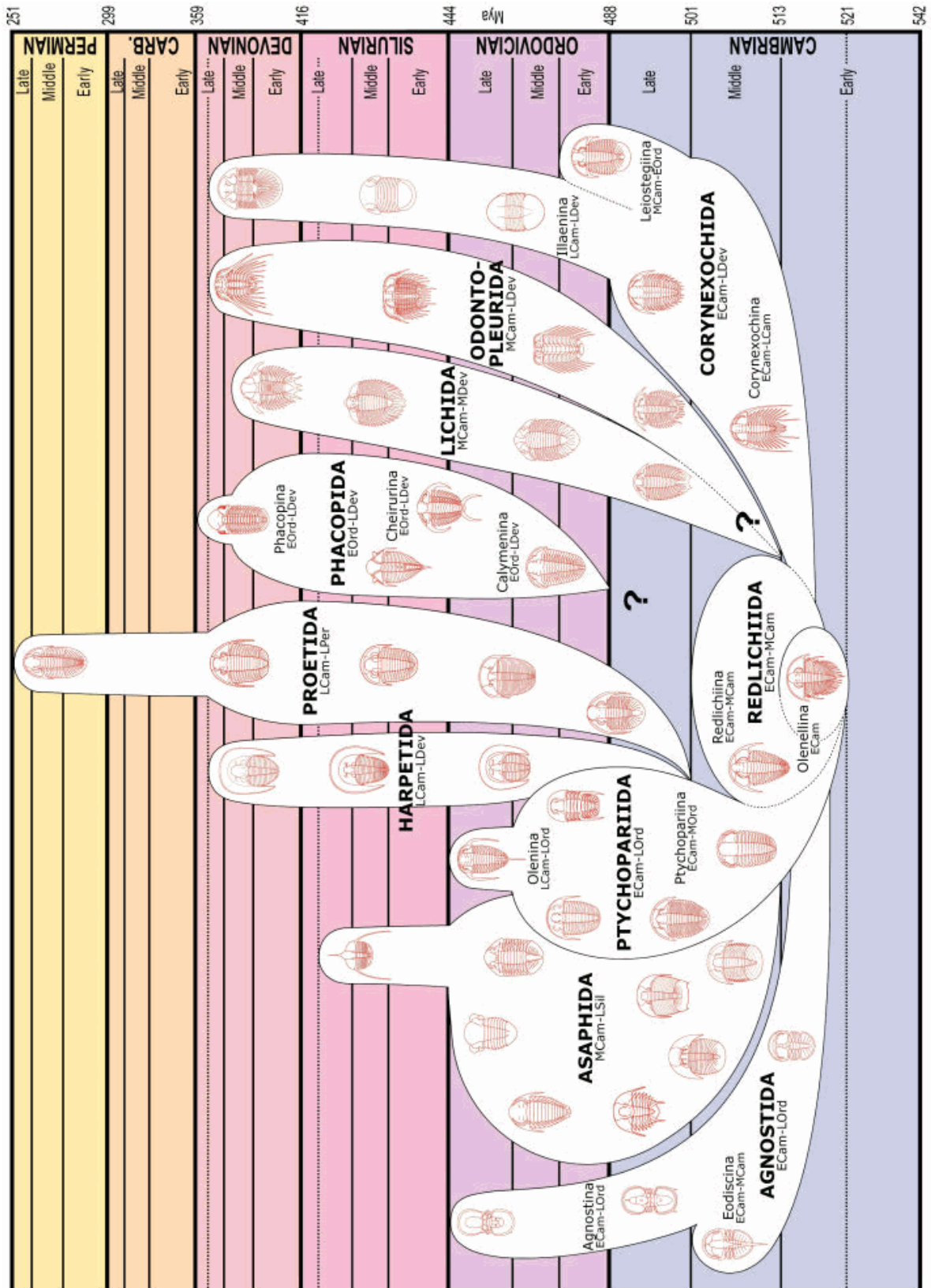


Graptolite shapes through time
 Modified from Moore, Lalicker & Fischer (1952), Figure 22-7

