$

27. $79\ 672 + 6000 =$

28. $399\ 084 + 7000 =$

29. $60\ 271 + 4000 =$

30. $996\ 000 + 6000 =$

Challenge

Can you add 2002, 3030 or 4400 or other multiples of 1001, 1010 or 1100 to some of the questions? What about multiples of 10 000?

Mental Calculations Challenge

Look at the varied addition and subtraction calculations below and work your way through them. See how many points you can score. You could play against others or set yourself a time limit.

Scoring system:

Score 2 points for every correct answer achieved after using a written method of calculation.

Score 0 points for any incorrect answer achieved after using a written method of calculation.

Score 3 points for every correct answer achieved after a mental calculation

Score 1 point for each incorrect answer achieved after using a mental calculation.

1. $68 + 45 + 17 =$

2. $14.6 + 6.14 =$

3. $78 - 53 =$

4. $42 + 43 + 44 =$

5. $9999 + 3 =$

6. $456 - 111 =$

7. $0.73 + 0.37 =$

8. $100 - 0.1 =$

9. $28.2 + 99 =$

10. $134 + 375 =$

11. $4586 - 1471 =$

12. $47\ 001 - 59 =$

13. $27 - 53 =$

14. $100\ 000 - 10\ 000 =$

15. $5362 + 99 =$

16. $408 - 19 =$

I scored points.

Using Rounding to Check Answers

Round these numbers to the nearest 100 and perform a mental calculation. Decide if your answer is close enough to the answer given to suggest that it is correct.

	Calculation	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
e.g.	$325.7 + 485.4 = 911.1$	$300 + 500 = 800$	No	811.1
1.	$615 + 391 = 906$			
2.	$872 + 211 - 1083$			
3.	$235.3 + 258.9 = 512.12$			
4.	$475.23 + 596.98 = 1172.21$			
5.	$4567 + 3219 = 7786$			
6.	$5387.3 + 2418.8 = 7806.1$			
7.	$4879.54 + 2712.89 = 7952.43$			
8.	$97433 + 87679 = 181152$			

Round these numbers to the nearest ten and perform a mental calculation. Decide if your answer is close enough to the answer given to suggest that it is correct.

	Calculation	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
e.g.	$456 + 242 = 698$	$460 + 240 = 700$	Yes!	
1.	$371 + 287 = 558$			
2.	$548 + 342 = 890$			
3.	$784 + 329 = 1113$			
4.	$234.8 + 172.9 = 307.7$			
5.	$896.6 + 402.7 = 1299.3$			
6.	$345.45 + 378.31 = 623.76$			
7.	$1762.99 + 37.22 = 2100.11$			
8.	$4873.23 + 151.82 = 5025.05$			

Rounding in Context

Rounding in context

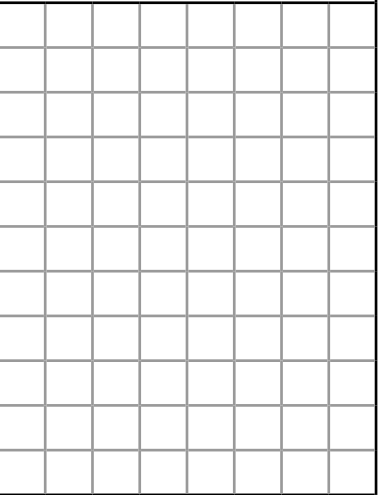
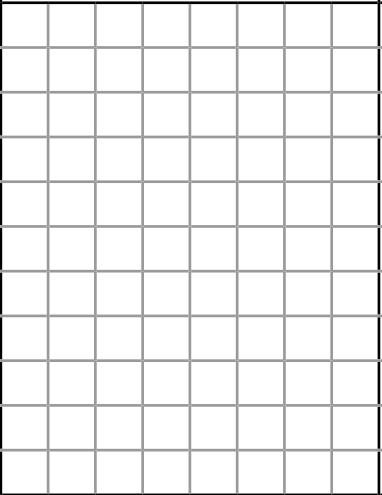
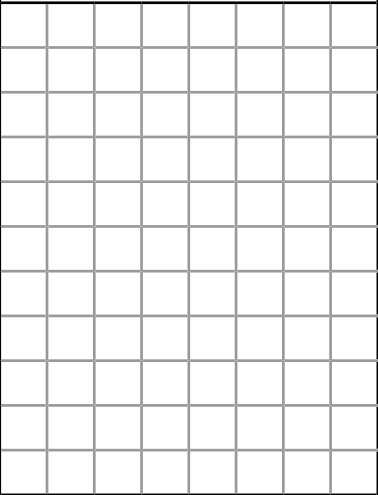
Look at the answers to these word problems. Can you suggest what a sensible rounded answer would be and why?

