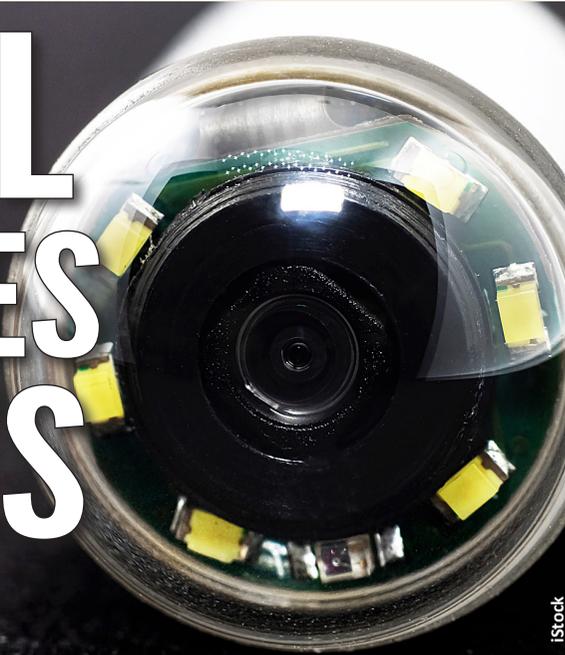


SCIENCE NEWS

THE PILL THAT TAKES PICTURES



This tiny camera will take pictures inside the human body!



The recording device is worn around the body



THE NHS is going to give thousands of people the chance to check for cancer by swallowing a miniature camera.

It may sound like something from science fiction, but the camera pill is the latest technology in the fight against bowel cancer. It's already in use in Scotland.

Bowel cancer is the fourth most common cancer in the UK. It affects the tubes leading from the stomach to the bottom. The hope is the pill-cams will detect the disease early, making it easier to treat.

So, how does it work? The 2cm-long pill contains a tiny light and a miniature camera. After being swallowed, it takes two photos every second and sends them to a recording gadget that can be carried around in a bag.

It usually takes between four and eight hours for the pill to pass through the body and come out the other end! The high-quality pictures are then reviewed by a doctor to spot anything abnormal.

In the past, the only way to check the health of your digestive system was for a doctor to put a camera on a tube down your throat or up your bottom. It requires time in hospital and, as you can imagine, isn't very comfortable!

The new pill-cam can be used at home. And the only discomfort is not being able to eat for 24 hours, so that the camera gets a clear view.

A group of 11,000 (eleven thousand) patients in England will be given the capsule cameras in more than 40 parts of the country. If the trial is successful, it will be rolled out across all areas.

Questions on: 'The pill that takes pictures'

- 1) What is your 'bowel'?
- 2) How did doctors check out your digestive system (food tubes) in the past?
- 3) Why is the pill-cam a better way to check these tubes? Can you think of **at least two reasons**?
- 4) How does this system work? Put the steps in order.

- The pictures are sent to a recording gadget.
 - It takes pictures every two seconds.
 - A doctor reviews the pictures.
 - The pill-cam is swallowed.
- 5) Why do people have to carry around a bag?
- 6) The photos are "reviewed by a doctor to spot anything abnormal".

What does '**abnormal**' mean?
- 7) How long does it take the camera pill to work its way through the body?
- 8) What helps the camera to take good pictures in these dark, mucky tubes?! Find **two things** that help.

ENVIRONMENT NEWS

REEF POLLUTION

A WORRYING number of face masks are being found in our oceans.

This week, in just ten minutes, divers in the Philippines found 10-12 masks on a coral reef close to the capital, Manila.

Masks like the ones found on the reef (below) break down in the water, releasing microplastics that are eaten or taken in by marine life.

Experts say an extra 280 tonnes of medical waste is being made in Manila every day because of the coronavirus pandemic. If even a tiny fraction of this ended up in the ocean, it would be a disaster for wildlife.



FUEL FROM FOOD



SCIENTISTS in the USA have found a way to make jet fuel from food waste.

Around 2.5% of greenhouse gases (the gases causing climate change) come from air travel. The USA alone uses more than 95 billion litres of jet fuel every year.

Food waste also creates greenhouse gases when it rots down in rubbish dumps.

So using food waste to create jet fuel has the potential to be a double-win for the environment. Great news, as electric planes that can travel long distances are themselves a long way off.

RIGHT TO REPAIR

A NEW law to tackle electronic waste will come into force this summer.

It is nicknamed the 'right to repair' law. It means families will be able get things like fridges, washing machines and TVs repaired, rather than having to throw them away.

Too often, electrical items have to be thrown away when they break down, because spare parts aren't available. The new rules say that companies will have to supply spare parts for up to ten years.

The products also have to be made so that they can be taken apart and repaired using ordinary tools.

The Government hopes the new rules will help to reduce the 1.5 million tonnes of electrical waste produced each year.



Questions on: 'Environment News'

1) Match the place to the news topic.

