

Home Learning Pack

Dear Parents

- We have provided several tasks that will support your child's learning during the current school closure.
- Many of the tasks are based on what the children would have been studying in class.
- Work can be recorded in your child's Home Learning book where appropriate.
- As teachers will not be able to oversee or feedback on this work, any support you can provide will be helpful.

Year group: 4	
Curriculum area	Tasks
Reading	Read the texts and answer the accompanying questions. Use a dictionary to find the meaning of unknown words. Reading Comprehension (Four Stories): Day 1- Five minutes with Ben Schwartz Day 2- Crazy but True Day 3- News in Pictures Day 4- World News Spellings: Practise your spellings every day for 15 minutes. Write a sentence using each spelling. Find the meaning of each word using a dictionary.
Writing	By the end of this week, you are going to write an informal letter. For each day please check the activity pack attached below. Day 1 - To find out the features of an informal letter. Day 2 - To find out and understand what key workers do. Day 3 - Grammar: Contractions Day 4 - To write your informal letter.
Maths	Practise Times Tables Rock Stars every day. Ensure that you use 'soundcheck' at least twice a day. Day 1- L.O. To add numbers with up to 4 digits using column method. Day 2- L.O. To subtract numbers with up to 4 digits using column method. Day 3- L.O. To estimate and use inverse operations to check answers to a calculation. Day 4- L.O. To solve addition and subtraction two-step problems.
Topic based project based on research	Valiant Vikings- How did the Vikings differ from the Anglo-Saxons? Complete (or draw) the comparison grid using the following helpful websites: https://www.dkfindout.com/uk/history/anglo-saxons/https://www.dkfindout.com/uk/history/vikings/https://www.natgeokids.com/uk/discover/history/general-history/anglo-saxons/Origin- Where did they come from? http://www.primaryhomeworkhelp.co.uk/viking/where.html http://www.primaryhomeworkhelp.co.uk/saxons/where.html Language - What language did they speak? https://www.btheschoolrun.com/homework-help/vikings https://www.bb.uk/anglo-saxons/articles/who-were-the-anglo-saxons Temperament- What are the personality traits of the group? https://www.bbc.co.uk/bitesize/topics/zxsbcdm/articles/zwjq2hv https://www.bbc.co.uk/bitesize/topics/zxsbcdm/articles/zyiq2hv https://www.bbc.co.uk/bitesize/topics/zxsbcdm/articles/zs3gcdm http://www.primaryhomeworkhelp.co.uk/saxons/religion.htm https://www.bbc.co.uk/bitesize/topics/xxsbcdm/articles/zs3gcdm http://www.primaryhomeworkhelp.co.uk/viking/religion.html PSHE How can you be responsible at home? - Create a diary or take some photos to show how you are taking responsibility for yourself and your surroundings. Think about the following points: - Fold your clothes and put them away Wash the dishes Set/clear away the table Make your bed Help cook a meal with an adult. Science Electrical components and circuits activity. (See sheets attached)

Reading Comprehension

Four Stories

FirstNews • Issue 722 • 17th - 23rd April 2020



BEN Schwartz is the voice of the fastest hedgehog in town, in the new live-action film Sonic the Hedgehog.

How would you describe the differences between 'game Sonic' and 'movie Sonic'?

Well, I played Sonic for years. Now I am playing Sonic! There are aspects of the videogame that, if you have played it, you will see them in the movie. But we also wanted to make a movie that works for all ages, for everybody.

What's your Sonic like?

I'm playing him like a very energetic kid. I want it to feel like you're looking at a little kid who is just so excited to be there and so happy.

I tried to figure out the things that make him unique. You know, how quick he is, obviously, but also, he's kind of sassy. Like, when you wait too long, he starts tapping his foot! He has this attitude. He's a funny kid. He has fun and can't believe he has the opportunity to go and do whatever he wants. I was like: "I need to bring that."

Also, he's so fast that nothing has ever really been a threat to him, so he's so confident whenever he's doing anything. It's only when he meets Dr Robotnik that someone is really making him scared.



How did they turn you into the animated Sonic?

[First], they took pictures of me doing all of these different emotions with my face. We took a ton of pictures.

Then, when we were recording, they would put dots on my face and I would have a helmet with a camera and a light on, so any time I did anything, the animators would have something to animate from. [The dots are used by computers to track movement.]

