

## Day 1: The mysterious lake of the Amazon

Glorious globetrotting



### Question:

How deep is the mysterious hidden lake?

**Answer:** 15 metres

Ed Stafford journeys alone deep into the Amazon rainforest looking for a mysterious lake seen on satellite images. When he arrives, he realises that, though he might well be the first person to have ever seen this place, he may not be the only living thing in the water.

**Series:** Ed Stafford into the Unknown

**Episode:** Brazil

**Channel:** Discovery Channel

**Location:** The Amazon, Brazil

**Clip duration:** 6 minutes 6 seconds

**Find it:** Discovery Education Espresso > Video Zone > Glorious globetrotting

**Fact to share:** The 'recordicopter' which Ed Stafford takes into the middle of the lake to get great aerial shots of the lake, is a drone! *How cool is that?*

## Day 2: Desert dwellers

Amazing animals



### Question:

Where does the word "desert" come from?

**Answer:** The latin word 'desertum' - meaning forsaken or abandoned

The Namib Desert is the oldest on Earth. Learn about some of the special residents of this hot, dry environment; the Shovel-snouted lizard and Sidewinder snake.

**Series:** Beautiful Freaks

**Episode:** Unusual wild animals of Namibia

**Channel:** Animal Planet

**Location:** Namibian desert, Namibia

**Clip duration:** 5 minutes 28 seconds

**Find it:** Discovery Education Espresso > Video Zone > Amazing animals

**Fact to share:** The Pinguetia is often referred to as the Sidewinder due to the bizarre way in which it moves over the sand.

## Day 3: Sharks of the 'sea cathedral'

Amazing animals



### Question:

How large can Hammerhead sharks grow to?

**Answer:** 4 metres

400km off the coast of Mexico, the small island of Roca Partida has become known as the cathedral of the sea. Dive deep below the water to uncover the predators swimming in these waters; the Silvertip sharks, Whitetip reef sharks and the mysterious Hammerhead shark which is named after the shape of its head.

**Series:** Wild Deep

**Episode:** Mexico

**Channel:** Animal Planet

**Location:** Roca Partida, Mexico

**Clip duration:** 3 minutes 10 seconds

**Find it:** Discovery Education Espresso > Video Zone > Amazing animals

**Fact to share:** White-tip reef sharks have a prominent brow above their eyes to protect them from the rough rocks their prey hides between.

## Day 4: The Transparent Factory

Fabulous factories



### Question:

What is the total area of the Volkswagen factory in Wolfsburg?

**Answer:** 7 sq. kilometres

The Volkswagen factory in Wolfsburg is one of the most technologically advanced car plants on earth and the largest car factory in Europe, the size of 17 football stadiums! Robots move around the factory using 100,000 magnets hidden in the floor, like a road map. With 12,000 parts needed for each vehicle an impressive 51,500 humans must work to ensure today's mission of 4,500 new cars is achieved!

**Series:** World's top 5

**Episode:** Mega Factories

**Channel:** Discovery Channel

**Location:** Wolfsburg, Germany

**Clip duration:** 3 minutes 50 seconds

**Find it:** Discovery Education Espresso > Video Zone > Fabulous factories

**Fact to share:** 57 computer controlled sleds are directed around the factory by 100 thousand magnets, hidden in the floor which act like a road map.

## Day 5: Mariachi music

Treasured traditions



### Question:

How did Mariachi music begin?

**Answer:** Farm workers putting poems to music

Mariachi music is one of Mexico's great cultural traditions. Find out about the skill, and luck, that are needed for a Mariachi to join one of Mexico's top bands as well as some of the features of the distinctive Mariachi sound.

**Series:** Discovery Atlas

**Episode:** Mexico

**Channel:** Discovery Channel

**Location:** Mexico city, Mexico

**Clip duration:** 7 minutes 21 seconds

**Find it:** Discovery Education Espresso > Video Zone > Treasured traditions

**Fact to share:** One Mariachi musician in this video knows more than 2,000 songs! (because he plays everything from memory).