Graptolites through time

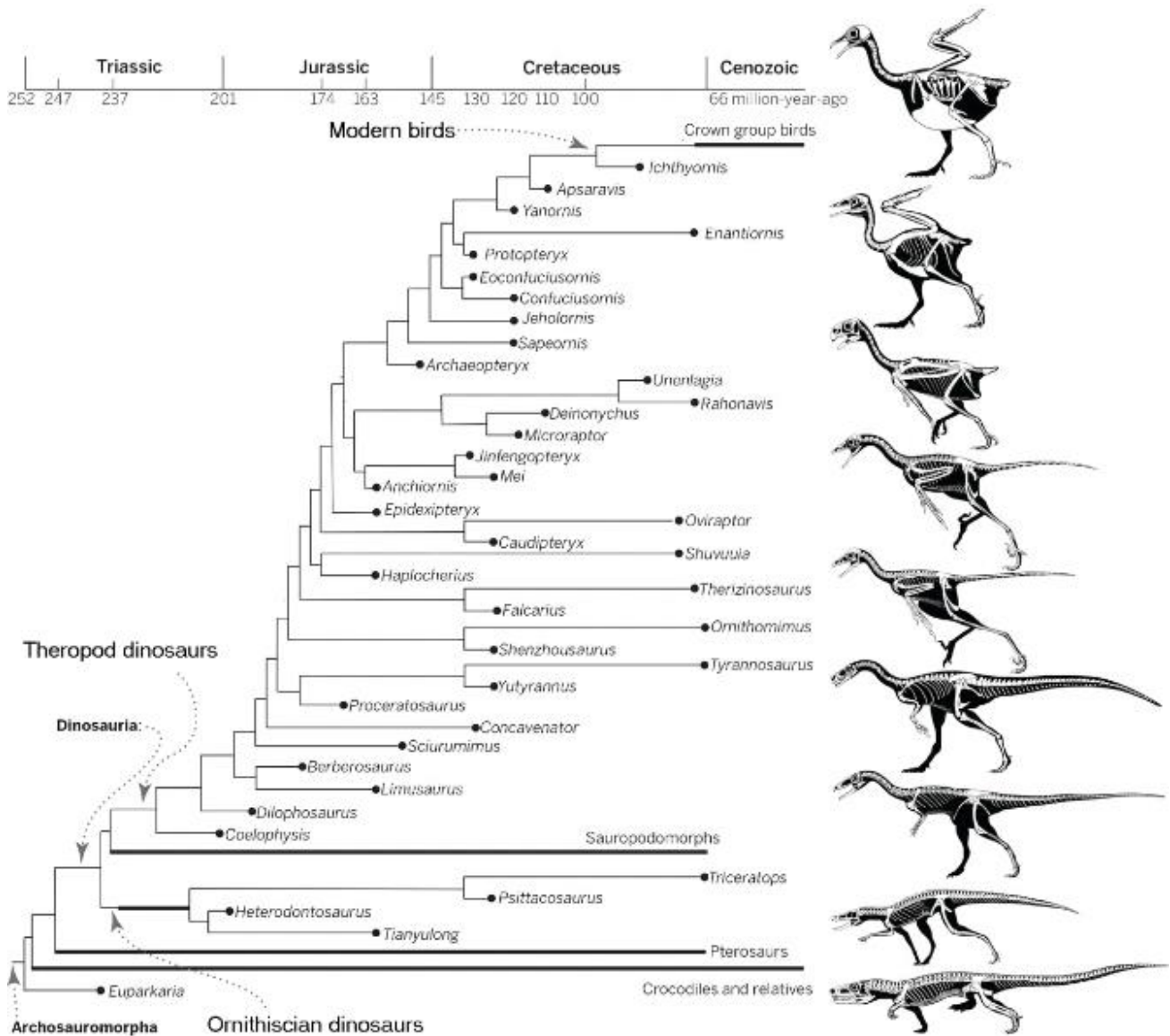


Trilobites through time

Hardness scale

Hardness	Example Minerals/materials
1	Talc
2	Gypsum
2.5	Fingernail, pure gold, silver, aluminium
3	Calcite, copper coin
4	Fluorite
4.5	Platinum, iron
5	Apatite, Pyroxene group (5 to 6)
6	Orthoclase feldspar, titanium, <u>spectrolite</u> , Pyroxene group (5 to 6)
6.5	Plagioclase feldspar, steel file, iron pyrite, glass, vitreous pure silica
7	Quartz, amethyst, <u>citrine</u> , agate, olivine, tridymite (high temp quartz)
7.5	Garnet, <u>coesite</u> (high pressure quartz)
8	Hardened steel, topaz, beryl, emerald, aquamarine
9	Corundum, ruby, sapphire
9.5	Carborundum
10	Diamond