Question	Calculation	Units	Rounded Answer	Reasoning
<p>e.g. If George wants to buy a tablet that costs £112 and he has 27 weeks to save up for it – how much should he save per week?</p>	$112 \div 27 = 4.14811481$	Pounds	£4.15	I have rounded it to the nearest actual sum of money above what he needs so he can save real money and still have enough.
<p>1. Charlie wants to make a rope bridge in his garden. He has calculated that he will need 6 pieces of rope each 1.23 cm long. The shop sells rope by the metre – how much will he need to buy?</p>	$1.23 \times 6 = 7.38$			
<p>2. There are 137 people going on the trip to zoo and each minibus can take 13 passengers. How many buses will need to be booked for the trip?</p>	$137 \div 13 = 10.538461$			

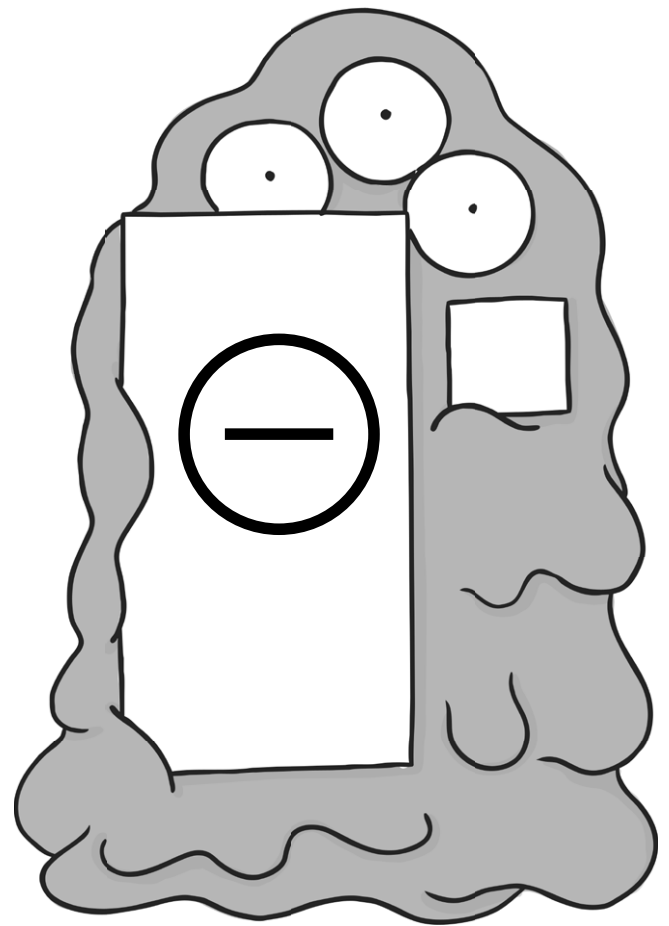
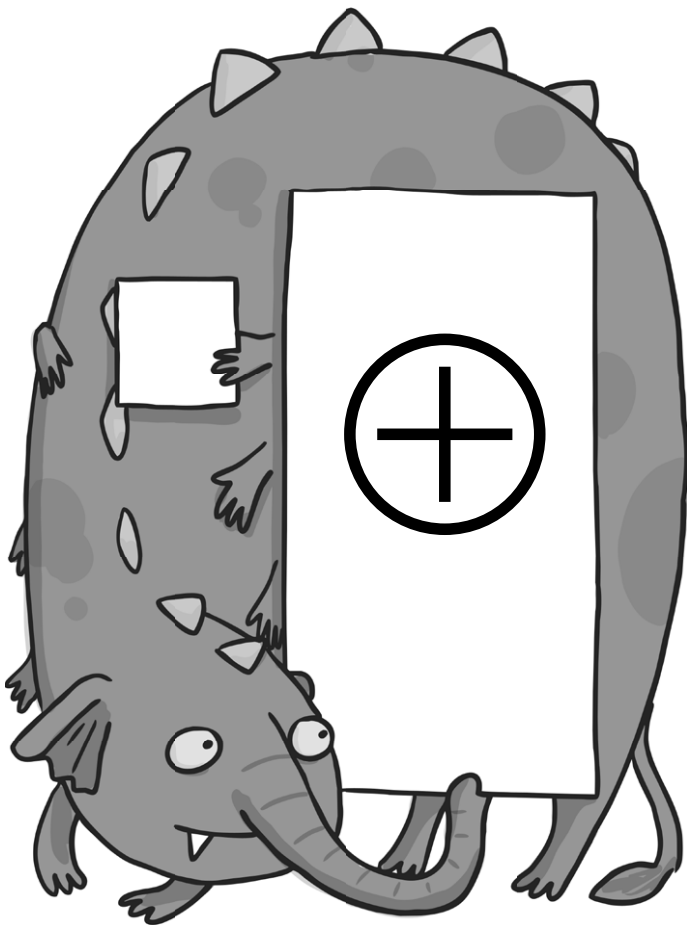
<p>3. Tina is reading a book which is 449 pages long – if she reads 17 pages a night before she falls asleep, how long will it take her to finish the book?</p>				
<p>4. Hamza wants to know what the population of the UK is for a quiz question. He finds out the following: England 53 124 565, Scotland 5 128 954, Wales 3 165 438, and Northern Ireland 1876031. What should the answer be in the quiz?</p>				
<p>5. David's dad wanted to buy him new carpet for his bedroom. First David's dad measured his bedroom and found that it was 3.25m long and 2.96m wide. Then he contacted the shop who told him that carpet was sold in square metres (m²). How many square metres of carpet did they need?</p>				
<p>6. Jemma's family drive to their holiday destination. They drive until lunchtime which takes them 2 hrs 44 mins and 15 seconds. After lunch it takes another 3 hrs 12 mins and 44 seconds to reach their hotel. How long might they say the journey took if they were asked?</p>				

