## SCIENCE...

# THE MOON AND THE TIDES

The moon causes tides to rise and fall in the Earth's oceans. This is because of the gravity force between the Earth and Moon.

During full and new moons the gravitational forces of the Sun and Moon combine to produce the highest tides called **Spring Tides**. During quarter moons the gravitational forces of the Sun and the Moon oppose each other to produce the lowest tides called Neap Tides.

To answer the question on the cover: How does the moon affect us being able to go to Holy Island for the day?

The moon causes the tides to rise and fall twice a day, every day - and confusingly at different times.

There is help though, from the Tide Tables. Tide tables very cleverly calculate years in advance what time the tide comes in and goes out. So if you want to go to Holy Island, you need to look at these first.

These are the tides times over the Easter Holidays, issued by Northumberland County Council. It is shown in the 24 hour clock.

Green means safe times.

Red means danger and you will not be able to cross during these times.

	A P R I L	SAFE TO CROSS	NO CROSSING	SAFE TO CROSS	NO CROSSING
Fri	7	03:20 until 11:15	11:15 until 15:55	15:55 until 23:45	23:45 until 04:40 (Sat)
Sat	8	04:40 until 12:00	12:00 until 17:10	17:10 until 00:25 (Sun)	00:25 (Sun) until 05:45 (Sun)
Sun	9	05:45 until 12:40	12:40 until 18:15	18:15 until 01:00 (Mon)	01:00 (Mon) until 06:35 (Mon)
Mon	10	06:35 until 13:15	13:15 until 19:05	19:05 until 01:30 (Tue)	01:30 (Tue) until 07:15 (Tue)
Tue	11	07:15 until 13:50	13:50 until 19:45	19:45 until 02:05 (Wed)	02:05 (Wed) until 07:50 (Wed)
Wed	12	07:50 until 14:25	14:25 until 20:15	20:15 until 02:40 (Thu)	02:40 (Thu) until 08:20 (Thu)
Thu	13	08:20 until 15:05	15:05 until 20:45	20:45 until 03:15 (Fri)	03:15 (Fri) until 08:45 (Fri)
Fri	14	08:45 until 15:45	15:45 until 21:05	21:05 until 03:55 (Sat)	03:55 (Sat) until 09:05 (Sat)
Sat	15	09:05 until 16:25	16:25 until 21:25	21:25 until 04:35 (Sun)	04:35 (Sun) until 09:25 (Sun)
Sun	16	09:25 until 17:10	17:10 until 21:45	21:45 until 05:25 (Mon)	05:25 (Mon) until 09:50 (Mon)
Mon	17	09:50 until 18:00	18:00 until 22:10	22:10 until 06:15 (Tue)	06:15 (Tue) until 10:15 (Tue)
Tue	18	10:15 until 18:55	18:55 until 22:40	22:40 until 07:15 (Wed)	07:15 (Wed) until 10:50 (Wed)
Wed	19	10:50 until 20:00	20:00 until 23:25	23:25 until 08:20 (Thu)	08:20 (Thu) until 11:40 (Thu)
Thu	20	11:40 until 21:10	21:10 until 00:30 (Fri)	00:30 (Fri) until 09:25 (Fri)	09:25 (Fri) until 12:55 (Fri)
Fri	21	00:30 until 09:25	09:25 until 12:55	12:55 until 22:15	22:15 until 02:00 (Sat)
Sat	22	02:00 until 10:30	10:30 until 14:25	14:25 until 23:10	23:10 until 03:35 (Sun)
Sun	23	03:35 until 11:25	11:25 until 15:55	15:55 until 23:50	23:50 until 05:00 (Mon)

## **NEWS HEADLINES...**



Cyclist Mark Beaumont has

announced plans to bike

around the world in 80

Back in 2008 he covered

the 18,000 mile route in 194 days, setting a new world record. Since then it

has been broken by other riders, and now the current

record is set at 123 days.

Mark will need to travel

240 miles a day to set a

He will begin his epic ride

around the coastline of

on 2 July, but as a warm-up to the trip, he will cycle

"The whole point of the next

couple of weeks going around

the coastline of Britain is to

can hold that 80-day pace."

He said: "I know what I'm

getting into. I cycled around

the world 10 years ago. It

scares me. It intimidates me. But I believe this is possible." The adventurer is raising funds for charity through his incredible record

Mark cycled the length of Africa

test the theory, to know that I

new fastest time.

Britain.

attempt.

two years ago.

in 80 days

days.

MASSIVE FOOTPRINT

The biggest dinosaur footprints ever discovered were found in northwestern Australia.

Thousands of tracks belonging to 2 different types of dinosaurs were found on a 20 mile stretch of the coastline. The area is being called "Australia's Jurassic Park".

