

Strange and beautiful, jellyfish are among the most unusual animals on Earth. Read on to discover why they are such extraordinary marine creatures...

## 1 Jellyfish are the oldest multicellular animals on Earth

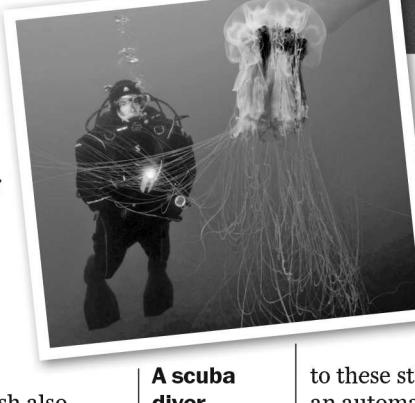
Scientists have found jellyfish fossils that are thought to be more than 500 million years old. This means that there were jellyfish swimming in the world's oceans hundreds of millions of years before the first dinosaurs emerged!

## 2 One species of jellyfish can live forever!

A species of jellyfish called *Turritopsis dohrnii* is a rare example of an animal that can develop from its young stage (as a polyp) to its mature stage (as a grown-up jellyfish) before returning again to its young stage. It repeats the process in an apparently endless cycle. In reality, many "immortal" jellyfish will be eaten by predators or die from disease. But, in terms of its own biology, there is nothing to stop one from living forever.

## 3 Jellyfish don't have lungs, a heart or a brain

So how do jellyfish survive and thrive without organs that are vital for humans? First, a jellyfish's skin is so thin it can absorb oxygen directly, so it doesn't need lungs to do the same job. Jellyfish also don't have blood, so they don't need a heart to pump it around their bodies. And instead of a brain, jellyfish react to changes in their environment using signals from a basic set of nerves just below their epidermis, or outer skin. These nerve cells serve as the jellyfish's



A scuba diver approaches a lion's mane jellyfish. Right, sea turtles chewing on a jellyfish.

to these stimuli with an automatic reflex, without the need for a brain to collate and process the sensory information centrally.

## 4 They are mostly made of water

Only about 5 percent of the body of a jellyfish is solid

sensory organs by responding to touch, light, gravity, temperature and other external stimuli. The jellyfish reacts

matter. The rest is water. So when a jellyfish washes up on a beach, it will mostly disappear as all the water inside its body evaporates.

## 5 Jellyfish can have very long tentacles

The lion's mane jellyfish



is the world's largest species of jellyfish. Its tentacles can be more than 100 feet (30 meters) long – which is longer than a blue whale!

## 6 Despite their length, a jellyfish's tentacles don't ever get tangled and never sting their owners

To keep them from getting tangled together, a jellyfish's tentacles are naturally very slippery. They also contain special sensory cells that recognize chemicals

## DID YOU KNOW?

The Australian box jellyfish is thought to be the most venomous marine animal. Each of its tentacles has around 5,000 stinging cells – and its sting can kill a human in just a few minutes.

A group of jellyfish is known as a bloom. There are several collective nouns for jellyfish, including a swarm, a smack, a fluther and – our favorite – a bloom.

## 10 Jellyfish have been to space!

In 1991, over 2,000 moon jellyfish polyps went into space on board the Space Shuttle Columbia so that scientists could study how they were affected by microgravity. When the shuttle returned to Earth, the scientists found out that young jellyfish that were born in space didn't know how to swim normally in Earth's gravity.

Stumped? Don't worry, you can find the solutions to all the puzzles at: [whatonearthmag.com/answers](http://whatonearthmag.com/answers)

## PUZZLES & JOKES

### WEATHER WORD SEARCH

Can you spot the 12 weather-related words hidden in our word search puzzle? Good luck!

BLIZZARD

D R A I N

CLOUD

M U D F M L U S X

CYCLONE

N U S L D O O T A E I

FOG

I D M J Q F K G K O N T

FROST

L P Y C M D I J U A O F L

HAIL

V O V R I O T V L H U L H M A

LIGHTNING

U S G N I N T H G I L C S L M

MIST

C L N L O S N A T T F Y U A I

MONSOON

U L E G C O L W Y S G C X N S

RAIN

M I O T G O A X W D O K A Q T

SNOW

A L U O N O P O A B R S O

SUN

H N U D A L A N O H M F R

K J S W X L S I N M M

D R A Z Z I L B Y

B Z D W N

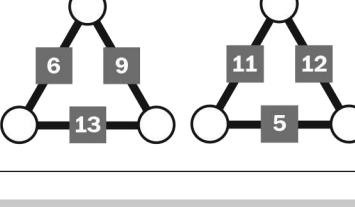
### NUMBER TRIANGLES

In the triangles below, the numbers inside the squares are the sums of the two numbers in the connected circles. For example:

1 3 2

Can you figure out which number should appear in each of the circles?

All the numbers in the circles are between 1 and 10 and a number can only be used once in each triangle.



### SUDOKU

Fill all the empty squares so that every row, column and 3x2 box contains each of the numbers 1 to 6.

1	6				
			3	1	6
5	1	2			3
3	4	6			
1	2				5
6		1			2



## What on Earth! Magazine

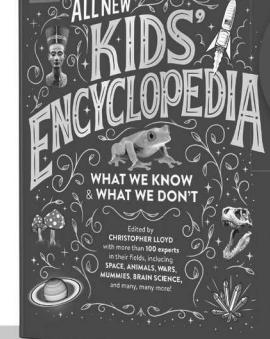
Are you enjoying KidsPost? Then you will love the multi-award-winning **What on Earth! Magazine**. It's the fun way to help curious kids ages 7–14 fall in love with reading, knowledge and learning – and is created in partnership with Encyclopaedia Britannica.

### SPECIAL OFFER

New subscribers will also receive a fantastic free gift – a hardcover copy of the brilliant *Britannica All New Kids' Encyclopedia* worth \$35\*.



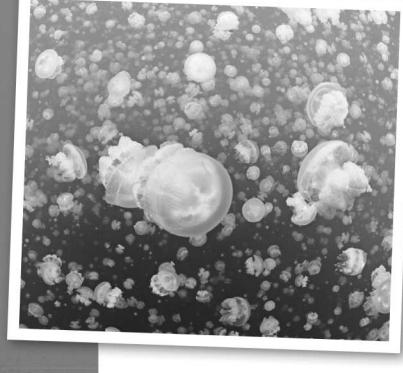
**SUBSCRIBE FOR \$69.99 AND RECEIVE A YEAR'S WORTH OF MAGAZINES—PLUS A FREE KIDS' BOOK WORTH \$35\***



**FREE GIFT WORTH \$35!**



A group of jellyfish is sometimes known as a bloom.



given off by members of the same jellyfish species (including the jellyfish itself). When they recognize these chemicals, the jellyfish's tentacles don't release their sting.

## 7 The scientific name for a mature jellyfish's type of body is a medusa

The shape of a grown-up jellyfish's body – with its curved bell at the top and tentacles flowing beneath – is named after Medusa, a female figure from Greek mythology who had a mass of snakes on her head instead of hair. Medusa is also the word for jellyfish in several languages, including Italian and Spanish.

## 8 Jellyfish can clone themselves

Amazingly, if you cut a jellyfish in half, the two pieces can regenerate to create two separate living organisms.