Multi-Step Addition and Subtraction Problems

No.	Question	Calculation required (Do brackets first!)	Method	Answer
e.g.	The stadium has 25 000 seats – 11 348 adults and 2767 children come to see the game. How many empty seats are there?	$25000 - (11348 + 2767) =$		10 885
1.	Dorothy's family are saving money for a holiday costing £1845 – if they have already saved £490 and then raise £146 from a car boot sale, how much more do they need to save?			
2.	A study of 32 164 people found that 25 412 were right handed, 3849 were left handed and the remainder were ambidextrous (could use either hand) How many were ambidextrous?			

3.	<p>The crisp factory needs to make 85 000 bags an hour. If a machine breaks down and the factory only makes 47 233 bags in one hour, how many does it need to make in the next hour to catch up?</p>			
4.	<p>Dave earns £19 385 a year as a bus driver and his wife earns £28 460 as a teacher. If Dave gets a pay rise of £217 a month how much less than his wife does he earn?</p>			
5.	<p>If Cleopatra was born in 69 BC and lived to be 39 years old – how many years ago did she die?</p>			

Year 5 Maths Addition and Subtraction Workbook - Answers



Year 5 Maths Addition and Subtraction Workbook - Answers

Year 5 Programme of Study – Addition and Subtraction - Answers

Statutory Requirements	Worksheet	Page Number	Notes
add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	Addition with 5 digit numbers	3	
	Subtraction with 5 digit numbers	4	
add and subtract numbers mentally with increasingly large numbers	Mental Maths Adding Worksheets	5 - 6	
	Subtracting Multiples of 1000	7	
	Adding Multiples of 1000	8	
	Mental Calculations Challenge	9	
use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	Using Rounding to Check Answers	10	
	Rounding in Context	11	
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Spend Your Lottery Winnings	-	
	Multi-Step Addition and Subtraction Problems	12	

Addition With 5 Digit Numbers: Answers

question	answer
1	100 938
2	97 000
3	109 937
4	84 270
5	143 605
6	163 496
7	170 516
8	160 189
9	80 383
10	145 847
11	151 010
12	42 984

