

Hello Gondolas!

I hope you are all doing well and that you are either enjoying your time at school or at home. If you are still completing the homework, then well done! You should be very proud of yourself for keeping it up for so long.

Q1.

This text is about how ladybirds helped farmers in California to get rid of a plague of tiny insects that were killing their orange trees.



California's Unlikely Warriors

Over 100 years ago in America, Californian orchards were almost destroyed by a plague of thousands of tiny creatures called scale insects. These tiny sap-sucking bugs were attacking the orange trees and ruining all the fruit.

Scale insects had never been seen in America before. So where had they come from? Eventually the invasion was traced to some acacia plants that had been shipped in from Australia.

The scale insects spread so quickly that unless something was done to get rid of them, the whole fruit industry in California would be ruined. The situation was so bad that Californian fruit growers were pulling up their fruit trees and burning them to destroy the pests. Soon, the takeover started to spread to other parts of America. Different kinds of pesticides were used to try to kill the insects but none of them worked.

By now thousands of orange trees were dying.

A professor from the Department of Agriculture, Charles V. Riley, suggested that the scale insects might be controlled by introducing other insects to feed on them. But no-one listened to him. No-one had ever heard such a theory before! They thought it was a crazy idea and laughed at his suggestion. This made Mr Riley more determined. He was sure that he was right.

He had heard that in Australia, scale insects were much less of a problem. So, why was this? Why were the Australians not suffering the same damage to their trees

and plants?



Mr Riley predicted that the Australian scale insects must have a natural enemy that was reducing their numbers. Eventually he was able to persuade a researcher called Alfred Koebele to go to Australia to try to find out if this was the case.



In Australia, Mr Koebele visited many of the trees that attracted scale insects and made a surprising discovery – a large number of small colourful beetles were living in them. They were ladybirds, and everywhere he found scale insects on the fruit trees of Australia, he found ladybirds feasting on them. Mr Koebele scooped up as many of the little red and black creatures as he could and sent them back to California.

When the unlikely warriors were set free in one of the dying Californian orange groves, they cleared all the scale insects from the trees in just a few days. The original 350 ladybirds sent from Australia multiplied at such a staggering rate that by June that year over 10,000 were available to be distributed to fruit growers across California. The speed at which the pests were wiped out was astonishing. One grower, who had abandoned all hope for his young orange trees, was able to harvest two to three boxes of oranges from each tree by the end of the growing season.

So successful was the experiment that soon the Americans were breeding and distributing more and more ladybirds. Not only that, but before long other countries around the world also decided to import and breed Australian ladybirds.

Because of this remarkable result, we now know a lot more about these ladybirds. We know that scale insects are their favourite food and that some ladybirds can eat large amounts in a day. Ladybirds also like to eat honeydew, nectar and pollen – but they still need insects to help them grow and breed.

Today, scientists are still studying ways of using insects to help control the pests and parasites that regularly destroy our plants and trees. As we learn about some of the damage that chemical pesticides can cause, it seems even more important to take care of small creatures that can help us protect our environment.

There is an old superstition which says that ladybirds bring you luck. They certainly brought good fortune to the fruit growers of California!



Monday

Q2.

1. How long ago did the plague of scale insects attack in America?

1 mark

2. What did the scale insects attack?

1 mark

3. The scale insects sound like an army.

Find and copy two words in the first two paragraphs that support this idea.

1. _____

2. _____

2 marks

4. It was important to find a solution to the plague of insects quickly.

Explain why.

1 mark

5. Before ladybirds were introduced, how did the fruit growers try to solve the problem of scale insects?

1 mark

Tuesday

6. Look at page 1.

1. What did Mr Riley suggest to solve the problem of scale insects?

1 mark

2. How did other people react to Mr Riley's suggestion?

1 mark

7. In the paragraph beginning: *In Australia, Mr Koebele visited...*, the ladybirds are described as *feasting* on the scale insects.

What does the word *feasting* suggest about the ladybirds?

1 mark

8. Look at the paragraph on page 2 beginning:

When the unlikely warriors...

How does the text emphasise the success of the ladybirds?

Explain fully, referring to the text in your answer.

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9. Tick one box in each row to show whether each statement about ladybirds is **true** or **false**.

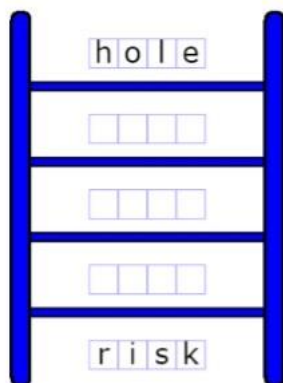
	True	False
They help protect the environment.		
They only eat scale insects.		
They can survive on just nectar and pollen.		
Some people say that they bring you good luck.		

