

Scientific discoveries...

Oldest material on earth discovered!

Scientists analysing a meteorite have discovered the oldest material known to exist on Earth.

- In 1969, a meteorite fell to Earth and within that, Scientists have since found grains of star dust that are as much as 7.5 billion years old.
- This is about 2.5 billion years before the sun, Earth and rest of solar system formed. These dust specks are therefore known as “presolar grains”, “presolar” meaning before the sun.
- The age distribution of the dust show that many of the grains were concentrated at particular time intervals. This provides clues about the rate of star formation in the Milky Way galaxy, and hints at bursts of stellar births, rather than the rate of formation being constant.
- Scientists detected the tiny grains inside the meteorite by crushing fragments of the rock and then making it into a paste, they described the smell as being like rotten peanut butter!

Why not expand on this discovery topic and take a look at our GCSE Physics free sample, 'Life cycles of stars'. This unit looks at how stars with a similar mass to the Sun change over time, as well as how stars with much larger masses than the Sun change, and how the balance between

*thermal expansion and gravity affect stars. You can explore this free sample and many more in our **[Pearson Edexcel GCSE Science page here:](#)** ➔*

