



## **Keep in touch with the Sky above us**

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Earth and astronomical phenomena and processes are often difficult to visualize and we appeal to abstraction in order to try to understand them. Sometimes the use of very simple and inexpensive materials allow the creation of very effective experiences to better understand the environment which surrounds us. In our poster we are presenting two simple activities on the observation of astronomical aspects of our Solar System.

The Oriented Globe (or Parallel) is a simple experience, which allow modelling the Earth in the Space. It is a common terrestrial globe whose axis is inclined about  $23^{\circ}27'$  (obliquity of the rotational axis). We can re-orient this axis with respect to the horizontal plane by an angle equal to the latitude of the place where we are (for instance about  $48^{\circ}\text{N}$  for the town of Vienna). If the axis is oriented towards north it points towards the north celestial pole and it is parallel to the axis of the Earth. The Oriented Globe gives us the opportunity to make a lot of simple experiences of orientation in space, and on Earth-Sun relationships.

A pinhole camera is a very simple device that safely allows observing the Sun. To setup the pinhole you just need a 1 meter tube, a sheet of parchment paper, a sheet of aluminium foil, a pin. . . and a sunny day! By projecting the Sun through a tiny hole onto a white sheet of paper it is possible to make a lot of observations and measurements, as for instance the computation of the Sun diameter.