## Day 6: Flying fire engine

Awesome aircraft



**Question:** How long does it take to fill the water tanks of the 'Superscooper'?

**Answer:** 12 seconds

Davor Turkovic, is the pilot of the 'superscooper'. It is a unique type of plane, spraying out water to put out fires. It would be impossible to fight forest fires without this type of aircraft. As one of the most dangerous and difficult flying jobs in the world, Davor needs to keep his piloting skills perfect.

**Series:** World's top 5

**Episode:** Monster Firefighters

**Channel:** Discovery Channel

**Location:** Croatia

**Clip duration:** 7 minutes 21 seconds

**Find it:** Discovery Education Espresso > Video Zone > Awesome aircraft

**Fact to share:** The Superscooper Water Bomber can collect 6,000 litres of water in seconds. *How amazing is that?*



## Day 7: The tuna lottery

Curious careers



**Question:** What is the name of the island that Osamu's hometown is situated on?

**Answer:** Honshu

Tuna fishing is very difficult but in Japan it's also very rewarding work - one tuna can sell in Tokyo for \$200,000! We follow Osamu Yamazaki, a fisherman from the north of the country on his quest to catch one of these valuable fish.

**Series:** Discovery Atlas

**Episode:** Japan

**Channel:** Discovery Channel

**Location:** Japan

**Clip duration:** 7 minutes 11 seconds

**Find it:** Discovery Education Espresso > Video Zone > Curious careers

### **Fact to share:**

Once fishermen catch a tuna fish, they keep the heart and fin for luck.

## Day 8: The first mobile phone

Incredible inventions



**Question:**  
In what year was the first mobile phone invented?

**Answer:** 1972 (idea in 1972, produced in 1973)

Learn about how fierce business competition led to the invention of one of the most important inventions of the last 50 years — the mobile phone.

**Series:** How we invented the world

**Episode:** Mobile phones

**Channel:** Discovery Channel

**Location:** New York, USA

**Clip duration:** 6 minutes 31 seconds

**Find it:** Discovery Education Espresso > Video Zone > Incredible inventions

### **Fact to share:**

There was actually five different designs of the first mobile phone.

## Day 9: Alaska's volcanoes

Volatile volcanoes



### Question:

Mount Augustine is part of which chain of volcanoes?

**Answer:** The Pacific Ring of Fire

Mount Augustine in Alaska is so active that it is still growing taller!  
Discover this spectacular volcano and how it grows.

**Series:** Fearless planet

**Episode:** Alaska

**Channel:** Discovery Channel

**Location:** Alaska, USA

**Clip duration:** 2 minutes 16 seconds

**Find it:** Discovery Education Espresso > Video Zone > Volatile volcanoes

**Fact to share:** Alaska has 41 active volcanoes. After Mount Augustine last erupted in 2006, it had grown by 30 metres.

## Day 10: Monarch butterflies

Amazing animals



### Question:

Monarch butterflies migrate to Mexico from which two countries?

**Answer:** North America and Southern Canada

Visit the forests of Michoacán, Mexico and see one of the most amazing sights in all of nature — the winter resting place of the monarch butterfly.

**Series:** Discovery Atlas

**Episode:** Mexico: Monarch butterflies

**Channel:** Discovery Channel

**Location:** Michoacán, Mexico

**Clip duration:** 4 minutes 04 seconds

**Find it:** Discovery Education Espresso > Video Zone > Amazing animals

**Fact to share:** When you first look at the Monarch butterflies, they appear to be large clumps of dead leaves hanging from oyamel trees.

## Day 11: The Polynesian discovery of Hawaii

Treasured traditions



**Question:** What was the name of the plant the Polynesians carried with them to Hawaii?

**Answer:** The Taro plant

The incredible feat of human endurance which led to the first people arriving on the isolated Hawaiian islands 1400 years ago and how they made tools and grew food. According to legend, it all started with the migration of a bird species.