I'm a little nerd for this stuff. I was very excited to get those dots because I've seen them used in *The Avengers* before, so it was very exciting! And to see the things Sonic does, and to see that he looks like me when he's doing them? That is a thrill beyond a thrill.



Sonic the Hedgehog is available to download and keep now!

DID YOU KNOW?

Sonic the Hedgehog is a videogame series made by Sega. Sonic first appeared in 1991, making the little hedgehog 29 years old!

CRAZY BUT TRUE

A father and son from America have invented a funny way to make sure people are keeping two metres apart from each other!

They call it the Social Distancing Circle. The pair linked together pipes to make the circle, then covered it with a tarpaulin. A video of them wearing the contraption and taking a wander in the park has been viewed millions of times.

"There were a few confused people," admitted the son. His dad added: "Some of them thought we were flying a big kite, others thought it was a trampoline.



4) What does Ben say is a "thrill beyond a thrill"?



Fans of Doctor Who will be familiar with the terrifying Daleks and their famous catchphrase, "EXTERMINATE!"

Now they're taking to the streets of Whitby! A Dalek was spotted patrolling the local area, warning: "All humans must self-isolate by order of the Daleks!"

The dustbin-shaped robots first appeared on TV way back in 1963. Many people still remember being scared of them when they were little.

A hairdresser in America has found a funny way to practise her skills during the lockdown.

While Geoff Clark works from home on his computer, his girlfriend Heidi styles his long hair — and shares the pictures! As you can see, she often chooses to make him look like a famous character, including Princess Leia from Star Wars and Poppy from Trolls. Heidi said that Geoff "has a heart of gold for letting me do this and post it"!



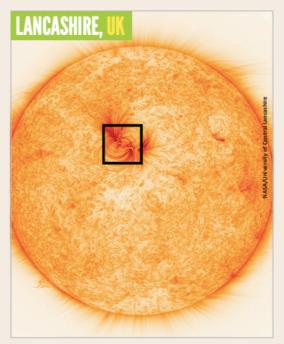
Questions on: 'Five minutes v	with Ben Schwartz'		
1) The character of Sonic the Hedgehog j	first appeared in a	5) Find three words Ben uses to describe the	ne character of Sonic
book videogame film	TV series	1:	
		2:	
2) "I played Sonic for years. Now I	am playing Sonic!"	3:	
Can you explain what the actor means?			
3) To act the character of Sonic, Ben trie	d to be just like a	6) Who do you think is the 'baddie' in the What information tells you this?	film and the games?
Hedgehog Little kid		7) Why did Ben have dots all over his face	during filming?
Videogame character		8) Can you think of another videogame tha	t could be turned
		into a film? Explain your choice and your id	

1) What links all these 'Crazy but True' stories?	Look at the story 'SELF-ISOLATE!'		
Look at the story 'Keeping your distance!' 2) Why have a father and son made a big plastic circle?	6) What do you find out about the Daleks? TV programme:		
3) What is a 'contraption'?	Favourite saying: Type of character:		
A mechanical or electrical gadget A machine or device that looks quite strange A cutting-edge invention	7) What is this Dalek saying as it moves around the s Whitby? Why do you think someone has made this D		of
4) What was the 'Social Distancing Circle' mistaken for?	Consider all the news. 8) True or false?	TRUE	FALS
	January January		
1: 2:	All the stories are from America.		
1: 2:			
1:	All the stories are from America.		
	All the stories are from America. All the stories contain quotes. All the stories are about pictures or videos		

NEWS IN PICTURES



The Taylor family from Wellington in Somerset spent six hours colouring every brick of their house with jumbo chalks to create a rainbow effect. They did it to "lift people's spirits" during the coronavirus lockdown. Mum, Fern Taylor, put pictures of the house on Facebook. She said that as they worked lots of people stopped to cheer them on and asked to take photos. "We even had an ambulance stop and say they loved it!"



Extraordinary, detailed images of the sun have been revealed by researchers at a university in Lancashire. They were taken by NASA's Hi-C telescope and show the sun's outer layer in detail for the first time. The threads you can see are filled with plasma (a form of gas) and are thought to be about a million °C!



