

# VIDYA BHAWAN BALAKA VIDYAPITH SHAKTI UTTHAN ASHRAM LAKHISARAI

CLASS 11<sup>th</sup>      SUBJECT GEOGRAPHY 0

## The origin and evolution of the earth

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Early Theories

#### **Nebular Hypothesis**

- Immanuel Kant, a German philosopher gave this theory.
- In 1796, a mathematician Pierre-Simon Laplace reexamined it.
- According to this hypothesis, the planets were moulded out of a cloud of material associated with a young Sun, which was rotating slowly.

#### **Binary theories**

- As per these theories, the sun had a companion.

#### **Revised Nebular Hypothesis**

- Revised Nebular Hypothesis was propounded by Carl Weizascar in Germany and Otto Schmidt in Russia.
- They regarded that a solar nebula surrounded the sun and that the nebula comprised of chiefly hydrogen, helium and something called dust.
- The collision of particles and the friction caused a disk-shaped cloud to be formed and then the planets were created via the accretion process.

Modern theories

#### **Big Bang Theory**

- Alternatively called the expanding universe hypothesis.
- As per this theory, in the beginning, all matter or substance forming this universe existed at one place as a tiny ball. This tiny ball had an extremely small volume, infinite density and temperature.
- At the Big Bang, this ball blasted fiercely and forcefully and started a substantial process of expansion which continues to this day.
- Now it is accepted that this event took place 13.7 billion years ago.

## Origin of Earth

Theories

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