**Series:** Discovery Atlas

**Episode:** Hawaii

**Channel:** Discovery Channel

**Location:** Hawaii, USA

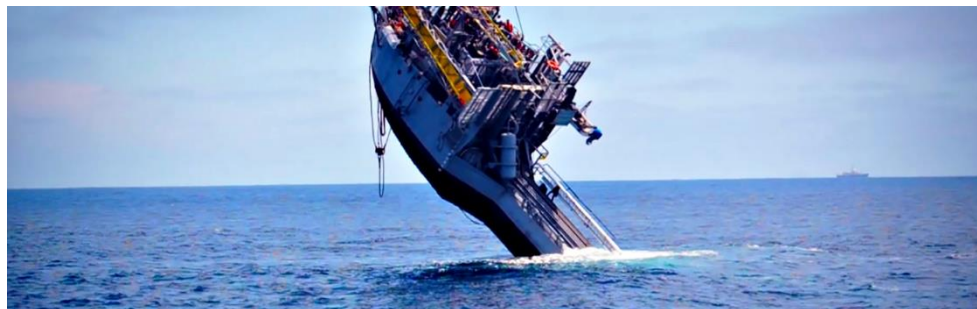
**Clip duration:** 7 minutes 52 seconds

**Find it:** Discovery Education Espresso > Video Zone > Treasured traditions

**Fact to share:** Hawaii's volcanic geology means it locks away crucial nutrients like phosphorous, which plants are then deprived of, so food can be hard to grow on the island.

## Day 12: Self-sinking ship

Brilliant boats



**Question:**

On what object is the design of the FLIP thought to be modelled?

**Answer:** A baseball bat

The 'Flip' is one of the strangest vessels ever to take to water. This extraordinary research ship is capable of flipping itself 90 degrees and sinking itself!

**Series:** World's top 5

**Episode:** Monster Sea Machines

**Channel:** Discovery Channel

**Location:** California, USA

**Clip duration:** 5 minutes 30 seconds

**Find it:** Discovery Education Espresso > Video Zone > Brilliant boats

**Fact to share:** FLIP is a research platform built by the US Navy over 50 years ago.



## Day 13: Italy's icons

Curious careers



**Question:** How many years did it take Alessandro to train and qualify as a gondolier?

**Answer:** 3 years

The gondoliers of Venice are one of the most recognisable symbols of Italian culture. Getting a job as a gondolier is a tough task and usually gets handed down through generations from father to son. Follow the story of Alessandro as he takes the all-important and difficult test to become a Venetian gondolier.

**Series:** Discovery Atlas

**Episode:** Italy: Gondoliers

**Channel:** Discovery Channel

**Location:** Venice, Italy

**Clip duration:** 5 minutes 52 seconds

**Find it:** Discovery Education Espresso > Video Zone > Curious careers

**Fact to share:** Venice's gondoliers are governed by strict legal rules which charge fixed rates, and they're forbidden to work independently.

## Day 14: The search for a second Earth

Spectacular space



**Question:** What is the name of the space telescope that has helped scientists to discover hundreds of exoplanets?

**Answer:** The Kepler Space Telescope

Find out how scientists are using a highly advanced space telescope, and shadows, to search for other planets that humans could live on.

**Series:** How the universe works

**Episode:** Search for a second Earth

**Channel:** Discovery Science

**Clip duration:** 4 minutes 03 seconds

**Find it:** Discovery Education Espresso > Video Zone > Spectacular space

**Fact to share:** There are hordes of other Earth-like planets in space, moving around the other stars. Some stars have multiple Earths orbiting them, that's how common Earth-like planets are!

## Day 15: Baked bean mega factory

Fabulous factories



### Question:

Which type of beans are used to make a tin of baked beans?

**Answer:** Haricot beans

Keith Gibson has a job you'd either love or hate – tasting baked beans! He is a part of a team who work in the largest food processing factory in Europe, producing half a million cans of baked beans in just six hours, every working day. The secret recipe is only known by two people in the whole factory.

**Series:** World's top 5

**Episode:** Mega Factories

**Channel:** Discovery Channel

**Location:** Wigan, UK

**Clip duration:** 5 minutes

**Find it:** Discovery Education Espresso > Video Zone > Fabulous factories

**Fact to share:** A laser beam machine in the factory checks every single bean for imperfections. If it finds one that's the wrong colour, the bean is simply blown off the production line.