Dedicated keepers at ZSL London Zoo decorated fresh eggs and created an egg hunt to entertain their meerkat mob this Easter. Even though the zoo is closed, the keepers are still hard at work looking after all the animals. Meerkats are a type of mongoose found in southern Africa. They mostly eat small insects, but the zoo explained they "sometimes come across eggs in the wild, which they see as a rare treat."

Questions on: 'News in Pictures'

1) Match 1	the	place	to	the	correct	news	subjec

Somerset

Easter treat for meerkats

Lancashire

Colourful bricks

London

Stunning sun pictures

Look at the news from Lancashire.

- 2) Which part of the sun is shown here in detail for the first time?
- 3) What two words does the writer use to describe the picture?

1:	 2:	

4) Find two facts about the strands you can see in the picture.

1:	
2:	

Look at the news from Somerset.

5) Can you answer these key facts about the news story?

Who? What? Why?

Look at the news from London.

6) We're in lockdown because of the coronavirus. Why aren't the zookeepers staying at home to keep safe?

True or false?

Eggs are a meerkat's main food.

A group of meerkats is called a mob.

Meerkats are a type of mongoose.

Meerkats are from North Africa.

Consider all the news.

8) Imagine you were creating a school newspaper. Which of these photographs would you choose to go on your front page? Explain your choice.

WORLD NEWS

NEW ZEALAND

STEEPEST STREET - AGAIN

Baldwin Street in New Zealand is once again 'the world's steepest street' after a rethink by Guinness World Records. Last year, the title was snatched by a street in Wales called Ffordd Pen Llech. It is a street in the medieval castle town of Harlech. But the people of Baldwin Street weren't happy and complained about how the measurements were taken.

Following an "intensive review",
Guinness agreed. Gwyn Headley, from
the Harlech team, said: "Blinking back
the tears, we would like to congratulate
Baldwin Street for winning the record."



*

KOALAS RELEASED

As the bushfire season comes to an end in Australia, lots of the koalas rescued from the terrible fires in December are being released back into the wild. Recent rains mean that there are plenty of new leaves on their favourite eucalyptus trees. They will be released back where they were found. Many will be returned to the exact same tree. Radio trackers will help scientists to check their progress.



NEPAL

RARE LEOPARDS TAGGED

Two rare snow leopards have been tagged and fitted with radio collars in Nepal. It's thought there are only 4,000 snow leopards left in the wild, making them at great risk of extinction. The WWF and the government of Nepal worked together on the project to catch the two male cats. The animals were tranquillised before being given a health

check and fitted with the tracking collars. It's hoped that the data collected will include information about where they live, their day-to-day movements and their behaviour. These big cats are very shy and spend most of their time high in the mountains, making it hard for scientists to study and understand them.

Questions on: 'World News'

Look at the news from Australia.

- 1) Why are so many koalas in rescue centres at the moment?
- 2) Why is now a good time to release the koalas?

Look at the news from New Zealand.

- 3) Two towns have been battling it out for which world record?
- 4) What did Guinness World Records decide last year? What did Guinness World Records decide last week?
- 5) Fill the gaps.

In Harlech,, you can fi	nd a
castle and the world's	steepest street.
) Look at Gwun Headleu's words. Ho	w does he feel about

6) Look at Gwyn Headley's words. How does he feel about losing this world record?

tosting this world record:	
He is heartbroken.	
He is sad but laughing.	
He doesn't care.	

Look at the news from Nepal.

7) Imagine you were planning this project. Can you think of four steps involved in the project, from beginning to end?
The first step has been started for you.

1: Capture the animals and
2:
3:
4:

Consider all the news.

8) In all the	news reports,	which part	gives a	useful
summary of	the story?			

The headline
The first sentence
The last sentence

Explain your choice.

Practise spelling these words!







cover





Summer 1 Week 2		
antiseptic		
anti-clockwise		
antisocial		
antidote		
antibiotic		
anti-venom		
anti-ageing		
antifreeze		
antiperspirant		
antigravity		

Day 1

LO: To find out features of an informal letter.

Activity:

Identify each feature of this letter example – use the key words to help you if you need!

