

ANIMAL NEWS

POISONOUS PEST CONTROL

FLEA treatments used on cats and dogs are accidentally poisoning rivers and lakes, say scientists.

Fleas are a pain and our pets can bring them into the house. So, to prevent cats and dogs getting fleas, pet owners give them a flea treatment. This is usually a liquid that is rubbed on to the animal's neck once a month.

A new study by scientists has found that the insecticide (a chemical that kills insects) is getting into our rivers.

Samples of water were taken from 20 rivers in England. Scientists found traces of fipronil in over 98% (almost all) of the samples. Fipronil is a highly toxic insecticide used in pet flea treatments.

The same substance is banned for use by farmers as it is so toxic.

There are concerns that the amount of fipronil found in rivers will affect the insects that live in water. If these insects die, the fish and birds that feed on them will also struggle to survive.

One of the scientists behind the study said the results were "extremely concerning."

There are an estimated ten million dogs and 11 million cats in the UK. Many of them will be given a flea treatment every month, whether they need it or not.

The scientists say we need to rethink how we manage our pets' fleas.



Questions on: 'Poisonous pest control'

1) What is a 'flea treatment'?

2) What type of minibeast is a flea?

- Spider
- Insect
- Mollusc

3) What is the name of the chemical that kills this type of creature?

4) Can you explain what has been discovered by scientists in a new study?

5) How did the scientists make this discovery? What did they do?

6) Scientists found traces of fipronil in the water. What does the word 'traces' tell you?

7) How do you think the flea treatment is getting into our rivers? You aren't told the answer, give your own ideas.

8) Imagine you are an expert who has been asked to rethink how we manage fleas.

What changes could be made? What questions would you ask, or want to investigate?

WORLD NEWS

FRANCE

**● Too high-tech**

Champagne (“sham-pain”) is a fizzy wine made only in the Champagne region of France. It is one of France’s most famous creations. This year a grower has caused outrage by using a harvesting machine to save time and money, instead of picking the grapes by hand. Using machinery to produce champagne is banned by law! The grower has had to use his grapes to make a different drink called ratafia, instead!

INDIA

**● Well out of that**

An elephant that fell down a deep and narrow well in southern India has had to be rescued with a crane. The poor elephant was trapped for more than 12 hours before being rescued. Villagers dropped banana leaves down for the male elephant to eat while a team of 50 people worked out a plan to rescue him. He was eventually sedated (made drowsy) and attached to a crane using belts. He was carefully watched for three hours to check his health before being released.

USA

**● Surprise stowaway**

A Christmas tree taken to New York City was found to have a stowaway hidden in its branches – a tiny owl!

Every year, a huge Christmas tree is cut down and delivered to Rockefeller Plaza in New York City. This year’s tree is almost 23 metres tall, weighs 11 tons and came with its own, living decoration! The male saw-whet owl was tired and hungry after his three-day trip, but otherwise well! He has been nicknamed Rockefeller, of course!

Questions on: World News

1) Match the clue to the correct country.

News clue

Christmas tree surprise

Large animal trapped in small space

Fury over farmer's choice

Country

FRANCE

USA

INDIA

2) What links the news from India and the USA?

Look at the news from France.

3) Find two facts about champagne.

4) What did this farmer do to save time and money?
Why was this a problem?

Look at the news from India.

5) The elephant was down the well for 12 hours.
What happened during this time?

Challenge: can you think of four things?

6) Why do you think the elephant had to be sedated?

Look at the news from the USA.

7) Complete the tree's delivery note.

Christmas Tree Delivery Note

Height:

Weight:

Destination:

8) Why do you think people were so surprised to discover this owl?

ANIMAL NEWS

PUZZLE-SOLVING PALS



OTTERS can teach each other how to solve puzzles, scientists have discovered.

A team at the University of Exeter gave groups of otters puzzles that they had to solve in order to get a meatball treat. The meatballs were locked in plastic containers that had to be twisted or pulled in different ways to open them.

The experts found that when one otter worked out how to get to the meatballs, the other otters watched and soon figured it out too!