## Day 16: Personal submersible

Brilliant boats



### Question:

How thick is the reinforced dome on the top of the Super Falcon?

**Answer:** 5 centimetres

The Super Falcon is a \$1.3 million, battery-powered personal submarine that can go 300 metres below the sea. Its inventor describes it as an underwater jet fighter aircraft!

**Series:** World's top 5

**Episode:** Sea machines

**Channel:** Discovery Channel

**Location:** San Francisco, USA

**Clip duration:** 5 minutes 49 seconds

**Find it:** Discovery Education Espresso > Video Zone > Brilliant boats

**Fact to share:** The cockpit protects the craft's occupants while giving them a 360-degree view. It's strong enough to maintain normal surface pressure inside so there's none of the compression and decompression associated with conventional deep-sea diving.



## Day 17: Flying truck

Awesome aircraft



### Question:

What materials are the Mi-26's rotor blades made out of?

**Answer:** Plastic

The towns and settlements of deepest Siberia are linked only by very few roads. Trucks here need to travel not by road, but in the sky. The engine of the Mi-26 alone weighs more than most entire helicopters, and each of its eight rotor blades is as long as a train carriage! This massive machine is the biggest helicopter ever created - it can even transport entire trucks in its hold.

**Series:** World's top 5

**Episode:** Super Helicopters

**Channel:** Discovery Channel

**Location:** Siberia, Russia

**Clip duration:** 5 minutes 30 seconds

**Find it:** Discovery Education Espresso > Video Zone > Awesome aircraft

**Fact to share:** The Mi-26 is a 35-year-old product of the Cold War, which can be used for disaster relief work and can even operate as a flying hospital!

## Day 18: India's sacred river

Treasured traditions



### Question:

What is the name Hindus give to the river goddess?

**Answer:** Ganga

The Ganges is one of the longest rivers in India and, to Hindus, it is also a goddess. Joyti is a boatman on the Ganges, who takes pilgrims out on to the river in the sacred city of Varanasi. His family has been doing this for generations. Learn all about his work and about some of the important Hindu traditions that take place in this city.

**Series:** Discovery Atlas

**Episode:** India

**Channel:** Discovery Channel

**Location:** The Ganges, India

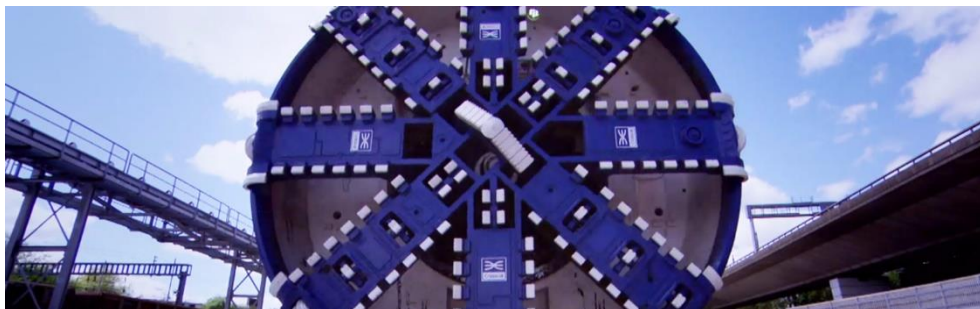
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**Find it:** Discovery Education Espresso > Video Zone > Treasured traditions

**Fact to share:** The Himalayas are the highest and fastest-growing mountain range on the planet. They are also the source of a river that lies at the heart of the Indian nation – the Ganges.

## Day 19: Giant earthworm machine

Colossal construction



### Question:

What job does Jimmy do?

**Answer:** Ring builder

Crossrail is the biggest construction project in Europe and an incredible engineering challenge. See how the tunnel boring machine crunches through the ground like a giant earthworm, digging deep below London to add to the labyrinth of the city's public transport tunnels.

**Series:** World's Top 5

**Episode:** Earthmovers

**Channel:** Discovery Channel

**Location:** London, UK

**Clip duration:** 4 minutes 54 seconds

**Find it:** Discovery Education Espresso > Video Zone > Colossal construction

**Fact to share:** The tunnel-boring machine (TBM) is the equivalent of 14 London buses end-to-end and a staggering 143 buses in weight. According to tunnelling tradition, a TBM cannot start work until it is given a name.