Main text

Close Opening

		Conclusion
	33 Henry Avenue Rustington Sussex 30th September, 1939	Address Greeting
Dear Mum,		
I'm writing to tell you that I arrived safely and to say thank yo you packed in my case. How lovely to have a nice surprise after the same α	•	
When we got to Rustington, we all had to go into the village milk and buns. I shared mine with my best friend Rita Evans b on the floor. After that, we were lined up along the wall and came to choose evacuees to take home. Some children went brothers and sisters but unfortunately Rita and I got split up. I didn't matter as a really smiley lady called Mrs Clark asked, "and stay with me dearie?" So now, that's where I am. She say Ivy and her husband is Uncle Bob. What do you think of that?	ecause she dropped hers people from the village together especially the was disappointed but it Would you like to come	
Their house is a bit different to our flat in London. It stands looking garden with lots of vegetables growing and there's even Bob says it all helps to prop up our rations. He's apparently bee with their neighbour Mr Jacques to dig out spaces for an Ander up a load of grass and they're going to put it back over the toy metal. Auntie Ivy says he had to dig out all his prize roses to be thinks actually he can replant them over its roof. I took a peek beds for us all like a doll's house. Smells a bit damp and mucknow about sleeping in it. Unless there's an air raid, I'm in the cot bed. It's alright but I can't see out since there's only a little sup for me. Teddy lives on the bed and when we go to sleep, we sail back in London so you'll be safe.	en some chickens! Uncle in working every evening son Shelter. They've dug o afterwards to hide the build the shelter but she inside and it's got little sty mind you so I don't attic on a sort of canvas skylight and it's too high	
Guess what we did yesterday? We went paddling in the sea of was incredible fun and we splashed each other. Auntie Ivy says again though because the Home Guard are busily putting barbet to stop the Germans' ships invading from the sea. There are all the dunes to stop the planes.	we won't be able to do it d wire along the beaches	
Have you had a letter from Dad yet? I asked Uncle Bob if he whe's in a reserved occupation at the water board so he has to si		
I miss you, Nanny and Didi very much. Can you come and viswrite and tell me what's happening at home.	sit me here soon? Please	
Lots of love,		
Jane X		
p.s. Auntie Ivy says I can send you a jar of her homemade strav	vberry jam. It's yummy!	

Question: Can you think of a real-life example of the use of informal letters?



33 Henry Avenue Rustington Sussex 30th September, 1939

Address

Greeting

Dear Mum,

I'm writing to tell you that I arrived safely and to say thank you for the new hair slides you packed in my case. How lovely to have a nice surprise after such a long day!

Opening

When we got to Rustington, we all had to go into the village hall where they gave us milk and buns. I shared mine with my best friend Rita Evans because she dropped hers on the floor. After that, we were lined up along the wall and people from the village came to choose evacuees to take home. Some children went together especially the brothers and sisters but unfortunately Rita and I got split up. I was disappointed but it didn't matter as a really smiley lady called Mrs Clark asked, "Would you like to come and stay with me dearie?" So now, that's where I am. She says I've to call her Auntie Ivy and her husband is Uncle Bob. What do you think of that?

Their house is a bit different to our flat in London. It stands in the middle of a fine-looking garden with lots of vegetables growing and there's even some chickens! Uncle Bob says it all helps to prop up our rations. He's apparently been working every evening with their neighbour Mr Jacques to dig out spaces for an Anderson Shelter. They've dug up a load of grass and they're going to put it back over the top afterwards to hide the metal. Auntie Ivy says he had to dig out all his prize roses to build the shelter but she thinks actually he can replant them over its roof. I took a peek inside and it's got little beds for us all like a doll's house. Smells a bit damp and musty mind you so I don't know about sleeping in it. Unless there's an air raid, I'm in the attic on a sort of canvas cot bed. It's alright but I can't see out since there's only a little skylight and it's too high up for me. Teddy lives on the bed and when we go to sleep, we say a little prayer for you all back in London so you'll be safe.

Main Text

Guess what we did yesterday? We went paddling in the sea and built sandcastles! It was incredible fun and we splashed each other. Auntie Ivy says we won't be able to do it again though because the Home Guard are busily putting barbed wire along the beaches to stop the Germans' ships invading from the sea. There are also anti-aircraft guns in the dunes to stop the planes.

Have you had a letter from Dad yet? I asked Uncle Bob if he was going to join up but he's in a reserved occupation at the water board so he has to stay in Sussex.

Conclusion

I miss you, Nanny and Didi very much. Can you come and visit me here soon? Please write and tell me what's happening at home.

Lots of love,

Close

Jane X

p.s. Auntie Ivy says I can send you a jar of her homemade strawberry jam. It's yummy!

