The Time Telescope - Summer – To be viewed in May/June

Part 1 – Back to the appearance of modern humans		
Barnard's Star	5.96ly	2014 - Rosetta and Philae lander approaching rendezvous with Comet 67P/Churyumov-Gerasimenko
61 cygni	10.4 ly	2010 - First potentially habitable planets discovered round Gliese 581 system. Patrick Moore presenting Sky At Night.
Altair	17 ly	2003 – Loss of Space Shuttle "Columbia" with the 7 crew
Vega	25 ly	1995 - First "Toy Story" film released and launch of Windows 95 (duh!)
Pollux	34 ly	1986 – Chernobyl disaster
Denebola	36 ly	1984 – Torvill and Dean, Band Aid single, Ghostbusters, Half pennies withdrawn
Arcturus	37 ly	1983 – Compact Discs arrive, Pound coins introduced
Rasalhague	47 ly	1973 - Skylab, the first American space station, is launched
Castor	52 ly	1968 - 2001: A Space Odyssey is released. Apollo 8 becomes the first manned spacecraft to orbit the moon.
Mizar	78 ly	1942 - World War 2 The U.S. government establishes the Manhattan Project, led by Robert Oppenheimer, to coordinate ongoing American efforts to design and build the atomic bomb.
Alcor	81 ly	1939 – Outbreak of World War 2
Alkaid	100 ly	1920 – Edwin Hubble begins work to prove that the universe extends beyond the Milky Way galaxy.
Dubhe	120 ly	1900 - Max Planck formulates an energy theory, postulating the existence of "quanta," which lays the groundwork for the quantum theory of modern physics.
Schedar	230 ly	1790 – The French Revolution
Melotte 111 Open cluster NGC4725	300 ly	Edmond Halley is appointed as Astronomer Royal for England.
Albireo	385 ly	1635 - Robert Hooke, English scientist and inventor born Galileo under house arrest till the end of his life for heresy saying that the earth in not the centre of the universe.
Polaris	430 ly	1590 – Lipperhey and Janssen invent the first system for observing objects at a distance. These become the precursors of the microscope and telescope.
Antares	550 ly	1470 - Wars of the Roses: Henry VI of England returns to the English throne after Earl of Warwick defeats Yorkists in battle
M44 Beehive	577 ly	1443 – Midst of The Hundred Years War between England and France
M27	1,200 ly	820 – Battles between between Mercians, Wessex

		and their common enemies, the Danes. Offa's Dyke recently completed along the English/Welsh border via Hay, Knighton and Llangollen.
Sadr	1,500 ly	520 - The Kingdom of East Anglia is formed, by the merging of the English counties of Norfolk and Suffolk,
M34 Open	1,500 ly	
M97 Owl	2,025 ly	6 BC –Believed to be the approximate date of the birth of Jesus.
M57	2,870 ly	851 BC - Homer composes the *Iliad* and *Odyssey*.
NGC 884	6700 ly	~5000 BC - Holocene - The islands of Great Britain and Ireland were now severed from continental Europe by rising sea water.
M13	25,000 ly	Pleistocene – Frequent Ice Ages covering Great Britain - Mammoths, Mastodons common
M3 Globular	34,000 ly	Upper Paleolithic – Homo Sapiens begin expansion out of Africa – Neanderthals becoming extinct.
M53 Globular	58,000 ly	Meteorite hits what is now Arizona forming Meteor Crater.
NGC5053 Globular	58,000 ly	
Small Magellanic Cloud	130,000 ly	Not visible from UK but the only stopping off points left when there might be human life resembling Homo Sapiens on earth. Straight tusked elephants roam UK and Europe
Large Magellanic Cloud	206,000 ly	
Part 2 – Before modern humans to the first life on earth		
M31	2.5 million ly	Pliocene - Co-existence of Homo Habilis and Homo Erectus
M81 M82	11 million ly	Miocene - The ancestors of humans had split away from the ancestors of the chimpanzees to follow their own evolutionary path
M94 Face on spiral	14 million ly	The Nördlinger Ries and Steinheim impact craters formed leading to a large circular depression in western Bavaria, Germany. The resulting explosion had the power of 1.8 million Hiroshima bombs. The two craters are believed to have formed nearly simultaneously by the impact of a binary asteroid
NGC4244 Silver Needle galaxy	14 million ly	Miocene - The apes first evolved, arose, and diversified. Megalodon: The World's Biggest Shark appears. Extinct 1.6 million years ago.
M64 Black Eye Galaxy	17 million ly	Possible human evolutionary ancestors such as Victoriapithecus evolved during this time interval.
NGC4631 Whale galaxy	22 million ly	The family of Hominidae (great apes) appeared 20 million years ago, concurrent with the appearance of giraffes, hyenas, bears and giant anteaters. Birds increased in diversity around this time. The oxygen level was 96.2 % of modern atmospheric oxygen.

