

Station 15: The First States - 6,000 Years Ago

 The first states existed in Mesopotamia near the Tigris and Euphrates Rivers about 6000 years ago. The carving on the p[laque is of King Gilgamesh who ruled about 2600 B.C.

Station 16: The Birth of Christ - 2,000 Years Ago

- Christ, represented here as the Lamb of God, was born in Israel, just over 2000 years ago. 1718 years later nano Nagle was born in a house close to this spot where the sundial records the passing hours.
- Ireland, 2000 years ago, was still in pre-history, a culture without writing, a small population, possibly speaking languages which have all disappeared.



#### The Sundial

- At the base of the sundial are linked hands, each representing 50 years.
   40 interlocking hands then brings us back to the time of Christ!
- The sundial reads the hours, but we must consult the tables at the base which tell us what to add for different times of the year.
- The moving shadow at the tip of the gnomon shows the equinoxes; the innermost one – the solstices and the middle line - the anniversary of Nano's death on April 26.

Earth from Space - 1969



## THE COSMIC WALK - NANO NAGLE BIRTHPLACE



This is a 2km walk around the property of Nano Nagle Birthplace.

- The distances between the stations are such that we are reminded of how long it took our Cosmic Story to evolve.
- Before you begin, gather at the silver ball of the world and when you see your
  reflection become aware that you were here at the very beginning. The chemicals –
  Hydrogen and oxygen, the water which make up your body were those which
  emerged in that first Big Bang.
- As you reflect on our evolution from the first "flaring forth" to the present day, you
  will walk around the upper fields, will pass hedges, will descend a stairs toward the
  river, and will walk along the River Blackwater and back up to the Sundial.

#### **ENJOY YOUR JOURNEY!**



Station 1: THE BIG BANG - 13.8 Billion Years Ago

- The universe exploded into being 13.8 billion years ago. Beginning in the 1920s, this fact has been ratified by many eminent scientists.
- It is believed that the universe existed as

Station 2: The First-Generation Stars - 12 Billion Years Ago

This plaque represents atoms of helium in the early gas cloud.
 Clumps of atoms became stars. The first generation of stars eventually imploded and burned out. The atoms they scattered into space became the sun and stars of our solar system.





Station 3: Creation of the Solar System - 4.6 Billion Years Ago

- As the sun formed at the centre of our solar system, it was surrounded by a spinning disc of dust and gas. When some of the clouds slowed down and cooled, they again crashed and made clumps.
- From these latest clumps the planets, including our Mother Earth evolved.

## Station 4: Land/Sea/Atmosphere - 4.3 Billion Years Ago

- After 300 million years the earth would finally cool enough for the surface to solidify and for the vapour in the atmosphere to condense into rain. Eventually most of the earth's surface was covered in water.
- 800 million years later we shall see life on earth!



# Station 5: Life on Earth - 3.5 Billion Years Ago

- The double spiral form of the DNA molecule is the key to reproduction of all forms of life on earth.
- The earliest known fossils are limestone nodules formed by colonies of bacteria. These are called stromolites and are found in rocks about 300 million years old.

#### Station 6: The Oldest Rock in Ireland - 1.8 Billion Years Ago

- This stone is a piece of the oldest rock formation in Ireland, known as the Annagh Series, from the coast of north Mayo.
- There had now been life on Earth for about 1.7 billion years and photosynthesis organisms were gradually building up free oxygen in the atmosphere.





## Station 7: Multi-Cellular Life - 530 Million Years Ago

 The first multi-cellular creatures in the fossil record show up in rocks in a burst of evolutionary creativity known as the "Cambrian Explosion". Most were in the sea while the land surfaces were bare.

# Station 8: The Age of Fishes - 370 Million Years Ago

- The sculpture represents a placoderm fish, common in the oceans of the Devonian Period (the age of the fishes).
- The boulder is a piece of red sandstone from across the River Blackwater.



 The sea was teeming with life but the land was mainly desert, so there are no fossils on land from this period.



# Station 9: Land Plants/Amphibians - 315 million Years Ago

- The amphibians were the first major group of land vertebrates, related to frogs, newts and salamanders of today.
- They were limited to wet places because of their porous skin and their need to lay their eggs in water.
- The boulder is of local limestone.

## Station 10: The Age of Reptiles - 270 Million Years Ago

 This sculpture represents Paliguana, a small early predator reptile from 270 million years ago. It sits on a block of chalk from County Antrim. This is from 100 million years ago when dinosaurs were at their peak.





Station 11: The Age of Mammals - 65.5 Million Years Ago

 A marsupial animal from 125 million years ago. They were small early mammals which struggled to survive the dinosaurs. It sits on a piece od basalt from County Antrim from about 65 million years ago – just after the dinosaurs which were killed when a massive meteor crashed into earth about 70 million years ago. Some of the small animals found save niches

and others took to the air as bats and birds.

## Station 12: The Age of Homo Sapiens - 200,000 Years Ago

 Our close relatives – the upright hominid apes have been around for about two million years. Then came the first humans – Neanderthals (200,000 years ago) and modern persons (70,000 years ago).



We are the late-comers to the Earth!



Station 13: The Beginning of Art - 40,000 Years Ago

 40,000 years ago, art appears for the first time in caves. This art has been found in caves as far apart as Australia, India and Europe. These early artists were hunter-gatherers and were nomads, always on the move.

## Station 14: Agriculture - 10,000 Years Ago

- Farming began in the Middle East about 10,000 years ago and occurred in Ireland 5000 years ago. Because food was more abundant, people were freed for other occupations and from this time we have memorial tombs and stone circles. Homes for people were much less elaborate than those for the dead!
- Emphasis in this age was on the supernatural and on religious practice.