Examples of real-life examples:

- Writing to a friend
- Writing to a family member
- Writing to someone who you don't have a professional relationship with

<u>Day 2</u>

LO: To find out and understand what key workers do.

Choose one or more professions that you would like to research and fill in the grid. If you want you can add another key worker that you would like to find out about. Remember: there are many people who are key workers.

Profession	What is their role?	How does this key worker contribute to our society?	How long does it take to train?	How many hours do they work?
Doctors/Nurses				
Supermarket worker				
worker				
Teacher				

LO: To understand what a contraction is.

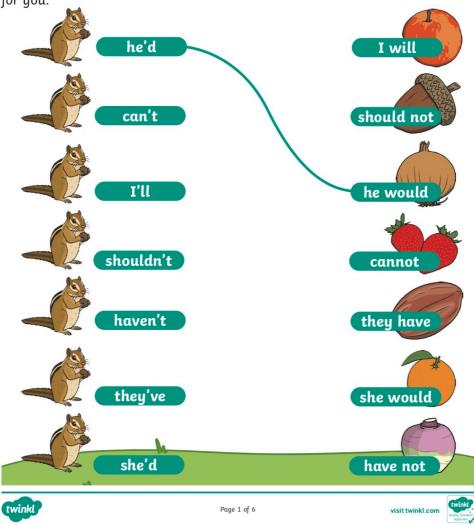
Contractions will help you when you are writing your informal letter.

Watch: https://www.bbc.co.uk/bitesize/topics/zvwwxnb/articles/zcyv4qt

Contraction Chipmunks The contraction chipmunks have left the burrow to find food but they have forgotten which items they have to

food but they have forgotten which items they have to collect. Help the contraction chipmunks find their way to the correct food item by matching the word on each chipmunk to the expanded form on the food.

Draw a line to match the chipmunk to the food item. One has been done for you.





Chris Contraction

Chris Contraction has been set some homework by his teacher. However, he is finding the work a little tricky. Can you help him complete the following questions by writing the correct answer in the space provided?

Write the contraction:

I will		would have	n
they have		does not	
he is		it is	
you are		we are	
do not			
Vrite the e	xpanded form:		
don't		he's	S
what's		where's	
we're		you'll	
can't		I'd	







Detective Daisy

Detective Daisy is looking for words that can be contracted in the following sentences. Can you help her find them by writing each sentence out again with the contracted word form?

For example:

Expanded form: In the morning, **they will** be going on holiday. **Contracted form:** In the morning, **they'll** be going on holiday.

1.	Later, we are going to the park.
2.	Lucy was amazed! She had never been to such a fantastic place.
3.	I have always wanted a pet dog.
4.	Where is the party tomorrow afternoon?
5.	John is very friendly and he is funny too.
6.	It is very late so we will finish the game tomorrow.
7.	In the cave, there is a mighty dragon.





Missing Apostrophe

Below are some sentences with contracted words. However, all the apostrophes are missing! Can you add the apostrophe to each contracted word so that the sentences make sense?

twi	nkl Page 4 of 6 visit twinkl.com visit twinkl.com
10.	I wont stay up too late becasue its a school night.
9.	Lets play football today.
8.	Hes going outside because its hot inside.
7.	My parents are very caring and theyre kind.
6.	Sarah was nervous because she hadnt been on an aeroplane before.
5.	When youve taken your medicine, youll feel better.
4.	The tiger is very big aand shes very dangerous!
3.	Were going to be late if we dont hurry.
2.	She wont be able to climb the mountain because its too big.
1.	Whats inside the box?

Answers

Contraction Chipmunks

he'd - he would can't - cannot I'll - I will

I'll - I will
shouldn't - should not
haven't - have not
they've - they have
she'd - she would

Chris Contraction Write the expanded form

I will - I'll
they have - they've
he is - he's
you are - you're

do not - don't

would have - would've does not - doesn't

it is - it's

we are - we're

Write the contraction

don't - do not

what's - what is/what has

we're - we are can't - cannot

he's - he is/he has

where's - where is/where has

you'll - you will I'd - I had

Contraction Detective

- 1. Later we're going to the park.
- 2. Lucy was amazed! She'd never been to such a fantastic place.
- 3. I've always wanted a pet dog.
- 4. Where's the party tomorrow afternoon?
- 5. John's very friendly and he's funny too.
- 6. It's very late so we'll finish the game tomorrow.
- 7. In the cave, there's a mighty dragon.