By watching closely, the experts were able to see how the problem-solving technique passed through the otter groups.

The scientists also discovered that otters have a good long-term memory.

The otters were given exactly the same puzzle a few months later. When they repeated the tasks they got the meatballs much faster than the first time round (69% faster, to be exact!)

The scientists studied Asian short-clawed otters at Newquay Zoo, Tamar Otter and Wildlife Centre and New Forest Wildlife Park.

Questions on: 'Puzzle-solving pals'

1) Which kind of otter was studied by the scientists?

- Sea otter
- Hairy-nosed otter
- Asian short-clawed otter

2) Where did they study the otters?

- In wildlife parks and zoos
- In British rivers
- In Southeast Asia

3) Describe the kind of puzzles the otters had to solve.

4) What food was given as their reward?

5) What is long-term memory?

- The ability to remember things after some time has passed
- The ability to remember many things at once
- The ability to solve a variety of different puzzles

6) What did the experts learn “by watching closely”?

- How the skill was shared in the otter group
- How the otters solved the puzzle
- How long it took to solve the puzzle

7) Would you choose to put this article on the **Science** page of the newspaper or the **Animal News** page? Explain your choice.

8) Why is **Puzzle-solving pals** a good headline for this article?

Think about:

- The choice of words
- What the scientists found out

SPACE NEWS

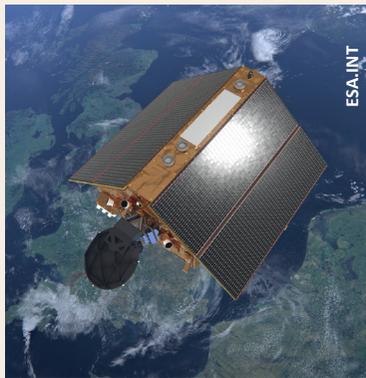
SEA SPY SATELLITE



ESA/INT

A new satellite has been launched that will collect vital information about sea levels for British scientists.

Sentinel-6 is the size of a small car. It will orbit (circle) the planet, collecting data on the planet's sea levels. Global warming is causing sea levels to rise because the polar ice is melting. Warm water also takes up more space than cold water. Scientists hope the new satellite will help them learn more about how the sea is changing.



ESA/INT

SCHOOL SCIENCE DISCOVERY



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Pupils at Stirling High School in Scotland have discovered a new colony of emperor penguins in the Antarctic.

The children studied free images taken by satellites to find the colony. They had to use maths and coding skills to make their discovery. The British Antarctic Survey has confirmed their find by looking at more detailed satellite pictures and praised the children for their work.

SPACE CLAW



ClearSpace

British scientists will soon be using their skills on a project to get rid of space junk.

ClearSpace-1 will launch in 2025. It is the first ever mission that will capture and remove a piece of space junk. British scientists will be building the essential navigation and control systems on the Swiss project.

Since humans first put an object into space in 1957, we have launched nearly 10,000 satellites. The vast majority are now defunct and hurtle around the planet at huge speed.

There is a real danger that the junk could put new missions in danger or damage important satellites.

The ClearSpace-1 satellite will capture the junk and then steer it back to Earth, allowing it to burn up safely as it enters the atmosphere.

Questions on: Space News

1) Which topic links all three science reports?

- discoveries
- pictures from space
- satellites

2) Which report is about a future event?

- Sea spy satellite
- School science discovery
- Space claw

Look at 'School science discovery'.

3) Explain how the children discovered the penguins. What did they do?

Look at 'Sea spy satellite'.

4) Find two reasons why global warming is causing sea levels to rise.

- 1: _____
- 2: _____

Look at 'Space claw'.

5) What is the mission of the ClearSpace-1 satellite?

6) Which part of the satellite will be built by British scientists?

7) "The vast majority [of satellites] are now defunct."
What does the word defunct mean?

- needs mending
- not working
- unmovable

8) Can you come up with any ideas to solve the problem of space junk?
It comes in all shapes and sizes, from old satellites and rockets to spanners dropped by astronauts!