## Day 20: Carnevale in Venice

Treasured traditions



### Question:

When does the Venetian Carnevale usually take place?

**Answer:** End of February

The mysterious, enchanting Carnevale of Venice is one of the most glamorous festivals of the year. Meet Alessandro, a new gondolier on his first day of work, and Antonia, an event planner, as they prepare for this spectacular festival.

**Series:** Discovery Atlas

**Episode:** Italy

**Channel:** Discovery Channel

**Location:** Venice, Italy

**Clip duration:** 4 minutes 56 seconds

**Find it:** Discovery Education Espresso > Video Zone > Treasured traditions

**Fact to share:** Carneval was first organised 800 years ago as an extravagant party before the abstinence of Lent.

## Day 21: A ferris wheel for boats

Incredible inventions



### Question:

What does the Falkirk wheel transport boats between?

**Answer:** Two canals (at different heights/levels)

The Falkirk wheel is a special invention - it's a rotating lift for boats! Find out how a 20 tonne boat can be raised 35 metres in just over 5 minutes.

**Series:** World's top 5

**Episode:** Mighty Transporters

**Channel:** Discovery Channel

**Location:** Falkirk, Scotland

**Clip duration:** 3 minutes 53 seconds

**Find it:** Discovery Education Espresso > Video Zone > Incredible inventions

### Fact to share:

Each boat that enters the Ferris wheel is lifted eight storeys up in the air!

## Day 22: The four kilometre train

Tremendous trains



### Question:

How many wagons make up the four kilometre train?

**Answer:** 342 wagons

The Transnet trains of South Africa carry enough iron ore on one trip to make 34,000 cars! That's because they are four kilometres long! The people who drive these trains are very highly-trained and skillful - sometimes when one part of the train is accelerating another part has to brake and all of this is done by one person!

**Series:** World's top 5

**Episode:** Extreme railways

**Channel:** Discovery Channel

**Location:** South Africa

**Clip duration:** 5 minutes 35 seconds

**Find it:** Discovery Education Espresso > Video Zone > Tremendous trains

### Fact to share:

The four kilometre train in South Africa has six engines.



## Day 23: Great Barrier Reef

Wonderful world



### Question:

Roughly how many species of fish live on the Great Barrier Reef?

**Answer:** Almost 1,600 different species

The Great Barrier Reef is the largest living organism on Earth - it is the size of Italy! The reef is heavily protected by the Australian government but still faces many threats to its delicate ecosystem.

**Series:** Discovery Atlas

**Episode:** Australia

**Channel:** Discovery Channel

**Location:** Australia

**Clip duration:** 3 minutes 47 seconds

**Find it:** Discovery Education Espresso > Video Zone > Wonderful world

**Fact to share:** The Great Barrier Reef is Earth's largest living organism.

## Day 24: Engineering the touchscreen

Incredible inventions



### Question:

Where was the touchscreen first invented?

**Answer:** Switzerland

As computers became more powerful and technology shrank in size, a new solution was needed to make using phones easier... enter the touchscreen!

**Series:** How we invented the world

**Episode:** Mobile phones

**Channel:** Discovery Channel

**Clip duration:** 3 minutes 44 seconds

**Find it:** Discovery Education Espresso > Video Zone > Incredible inventions

**Fact to share:** The mobile phone in your pocket today is a million times cheaper, a million times smaller, and a thousand times more powerful than a \$60 million supercomputer that was half a building in size 40 years ago.

## Day 25: Dagestan's traditional artform

Treasured traditions



**Question:** How long can it take to finish making one of Magomet's carpets?

**Answer:** 4 months

Dagestan is one of the poorest areas of Russia, but it is also home to an ancient tradition. This region produces stunning hand-made carpets that are more like works of art than something you would see at home. Follow Magomet Khan to his home village and learn how he is bringing this art form back to life.