Missing Apostrophe

- 1. what's
- 2. wont't/it's
- 3. we're/don't
- 4. she's
- 5. you've/you'll
- 6. hadn't
- 7. they're
- 8. he's/it's
- 9. let's
- 10. won't





Day 4

LO: To write an informal letter.

Today you are going to be writing a letter to someone who is a key worker, you do not need to know them.

You can refer back to Day 1 where you identified the features of an informal letter.

You will need to:

Introduce yourself and say why you are writing to them.

Dear all workers at the NHS,

My name is Esther and I am writing to say thank you for everything that you are doing to help us during this time.

Follow a structure and include research that you have done on the profession.

I am amazed by the number of hours that you work every day, it shows that you are selfless and very hard working.

I was very surprised when I found out that doctors need to train for five years at university before becoming doctors

End the letter

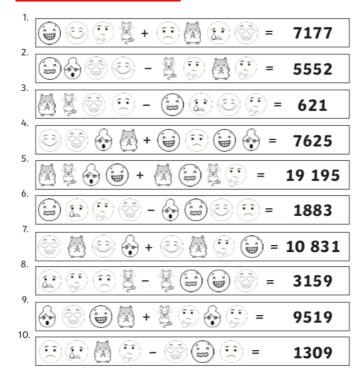
Many Thanks,

Esther

Emoji Code Breaking

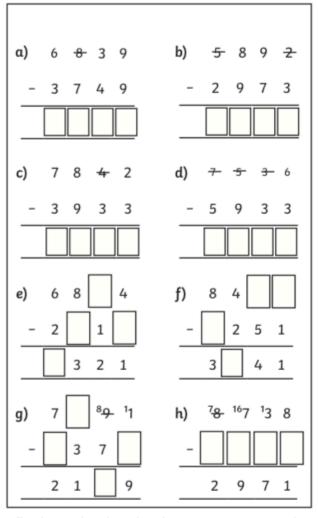
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○ ○ ★ • + · · · · · · · · · · · · · · · · · ·
1.
2.
3.
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6.
(
8.
9.
10.

Activity 1 Answers:



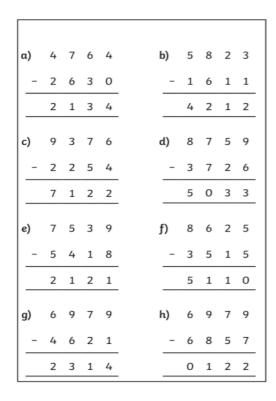
Maths Activity 2: Subtraction of up to 4 digits using column method

Solve the subtraction questions using column method.



Fill in the gaps by solving the subtraction question using column method.

Activity 2 Answers:



Maths Activity 3A: Estimating to check answers

Estimate Answers Speed Challenge

How many points can you score on the speed challenge? Set up a countdown timer for your chosen time limit and use your rounding skills to estimate the answers to as many questions as you can. When the time is up, check that your answers were in the allowable range. Score 1 point for each accurate estimate from list 1, 2 points from list 2, 3 points for list 3 and 4 points for list 4. No extra points for fully correct answers! Good luck!

	List 1	Estimate	List 2	Estimate	List 3	Estimate
1.	17 + 39		43 + 128		123 + 104	
2.	21 + 48		17 + 162		136 + 153	
3.	33 + 59		29 + 194		178 + 329	

Activity 3A Answers:

question		answer										
	List 1 Allowable Range = 10	List 2 Allowable Range = 50	List 3 Allowable Range = 50									
1	50 to 60	150 to 200	200 to 300									
2	65 to 75	150 to 200	200 to 300									
3	85 to 95	200 to 250	450 to 550									

Maths Activity 3B: Using the inverse to check answers

Geoffrey has left his homework until the last minute and has rushed through some of the questions. Can you check his homework using the inverse operation?