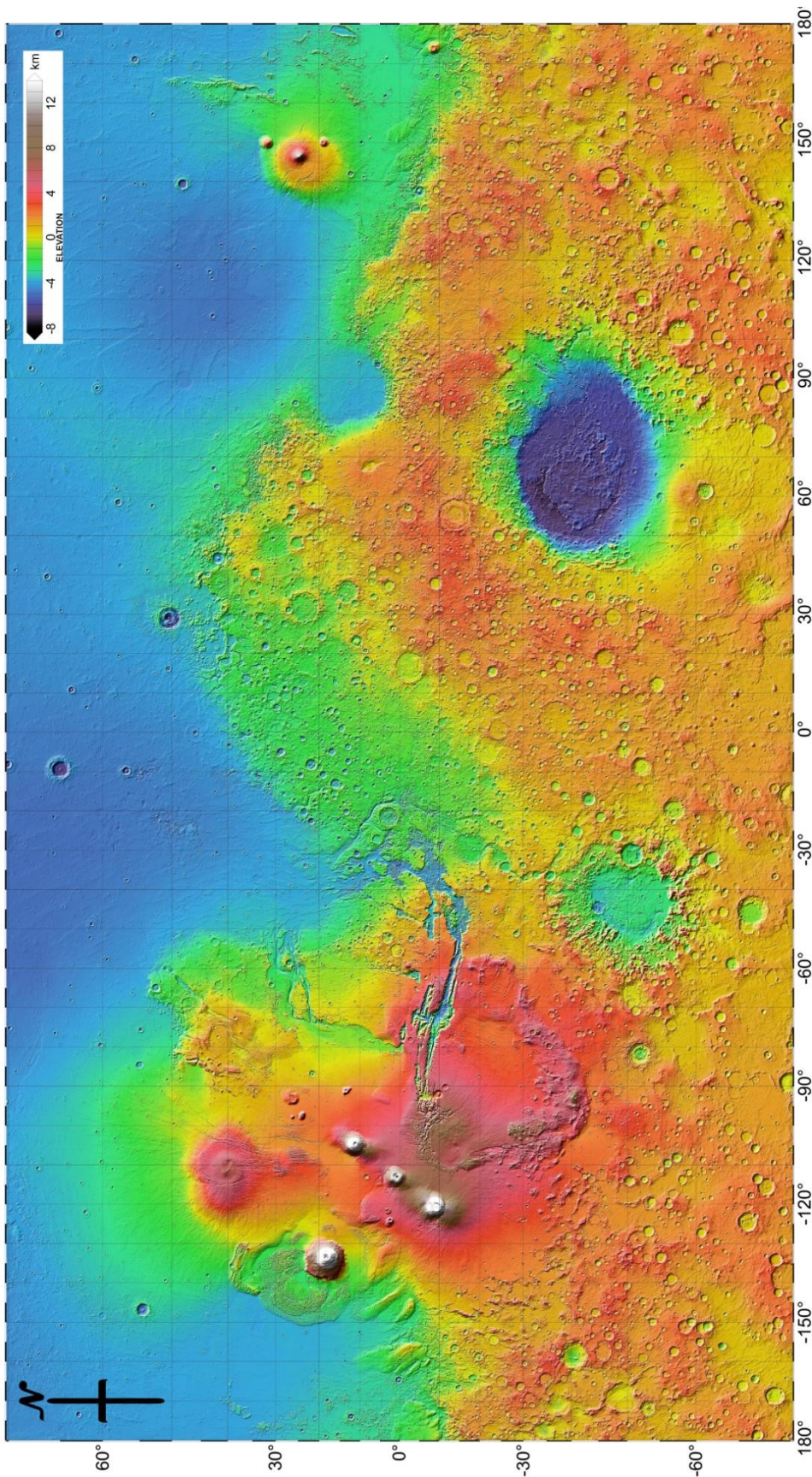
Evolution of birds and dinosaurs



Evolution of Birds

Modified from Xu et al 2014. Science V346, 6215.1253293

Topographic map of Mars



Topographic shaded relief map of Mars, based on the Mars Orbiter Laser Altimeter (MOLA) data set from the Mars Global Surveyor spacecraft. Elevations greater than 15 km above the baseline (zero on the elevation legend) are white. Elevations deeper than 8 km below the baseline are deep purple to black. Martian north is shown by the