USA

Right to repair

The Philippines

Fuel from food

UK

Reef pollution

Look at the story **Reef pollution**.

2) What is the capital city of The Philippines?

3) Why is it bad news for sea creatures if masks find their way into the ocean?

4) 10-12 masks were found on a coral reef. That doesn't sound so many. Why is this a clue to a much bigger problem?

Look at the story **Right to repair**.

5) Find **two new rules** that are part of the 'Right to repair' law.

1:

2:

Look at all the stories.

6) Find the (huge) numbers.

- The city of Manila makes an extra _____ tonnes of medical waste every day because of the coronavirus.
- The UK makes _____ tonnes of electrical waste every year.
- The USA uses _____ litres of jet fuel every year.

Look at the story **Fuel from food**.

7) Can you think of two reasons why we desperately need a new kind of jet fuel?

8) Can you explain why this fuel could be a “**double-win**” for the environment?

BIG NEWS

SEAWEED MAKES FOR BETTER BURPS



SCIENTISTS have discovered that feeding cattle seaweed reduces the methane in their burps by an astounding 82%!

Methane is a powerful greenhouse gas that causes climate change. Cows make it when they digest grass. It comes out mostly in their burps and also in their farts.

Over five months last summer, scientists in the USA added small amounts of seaweed to the diet of 21 beef cattle. They tracked how the animals grew and how much methane they made.

The cows with 80 grams of seaweed in their diet gained the same amount of weight as their herdmates, but burped out much less methane into the atmosphere.

Unfortunately, the type of seaweed fed to the cows doesn't appear much in the wild, so scientists are also investigating how it can be farmed.

No matter what, Professor Ermias Kebreab, who led

the study, is pleased with the results.

"Only a tiny fraction of the Earth is fit for farming crops," he explained.

"Much more land is suitable only for grazing, so livestock [grazing animals] plays a vital role in feeding the ten billion people who will soon inhabit the planet."

Questions on: 'Seaweed makes for better burps'

1) What's the name for a gas that causes climate change?

- greenhouse gas
- boiler gas
- potent gas

Find one example from the news article.

2) So, cows do a lot of burps and farts. Why is this a problem?

3) What causes the cows to make this gas?

4) Find the details of the experiment.

When was the experiment?:

Where was it?

How many cows?

How long did it go on for?

5) Complete the results.

Cattle fed _____ of seaweed grow
 _____ as cows eating a normal diet,
 but they made _____ methane in their
 _____.

Choose from:

a lot less

the same

burps

80 grams

6) Sounds brilliant! What's stopping us giving seaweed to all farmed cows now?

7) The journalist says the results are 'astounding'. What does this mean? Choose the **best** definition.

- very impressive
- very surprising
- very large
- very worrying

8) The results of this test are great news, but it was quite a small experiment. What **questions** would you like to ask the scientists to find out more?

WORLD NEWS

CHINA



ORANGE FOG IN BEIJING

A SANDSTORM swept across much of northern China last week and left the capital city, Beijing, in a strange orange fog.

The sandstorm combined with pollution in the city to create hazardous “off the scale” air quality levels.

Sandstorms from the Gobi Desert are quite common at this time of year, but this was the worst that has been seen for years.



SOUTH KOREA



PURPLE PLACE

TWO South Korean islands have turned purple.

Over the last few years, the islands of Banwol and Bakji, on the west coast of South Korea, have slowly turned purple.

Roofs, roads, signs and bridges have all been painted purple. Many of the islands’ 150 residents wear purple clothes every day to farm purple plants, such as lavender, kohlrabi and beets.

The purple plan began back in 2015, as a project to turn the tiny islands into a tourist attraction. And it seems to have been a success. Last summer, visitor numbers were up by a fifth, despite the coronavirus pandemic!

USA



FLOWING GREEN FOR ST PATRICK'S DAY

FOR about 60 years, the Chicago River has been dyed green for St Patrick’s Day on 17th March.

The tradition was cancelled last year because of the coronavirus and was supposed to be cancelled again this year. But, at the last minute, Chicago’s mayor approved a secret, early-morning dyeing to keep the tradition going but keep the crowds away.



Questions on: 'World News'

1) Match the colour to the correct country.

SOUTH KOREA

Orange

CHINA

Green

USA

Purple

Look at the news from **China**.

2) Where has this sand come from?

3) The air quality in the city is said to be “off the scale”. What do you think this means?

Look at the news from **South Korea**.

4) Match the two halves of each sentence correctly.

Kohlrabi and beets...

have been painted purple.

Banwol and Bakji...

are two purple crops.

Roads and roofs...

are two South Korean islands.

5) What was the aim of this purple project?

6) Find a fact that tells you the project was a **success**.

Look at the news from the **USA**.

7) Find two things that the mayor of Chicago wanted “to keep”.

Consider **all the news**.

8) These news reports are also a ‘News in Pictures’ selection.

If you could get **more photos** of one of the news stories, which would you pick? Explain why.