*The large (94km diameter) ruined walled plain Fra Mauro is marked by the spacecraft boom. Apollo 14 landed in the rugged terrain just outside the ring and towards the top.*

in craters with diameters of 20–50 km and these, together with the larger sizes, are very shallow in relation to their diameter, with depths of just a few kilometres. Smaller craters are often clean-cut and bowl shaped, but the larger they are, the more likely it is that they will be partially filled by material which has fallen from the walls. In the very largest cases there has usually been extensive slumping to form internal terraces and, in some instances, flooding by dark mare material has produced a level floor. Big craters frequently show a central peak, or even a ring of peaks around the centre. Such features show many similarities to the multi-ringed basins, one of the youngest of which is the 900-km-diameter Mare Orientale.

The origin of all the craters has long been a subject for debate between those who favour a volcanic origin and those who believe they were formed by impact. However, the evidence from spacecraft data and from the rocks gathered by the astronauts makes it seem highly likely that the majority are impact features. The impact of a high-velocity meteorite vaporizes both the object itself and part of the underlying rock down to as much as a few kilometres in depth. The explosion caused by this pocket of hot gas can transport debris to very great distances, but