



A New Study on Earth

 drishtiias.com/printpdf/a-new-study-on-earth

Why in News

- Recently, a study on Earth's spin was published in the American Geophysical Union's journal *Paleoceanography and Paleoclimatology*.
- The study came after scientists studied a 70 million years old mollusc fossil from Oman.

Key Points

- The study states that **Earth spun 372 times a year 70 million years ago, compared to the current 365 times**. This means the day was **23½ hours long**, compared to 24 hours today.
- It is important to note that **the period of Earth's orbit has remained the same**. In other words, one year 70 million years ago was as long as one year today.
- Today, Earth's orbit is not exactly 365 days, but 365 days and a fraction, which is why our calendars have leap years, as a correction.
- It has long been known that Earth's spin has slowed over time.
- The study states friction from ocean tides, caused by the Moon's gravity, slows Earth's rotation and leads to longer days. And as Earth's spin slows, the Moon moves farther away.
- The study states that the Moon's rate of retreat has changed over time.

Source: Indian Express