Question	Calculation		e answer is incorrect, what the correct calculation?
e.g.	776 - 445 <u>322</u>	4 4 5 + 3 2 2 x ·	7 7 6 - 4 4 5 3 3 1
1	1984 + 587 2571		
2	972 - 284 - 588		

3	298 + 1475 1663								
4	9857 - 2743 7114								

Activity 3B Answers:

Question	Calculation	Correct?	If the answer is incorrect, what is the correct answer?
** 1	1984 + 587= 2571	✓	
★★2	972- 284 = 588	×	688
** 3	298 + 1475 = 1663	×	1773
★★ 4	9857- 2743 = 7114	√	

Maths Activity 4: Solve addition and subtraction two-step problems

No.	Question	Calculation required (Do brackets first!)	Method						Answer					
e.g.	The cinema has 700 seats – 113 adults and 276 children come to see the film. How many empty seats are there?	\								_	9			311 empty seats
			H			1					Ø			
			H	+		7	-	-	-	3	8	-		
			Н		3	8	9			3	1	1		
1.	Dorothy is saving her money for a new bike costing £286. If she has already saved £39 and is then given £59 for her birthday, how much more does she need to save?													
2.	A study of 900 people found that 687 were right handed, 174 were left handed and the remainder were ambidextrous (could use either hand). How many were ambidextrous?													

3.	The crisp factory needs to make 875 bags an hour. If a machine breaks down and the factory only makes 323 bags in one hour, how many does it need to make in the next hour to catch up?					
4.	Dave earns £1485 a month as a bus driver and his wife earns £1760 as a teacher. If Dave gets a pay rise of £217 a month how much less than his wife does he earn?					
5.	If William Shakespeare was born in 1564 and lived to be 52 years old, how many years ago did he die?					

Activity 4 Answers:

question		answer				
1	£286 - (39 + £59)	188 more to save				
2	900 - (687 + 174)	39 people				
3	(875 - 323) + 875	1427 packets of crisps				
4	£1760 - (1485 + £217)	58 less				
5	current year - (1564 + 52)	answer will change each year				

Further support

Column addition and subtraction: (Ones and Units mean the same thing)

https://www.youtube.com/watch?v=7ujcg3HAyNY https://www.youtube.com/watch?v=FzLlzzIQIDM

Estimating:

https://www.youtube.com/watch?v=4vTvgn7AqbA https://www.youtube.com/watch?v=pNfz-JU2cKE&t=69s

Using the inverse:

https://www.youtube.com/watch?v=HvBr-OSH7fw

Solving two-step word problems

https://www.youtube.com/watch?v=kDQN7G-WdWk

<u>Learning Quest:</u> How did the Vikings differ from the Anglo-Saxons?

	Vikings	Anglo-Saxons
Beliefs		
What religion did they practise?		
Temperament		
What are the personality traits of the group?		
Language		
What language did they speak?		
Origin		
Where did they come from?		

Optional Extension:

Use the information that you have gathered to write four paragraphs discussing the similarities and differences between the Vikings and the Anglo-Saxons. Remember to include a range of conjunctions.

Science: Electrical Components and Circuits

Electrical components and circuits





Thomas Edison



- Why are they significant?
- · Have you heard of these people?

Benjamin Franklin

- Proved that lightning was electricity by flying a kite in a lightning storm
- Helped people understand the principles of electricity

Thomas Edison

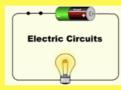
- Invented the electrical light bulb

What is electricity?

- · Electricity is a form of energy
- · It is caused by a flow of tiny particles called electrons through a material

What is an Electrical Circuit?

· A circuit is an electrical device that provides a path for electricity to flow



Complete or Incomplete?

- · A complete circuit is where all the components of a circuit are joined up and there are no gaps
- · The pathway for electricity is complete



Complete or Incomplete?

- · An incomplete circuit is where the pathway for electricity is broken
- · The electricity cannot flow

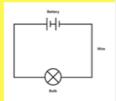


Circuit Diagrams

· An easy way to draw a circuit is with a circuit diagram

TASK

- · Draw a complete
- Draw an incomplete circuit



Circuit Diagrams

RULES:

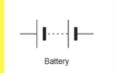
- 1. Each component has its own symbol
- 2. Wires connect the components
- 3. Wires must be drawn with straight lines with
- 4. The wires should never cross each other

Component Symbols - a cell



- · A cell is what gives the circuit power
- The long line is the positive end
- · The short line is the negative end