**Series:** Discovery Atlas

**Episode:** Russia

**Channel:** Discovery Channel

**Location:** Russia

**Clip duration:** 7 minutes 44 seconds

**Find it:** Discovery Education Espresso > Video Zone > Treasured traditions

**Fact to share:** The Dagestani people speak over 30 different languages.

## Day 26: Flying taxi driver

Curious careers



**Question:** How many helicopter lift-offs per hour take place in São Paulo?

**Answer:** Around 100 lift-offs per hour

Learn what it takes to become one of São Paulo's famous helicopter taxi pilots. Clarissa is one only four female taxi pilots in the city and is training to be able to fly in zero visibility. Learn about the advanced test she needs to pass in order to become one of the best pilots in Brazil.

**Series:** World's Top 5

**Episode:** Super helicopters

**Channel:** Discovery Channel

**Location:** São Paulo, Brazil

**Clip duration:** 8 minutes 54 seconds

**Find it:** Discovery Education Espresso > Video Zone > Curious careers

**Fact to share:** São Paulo in Brazil has the most helicopter traffic in the world. Many business executives use them as a taxi service to get to work.

## Day 27: How is steel made?

Marvellous materials



**Question:** How is steel made?

Which three materials are mixed to create steel?

**Answer:** Iron (or Iron ore), coke and limestone

Steel is essential to the modern way of life. Without steel we would have no ships, no trains and rails and no skyscrapers.

**Series:** Industrial Junkie

**Episode:** Steel

**Channel:** Discovery Channel

**Location:** Spain

**Clip duration:** 6 minutes 29 seconds

**Find it:** Discovery Education Espresso > Video Zone > Marvellous materials

**Fact to share:** Inside the blast furnace, the air is heated up to twelve hundred degrees Celsius!

## Day 28: Japan's 10,000 year-old secret

Glorious globetrotting



**Question:** Kihachiro's discovery has

similar characteristics to which two historical sites?

**Answer:** The Pyramids and Machu Picchu

Kihachiro Aratake, a master diver from the remote island of Yonaguni in the south of Japan, made a remarkable underwater discovery off the coast of his island - but what was it? And could it really rewrite history?

**Series:** Discovery Atlas

**Episode:** Japan

**Channel:** Discovery Channel

**Location:** Japan

**Clip duration:** 3 minutes 48 seconds

**Find it:** Discovery Education Espresso > Video Zone > Glorious globetrotting

**Fact to share:** At the southern end of the Japanese string of islands lies Yonaguni, which was once part of a separate kingdom, with its own language, that some islanders still speak today.



## Day 29: Siena - city of tradition

Glorious globetrotting



### Question:

What is the prize for the winner of the Palio?

**Answer:** A (hand-painted) silk banner

The occupants of the historic city of Siena are encircled by its famous city walls, but divided by neighbourhood rivalries which surface each year in the annual 'Palio', a bareback horse race through the city streets. We meet Alberto Ricchieri, a jockey hoping to compete in the race, and find out why the Palio means so much to the citizens of Siena.

**Series:** Discovery Atlas

**Episode:** Italy

**Channel:** Discovery Channel

**Location:** Siena, Italy

**Clip duration:** 4 minutes 25 seconds

**Find it:** Discovery Education Espresso > Video Zone > Glorious globetrotting

**Fact to share:** The only neutral territory in Siena is at the city's centre, called the Piazza del Campo. Surrounding it, each neighbourhood is represented by its own colours and traditions.

## Day 30: Hawaii's telescopes

Spectacular space



### Question:

Why is Hawaii better for star-gazing than other parts of the world?

**Answer:** It's far from light pollution

Hawaii is one of the best places on Earth for observing space and the Mauna Kea Observatory was responsible for some of the most important astronomical discoveries of the last century. Find out what makes this location so important for astronomy.

**Series:** Discovery Atlas

**Episode:** Hawaii

**Channel:** Discovery Channel

**Location:** Hawaii, USA

**Clip duration:** 2 minutes 19 seconds

**Find it:** Discovery Education Espresso > Video Zone > Spectacular space

**Fact to share:** Hawaii's telescopes have helped us discover the moons of Jupiter and Saturn!