

Activity name	Expected duration	Difficulty of the activity	Age of children for which the activity is suitable	Tools and material used	Objective of the activity
Practical Exercise 1:	1 lesson	medium	14 – 15 years	wooden metre, table or laboratory stand, tape measure	Introduction to the term parallax
Practical Exercise 2:	2 lessons	higher	12 – 14 years	tape measure, compass, drawing supplies, calculator	Introduction to methods of measuring distance in space
Practical Exercise 3:	1 lesson	medium	12 – 14 years	–	Introduction to scales for distances in the Solar System
Practical Exercise 4:	1 lesson	medium	12 – 14 years	–	Introduction to scales of planets in the Solar System

Practical Exercise 4: SCALES OF PLANET SIZES IN THE SOLAR SYSTEM

Find out from suitable sources (textbooks, tables, the internet) the diameters of the planets, or their radii and calculate the diameters accordingly. Then calculate how many times the larger planets are larger than the Earth and how many times the smaller planets are smaller (write a decimal number which needs to be used to multiply the diameter of the Earth).

Planet	Diameter (km)	Scale
Mercury		
Venus		
The Earth		1.00
Mars		
Jupiter		
Saturn		
Uranus		
Neptune		

Planets in a suitable scale (e. g. Jupiter with a diameter of 5 cm) can be modelled from colourful plasticine, or each planet in the correct scale can be drawn on a paper with the size of one quarter of A4 format. In connection with Activity 2, it is possible to prepare a planetary path, e.g. on the school corridor.