Battery

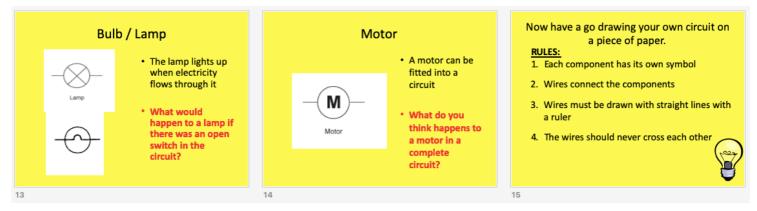


- A battery is made up of 2 or more
- · It gives the circuit
- It is important that right way

Switch



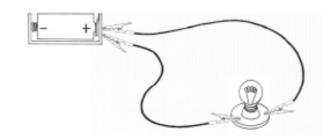
- · A switch can be open (as shown) or closed
- · When the switch is open, the circuit is incomplete - no electricity can flow
- What happens when the switch is closed?

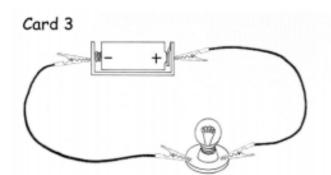


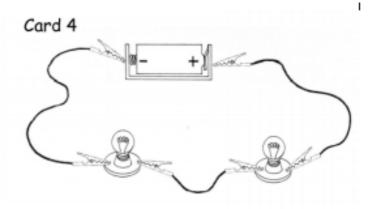
In the answer column put a tick or cross whether you think the circuit is complete, give your reason for your prediction. The first one has been done for you.

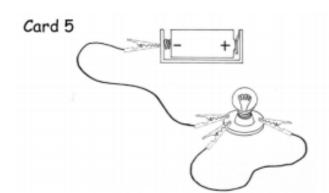
Circuit Card	Answers	Prediction
1	Х	I think the light bulb will not light because there is a wire missing from the negative end of the battery to the light bulb. Therefore it is not a complete circuit.
2		
3		
4		
5		
6		
7		
8		
9		
10		

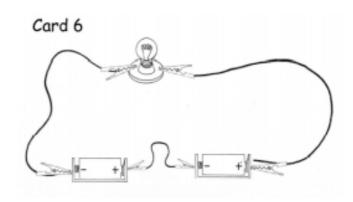


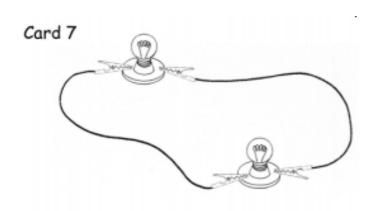


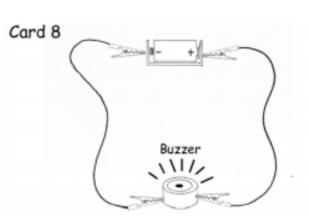




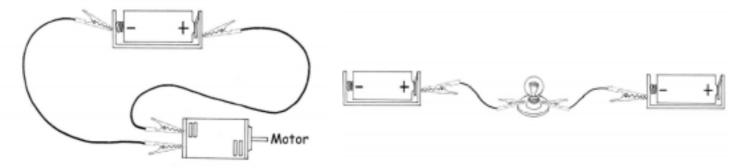








Card 9 Card 10



Answers

Circuit Card	Answers	Prediction
1	X	The light bulb will not light because there is a wire missing from the negative end of the battery to the light bulb. Therefore, it is not a complete circuit.
2	Х	The light bulb will work because both wires are connected to the positive end of the battery. It is not a completed circuit.
3	V	This bulb will light up/work as all the wires are attached in the right place. It is a complete circuit.
4	V	This bulb will light up. However, the bulbs will be dim as there are two. This is a complete circuit.
5	Х	The bulb will not light up as one of the wires is attached to the bulb and not the positive end of the battery. Both ends of one the wires are attached just to the bulb. This is an incomplete circuit.
6	V	This is a complete circuit. The bulb will light up even though there are two batteries.
7	X	There is not a cell or a battery powering the bulbs, they will not work. This is not a complete circuit.
8	V	This circuit is complete and will work. There is a wire from the negative end and the positive end of the battery connecting to the buzzer.
9	V	This circuit is complete and will work. There is a wire from the negative end and the positive end of the battery connecting to the motor.
10	X	This is not a complete circuit. There is a wire missing from the negative end of one of the batteries and positive end of the other battery.