M106	24 million ly	Oligocene - Australia separates from Antarctica India crashes into Asia creating the Himalayan Mountains. Antarctica is covered by glaciers . Sea levels are low
M51	27 million ly	Terror birds, large carnivorous flightless birds that were the largest species of apex predators roam South America
NGC 4656 Hockey Stick	30 million ly	The eruption that created the La Garita Caldera in Colorado is among the largest known volcanic eruptions in Earth's history, as well as being one of the most powerful known supervolcanic events. 5,000 times more powerful than the largest hydrogen bomb.
M63 Sunflower	34 million ly	Eocene - The initiation of the Antarctic Circumpolar Current, and a change to a colder Antarctic climate is associated with the opening of the Drake Passage between South America and Antarctica. The Chesapeake Bay impact crater was formed by a bolide that impacted the eastern shore of North America. The impact crater created a long-lasting topographic depression which helped predetermine the course of local rivers and the eventual location of the Chesapeake Bay.
NGC4485 and NGC4490 Cocoon	40 million ly	The Antarctic was home to a species of frog, when the now icy region was once much warmer and temperate
M87	58 million ly	Europe has a tropical climate. The tarsier, a primate with enormous eyes to help it see at night, splits from the rest of the haplorrhines: the first to do so.
NGC4414 Spiral	58 million ly	
M90	61 million ly	The primates split into two groups, known as the haplorrhines (dry-nosed primates) and the strepsirrhines (wet-nosed primates). The strepsirrhines eventually become the modern lemurs and aye-ayes, while the haplorrhines develop into monkeys and apes – and humans.
M85	65 million ly	An asteroid hits the Yucatan peninsula in Mexico and gouges a hole 20 times as deep as the Grand Canyon wiping out most life on earth including all the giant reptiles: the dinosaurs, pterosaurs, ichthyosaurs and plesiosaurs. The ammonites are also wiped out. The extinction clears the way for the mammals, which go on to dominate the planet.
NGC3892 spiral	68 million ly	Grasses evolve – though it will be several million years before the vast open grasslands appear. The most widely known dinosaurs, Tyrannosaurus,

		Triceratops and Velociraptor roam the earth.
NGC5005	81 million ly	Dinosaurs become more widespread
NGC4921	319 million ly	Carboniferous - The pelycosaurs, the first major group of synapsid animals, dominate the land. The most famous example is Dimetrodon, a large predatory “reptile” with a sail on its back. Despite appearances, Dimetrodon is not a dinosaur. The Permian period ends with the greatest mass extinction in Earth’s history, wiping out great swathes of species, including the last of the trilobites.
NGC4874	340 million ly	The coal beds of Europe and North America are laid down by vast forests.
NGC4889	390 million ly	Devonian - Age of the fishes The first four-legged animals, or tetrapods, evolve from intermediate species such as Tiktaalik, probably in shallow freshwater habitats. The tetrapods go on to conquer the land, and give rise to all amphibians, reptiles, birds and mammals . Tthe oldest known insect lives around this time.
3c 273 Quasar	2.5 billion ly	Earth freezes over in what may have been the first “snowball Earth”, possibly as a result of a lack of volcanic activity. When the ice eventually melts, it indirectly leads to more oxygen being released into the atmosphere. Viruses are present by this time, but they may be as old as life itself.
Jupiter and Saturn	778m km 1420m km	On the way back to the present day, just time to stop at Saturn 105 minutes ago and Jupiter, 41 minutes ago