

## Thornbury Science Festival 2015 Quiz Answers

- (1) After working with Niels Bohr in Copenhagen, the theoretical physicist John Wheeler took up a position in which university? North Carolina
- (2) What is the full name of the comet that was the target for the Rosetta mission? 67P Churyumov-Gerasimenko
- (3) What name is given to the process of programmed cell death in defective or damaged cells that is evaded by cancer cells? Apoptosis
- (4) What does PCR stand for when used to describe a method for generating millions of copies of a DNA strand from a sample containing only a few? Polymerase Chain Reaction
- (5) An astringent made from a solution of basic lead acetate and used in the 18<sup>th</sup> and 19<sup>th</sup> centuries was known as "Goulard's extract".
- (6) What name has been given to the small fossil reptile recently found in Woodleaze quarry at Tytherington? Clevosaurus sectumsemper
- (7) Which substance would have been represented by  using John Dalton's atomic symbols? Water
- (8) If the structures of two molecules are mirror images of each other, but cannot be superimposed on each other, they are called Enantiomers
- (9) To the nearest °C, at what temperature does water have its maximum density under normal atmospheric pressure? 4 °C
- (10) What has a temperature of 2.73 K and was discovered by Arno Penzias and Robert Wilson in 1964? Cosmic Microwave Background
- (11) The largest seismic waves produced by an earthquake of magnitude 6.6 on the Richter scale are how many more times pronounced than those from a magnitude 3.6 quake? 1000
- (12) What is the name of the space probe that will have a close encounter with Pluto during this Science Festival week? New Horizons
- (13) The family home of which famous physicist was, for a time, at 6, Julius Road in Bristol? Paul Dirac
- (14) The comedian and presenter Dara Ó Briain has a degree in Mathematics and Theoretical Physics