Subtraction With 5 Digit Numbers: Answers

question	answer
1	60 387
2	29 293
3	13 831
4	14 312
5	20 473
6	32 958
7	52 338
8	16 291
9	13 507
10	32 973
11	9129
12	14 641

Mental Maths Adding Worksheet 1: Answers

question	answer
1	£1.40 or 140p
2	57
3	£8.00
4	102
5	37
6	145
7	£1.91 or 191p
8	67
9	170
10	80kg

Mental Maths Adding Worksheet 2: Answers

question	answer
1	£1.32 or 132p
2	119 seconds
3	100
4	110
5	85p
6	40
7	60
8	£1.23 or 123p
9	£1.24 or 124p
10	83

Subtracting Multiples of 1000: Answers

question	answer
1	3438
2	1049
3	4823
4	2234
5	1905
6	2369
7	3099
8	997
9	1804
10	4993
11	661
12	1880
13	2820
14	2713
15	778
16	6052
17	10 993
18	49 702
19	86 362
20	199 905
21	185 641
22	498 785
23	70 043
24	600 234
25	65 382
26	646 802
27	84 863
28	591 788
29	73 261
30	990 000

Adding Multiples of 1000: Answers

question	answer
1	4358
2	7829
3	12 083
4	8850
5	10 862
6	7409
7	8749
8	9597
9	9006
10	7385
11	10 763
12	12 015
13	9530
14	9165
15	8708
16	19 666
17	18 647
18	37 902
19	33 023
20	306 456
21	160 982
22	297 505
23	65 903
24	710 034
25	45 892
26	587 902
27	85 672
28	406 084
29	64 271
30	1 002 000

Mental Calculations Challenge: Answers

question	answer
1	130
2	20.74
3	25
4	129
5	10 002
6	345
7	1.1
8	99.9
9	127.2
10	509
11	3115
12	46 942
13	-26
14	90 000
15	5461
16	389

Using Rounding to Check Answers: Answers

question	answer		
	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
1	$600 + 400 = 1000$	No	1006
2	$900 + 200 = 1100$	Yes	
3	$200 + 300 = 500$	Yes	
4	$500 + 600 = 1100$	No	1072.21
5	$4600 + 3200 = 7800$	Yes	
6	$5400 + 2400 = 7800$	Yes	
7	$4900 + 2700 = 7600$	No	7592.43
8	$97400 + 87700 = 185100$	No	185112
	Rounded Approximation	Does the original answer look correct based on rounded estimation?	Corrected Answer if necessary (You may need to recalculate)
1.	$370 + 290 = 660$	Yes	
2.	$550 + 340 = 890$	Yes	
3.	$780 + 330 = 1110$	Yes	
4.	$230 + 170 = 400$	No	407.7
5.	$900 + 400 = 1300$	Yes	
6.	$350 + 380 = 730$	No	723.76
7.	$1760 + 40 = 1800$	No	1800.21
8.	$4870 + 150 = 5020$	Yes	

Rounding in Context: Answers

question	answer		
	Units	Rounded Answer	Reasoning
1	metres	8 metres	If the shop sells rope in metre lengths only, Charlie will have to round his answer up to make sure he has enough.
2	minibuses	11 minibuses	The answer needs to be rounded up to ensure everyone can get on a bus.
3	nights	27 nights	The answer needs to be rounded up because even though she reads fewer pages on the last night, she still needs that last night to get to the end of the book.
4	people	63 million	Here the answer can be rounded to the nearest million to make it simpler for a quiz. Also as people are being born and dying all the time, there cannot be a single exact answer.
5	Square metres	10 square metres	The answer needs to be rounded up to make sure David's dad has enough carpet to cover the floor.
6	Hours/minutes/seconds	6 hours	Answer is rounded to the nearest hour because anyone asking them would most likely not be interested in the exact minutes and seconds, just an idea of how long the journey took.

Multi-Step Addition and Subtraction Problems: Answers

question	answer
1	$1845 - (490 + 146)$
2	$32164 - (25412 + 3849) =$
3	$(85000 - 47233) + 85000 =$
4	$28640 - ((12 \times 217) + 19385)$
5	$69 \text{ BC} + 39 = 30 \text{ BC}$ - $30 + ? = 2015$ (Answer depends on current year - 2015 has been used for this answer)