Challenged by the producers of BBC's motoring TV show Top Gear to transform something slow into something extremely fast, engineer and inventor Colin Furze has once again come up with another wacky, record-breaking vehicle.

Colin has plenty of experience in converting unusual items into incredibly fast racing machines, having already created the world's Fastest pram and the Fastest mobility scooter.

bumper car.

The car took three weeks to build. Colin added a 600cc Honda motorbike engine, but ensured that the chassis remained that of a bumper car and the wheels were the same size, as required by the Guinness World Records rules for this title.

Confirming the new record, Guinness World Records adjudicator Lucia Sinigagliesi said: "We're all used to seeing The Stig driving at high speeds - but he's usually in a sports car and usually on a race track," she said. "To see him hurtle past in a classic bumper car at 100mph was surreal, but hugely impressive. Equally as impressive are the engineering expertise of Colin Furze - the combination of their skills makes for record-breaking fun."



# DISCOVERED

The largest footprint is 175 cm's long. The tracks are estimated to be between 127 to 140 million years old!

# LOCAL NATIONAL INTERNATIONAL





## **British engineer Colin Furze builds world's** fastest bumper car for Top Gear

His latest endeavour saw him customise a 1960's dodgem into the world's fastest

Bear in mind the average speed for a bumper car is just 5 mph!





## **INSPIRATIONAL PEOPLE...**

# ROALD DAHL









Roald Dahl was a British novelist, short story writer, poet, screenwriter, and fighter pilot. His books have sold more than 250 million copies worldwide.

Roald Dahl's books are full of incredible magic and mischief. He created unforgettable adventures out of ordinary things: a juicy peach could become a home for gigantic insects. Or a humdrum factory could turn out to be the start of chocolatey adventure! Here are some interesting facts about him:

### The Writing Hut

Roald Dahl would write for about 4 hours a day in his special space - a shed in the garden called 'The Writing Hut'. He had a cosy old armchair and a specially designed writing board which would sit on his lap. He would also only write his stories using a pencil and yellow paper.

### The Chocolate Wrapper Ball

As a young man, Roald Dahl ate a bar of chocolate every day as a part of his lunch. He would roll the foil wrapper from each bar into a silvery ball, small at first, but gradually getting bigger and bigger... to the size of a canon ball!

## One of his most famous books almost had a different name.

James and the Giant Peach, was almost called James and the Giant Cherry! It was changed from a cherry to a peach because Dahl said a peach was: "prettier, bigger and squishier than a cherry."

### His books were inspired by the people and things around him.

Many of the characters and stories created by Roald Dahl were inspired by the people and places around him, Charlie and the Chocolate Factory was inspired by his childhood. The chocolate maker Cadbury's used to taste-test their chocolate bars at Roald's school, and he used to dream that he would invent a new chocolate bar, and win praise from Mr Cadbury.

### Roald Dahl fought in WW2 and was a spy

Before he became an author, Roald Dahl was a pilot for the Royal Air Force. During World War II he flew a Hawker Hurricane plane.

Roald also became a spy for MI6 when he was recruited by the Canadian spymaster William Stephenson. Dahl used to send them facts and secret information, and worked alongside Ian Fleming, who later became the creator of James Bond.



# 5 THINGS...

### 1. FABERGÉ EGGS

Created by Russian jeweller Peter Carl Fabergé between 1885 and 1917, Fabergé eggs are the most famous and valuable eggs in the world.

They are so valuable because the eggs contain the finest jewels and precious metals, they also have historical value. Each egg took a year to make, with teams of highly-skilled craftsmen constructing very complex designs based around the Russian royal family.

Only 65 eggs were made. Seven of the original Fabergé eggs are currently lost. Either they have been destroyed, are stored in an unknown location or are currently owned by someone not aware of the item's value. Because of the quality, the designs, the history and the mystery that surrounds the search for missing eggs, Fabergé eggs are now valued up to £20million.

In March 2014 a scrap metal dealer an item at auction for £10.000. It was later discovered to be a previously missing Fabergé egg worth £18 million! Ten of the eggs are held in the Kremlin Armoury in Moscow and the Queen Elizabeth II owns four eggs which are part of The Royal Collection.



3. MAKE YOUR OWN COLOURS It is easy to dye eggs any colour without having to buy dyes.

4. CREATING BEAUTIFUL EGGS These very simple ideas decorate a home, and make wonderful gifts at Easter.







sparkle

# DECORATING EGGS





2. ONIONS, FLOWERS & LEAVES... AND TIGHTS! Traditionally eggs are dyed with onion skins at Easter. It is possible to achieve beautiful designs by securing leaves and flowers around the egg with old tights and boiling them with onion skins.