

## The history of the Universe

Key Stage 3

**Topics covered:** Cosmology, Big Bang, scale, chronology

Watch the video "How will the Universe end?", <a href="https://vimeo.com/122515139">https://vimeo.com/122515139</a>



The Universe as we know it began 13.8 billion years ago, in an event called the Big Bang. However there was no explosion, the Universe popped into existence in all directions simultaneously. Eventually over time atoms formed, then stars, galaxies, planets and everything else we see today.

Create your own timeline of the evolution of the Universe. Use an A3 piece of paper and draw a line (in pencil) 28 cm long. This will represent the timeline from Big Bang to now. A length of 2 cm on this line = 1 billion years.

Mark your billion year intervals similar to the line below:

yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs
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billi	billi	billi	billi	billi	billi	billi	billi	billi	billi	billi	billi	billi	billi
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1 billion years = 1000 million years.



Mark the following events on your timeline:

- 1. Big Bang = 0 years
- 2. First stars form = 200 million years
- 3. Milky Way forms = 600 million years
- 4. Solar System forms = 9.3 billion years
- 5. Life begins on Earth = 10.2 billion years
- 6. Dinosaurs wiped out = 13.74 billion years
- 7. Universe now = 13.8 billion years

Trillions of years from now the Universe will be very different. After watching the video, describe the different ways in which the Universe might end.