

Activity 4: The Universe in a year

Background information

Represent the 15 billion year history of the Universe as dates on a calendar:

The Calendar of Time

January	1	Big Bang
	5	First stars are born
	20	First galaxies form
March		The Milky Way Galaxy forms
September		The Solar System forms – The Sun, planets, asteroids, moons
October		First single celled organisms
November		First multi-celled organisms
December	19	First animals with shells and hard parts
	20	First vertebrates
	21	Life still confined to the sea, seaweed is the only plant
	22	First signs of land plants and animals
	23	First insects and spiders
	24	Amphibians dominant
	26	Mammal-like reptiles appear
	27	Dinosaurs abundant, first birds appear
	20	Dinosaurs extinct, increase in diversity of mammals of all kinds
	31	11:50pm – Anatomically modern humans appear

What you need

- A3 cardboard or paper
- Current calendar for reference

What to do

Ask the students to:

1. Draw or use a calendar to show days and months, or for a blank calendar go to the following website:
http://www.eduplace.com/rdg/gen_act/nature/graphics/cal.html
2. Add the bold information from the table above to the calendar.
3. Add drawings or pictures to the calendar to make it more attractive.
If 15 billion years = one year on this calendar,
 - calculate when the first stars and galaxies formed – add this to the calendar,
 - calculate when our Solar System formed and add this to the calendar,
 - add other significant events in the history of the Universe.*Hint: Work out what a month, day, hour and minute represent on your Calendar of Time.*
4. Find out what class mates have added to their calendars. If they have added the same events, check calculated dates are the same/correct.
5. Now draw and illustrate a timeline showing the main events in the history of the Universe. Calibrate your timeline in millions and billions of years from the present.