1 mark

Wednesday

This week, we are going to be using some stories from Newsround as inspiration for our writing.

Change a letter each time so you eventually get the word on the bottom. You cannot rearrange the letters within the word. The word below each other word must be exactly the same apart from one letter.



Girls become friends through a message in a bottle

<https://www.bbc.co.uk/newsround/53261453>

- 7 Jul 2020 7 Jul 2020

Have you ever imagined finding a message in a bottle sent by someone far away? That's exactly what happened to 11-year-old Sarah Beth from Florida in the US.

She was on holiday in the state of North Carolina when she found a message from 11-year-old Sofia washed up on a beach - 700 miles away from where it started its journey.



Sofia, from New York, was on holiday in Florida when she wrote the message saying how fed up she was of coronavirus.

Sarah Beth got in touch using the contact number in the letter and they've been messaging ever since.

If you were to write a message in a bottle, where would you like it to end up and what would you write?

Task:

Write your own letter which could go inside a bottle.

Thursday

Change a letter each time so you eventually get the word on the bottom. You cannot rearrange the letters within the word. The word below each other word must be exactly the same apart from one letter.



Disco lights keep elephants away from farmland in Botswana

7 Jul 2020 7 July 2020
Last updated at 11:27

<https://www.bbc.co.uk/newsround/53317762>



Not everyone likes to dance, it seems. Well, that's what scientists in Africa have discovered with a new way to protect crops from wandering elephants - and that's to put on a disco!

OK, so here's the explanation. Scientists from conservationist group Elephants Without Borders realised that elephants are more alarmed by disco lights than by barking dogs. It's after a disco-effect strobe barrier was set up in Botswana to keep elephants away from farmland crops.

Botswana, in Africa, is home to the world's largest elephant population. Lots of rural communities live alongside the banks of the Chobe River with their farming fields close by.

Alongside them live 7,500 elephants who pass through farming areas at night to get to the river to eat and drink. When elephants travel through the area they can cause damage to farmers' property and crops while also scaring people.

Because of this, farmers and conservationists have been trying to find new ways to help protect farms from elephants. They want the people living there to be able to live alongside the elephants but also save the crops so the local people can have food and money for their families.

So how does it work?

Well farmers have been coming up with lots of ways to keep elephants away. Things like building fences and using barking dogs, but none of it has worked in the area.

What did work was them quickly flashing torches on and off to scare the animals away. So scientists from Elephants Without Borders got to work to come up with a plan.

They placed colourful solar-powered strobe lights along the side of the field that farmers had previously seen elephants enter.

These lights shot out colourful patterns along the field which were changed every week so it would appear different to elephants passing through the area. If the elephants tried to enter the field from an area where there was no barrier, the lights could easily be moved to the new location.

The lights reduced the amount of damage caused by elephants to the farmers' crops, showing promising results for improving human-elephant coexistence.

Mr Deaconos, a farmer who took part in the experiment, said: "Before I had the lights in my field I had more elephants raid, which made it difficult to have a successful harvest, but in these two seasons with lights I have harvested successfully, we really think the lights work".

Task

Many people dislike snails in their garden as they eat the leaves of their precious plants! Can you come up with a strange and unique way of stopping snails from entering your garden? It can be as creative as you like- don't worry about if it would actually work!

Alternatively, you can think of a way to stop a different animal doing something that may be annoying for humans!

Use the headings and sentence starters below to write your own article for Newsround.

Article Headline

Opening sentence explaining what the problem was and how it was solved.

So here's an explanation...

This works because...

Local residents have said...

Task

Imagine you were running for Prime Minister.

What 3 things would you most want to change about the way the UK is run?

Why are those things important to you?

Your task is to write a speech convincing the citizens of the UK that you should be the next Prime Minister. You must clearly state what you would change and why and how this would be beneficial to everyone.

1. **Greeting - Attention Getter - the hook**
You'll need an opening statement or rhetorical question to sit your audience up with open ears and mind.
2. **Who you are** - your name, your current role in the Government
3. **What you want** - the role you are campaigning for- Prime Minister
4. **What you are going to do for the audience** - benefits to them in exchange for their vote.
(Brief summary -you will expand this in the body of your speech.)
 5. **Credibility** - your qualification or expertise establishing your fitness for the role you want.
(Brief summary - you will expand this in the body of your speech.)
 6. **Main Idea 1** – One thing that you will change, how you will do this and why it is important
 7. **Main Idea 2** - One thing that you will change, how you will do this and why it is important
 8. **Main Idea 3** - One thing that you will change, how you will do this and why it is important
9. **One or two sentences summing up your ideas**