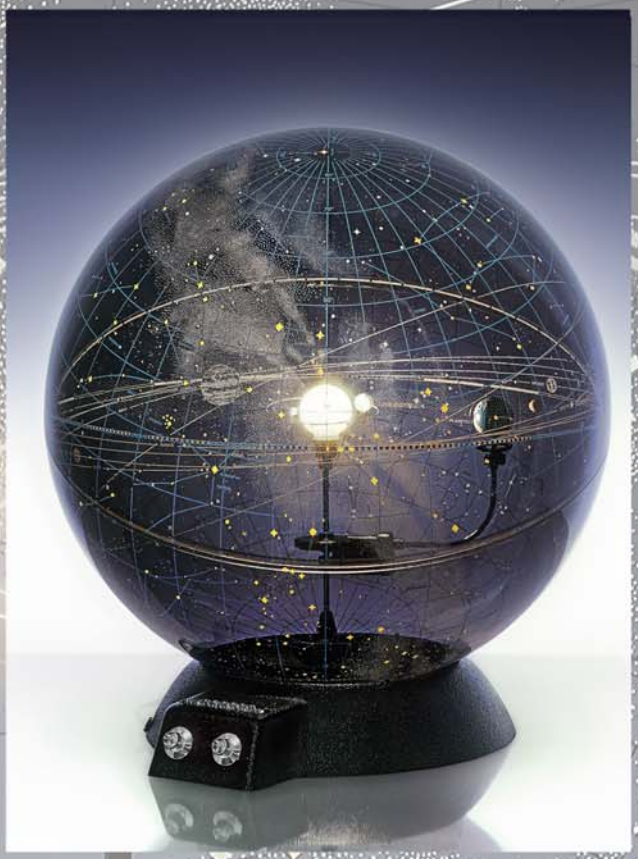
OBSERVATIONS AND DEMONSTRATIONS WITH A BAADER PLANETARIUM



PRIMARY SCHOOLS:

- Earth's revolution around the Sun (annual movement)
- Direction of Earth's axis towards the Celestial Pole (seasons)
- Earth's rotation around its axis (day and night, worldtime)
- Changing length of day and night (summer day, winter day, polar day, equatorial day)
- Moon's orbit around the Earth (full Moon, new Moon, phases of the Moon, lunar Eclipse, solar Eclipse)
- Polar orbit of a space ship
- The changing of the seasonal night skies (resulting from Earth's annual revolution)
- The hourly movement of the night skies as result of Earth's rotation

SECONDARYSCHOOLS:

- The Earth indeed "hangs in space" and rotates around its axis (observation of the astronauts)
- The derivation of the apparent movements of Sun, Moon, Planets and Fixed Stars from Earth's real motion, visible in the Planetarium
- The changing of the lunar nodes
- The horizon, depending on our position on Earth
- Celestial Equator and Ecliptic
- The Celestial Globe as spherical star map, magnitudes of Stars and the Constellations
- Synchronization of Earth and Star Globe to demonstrate the actual night sky

HIGH SCHOOLS AND UNIVERSITIES:

- Precession, different Calendars (lunar year – solar year)
- Solar time and Sidereal time, Solar day and Sidereal day directly visible
- Positional astronomy and astronomical determination of longitude and latitude deduced from heliocentric observations
- The different Coordinate Systems
- Changing of reference plane (by referring all observations onto a horizontal ecliptic or onto a horizontal celestial equator)
- Parallaxes in nature, parallaxes in the Planetarium
- Horizon, Star tracks, Sun's track
- Projection with the Planetarium, adjustment of the Star Globe matching the actual night Sky for every position on Earth and any date in the year, as basics for Celestial navigation

baader planetarium®

DOK: G\Prosp\Plan\2000_Baader_Planetarium-Weltraumlehrgerät-e-rvorn_web