Physics - NO year 6

The Universe

Sample description/criteria

You will take a written test in week 41 You can prepare by

* Read pages. Not the table on information about planets on page 14.
* Read through the PowerPoint that we used during the lessons, it is available on schoolsoft under *Physics universe* and *files*, it is also available in *teams* in *NO*, then go to *files* and under *Physics*.
* Look at your own notes.
* Practicing concepts. Do you know the concepts? Use them to test whether you know and understand what they mean.

You will do some assessment tasks during the work that are unprepared.

**Key concepts**

Asteroid, astronaut, astronomy, atmosphere, Big Bang, day, fusion, galaxy, celestial bodies, earth axis, Jupiter, comet, cosmonaut, light year, Mars, Mercury, meteor, meteorite, midnight sun, month, moon, lunar eclipse, nebula, Neptune, neutron star, orbit, red giant, satellite, Saturn, leap year, shadow, sun, solar eclipse, solar system, sundial, star, supernova, black dwarf, black hole, tide, universe, Uranus, vacuum, Venus, Milky Way, white dwarf, world view, year, season.

**The ability to use concepts, models and theories to describe and explain different relationships.**

You should be able to understand and explain:

* why the Earth's atmosphere is so important for life on Earth
* what a worldview, geocentric and heliocentric, is and how it has changed over time
* how day becomes night
* and name some planets that are in our solar system
* what distinguishes the 4 inner planets from the 4 outer planets in our solar system.
* give examples of some celestial bodies in the universe and how they move
* why we have seasons (use concept of earth axis)
* the relationship between the sun, moon and earth
* concepts; day, month, year, season and leap year
* what metric is used to measure distance in space and explain what it means
* what a satellite is
* uses of satellites (use concept of orbit)

**The ability to use knowledge to review information, communicate and take positions on issues.**

* Choose from different sources about how technology can influence the description of the solar system and which sources are about how religion and culture can influence.
* consider whether the information is important and the source is credible (source criticism).
* take a stand (what you think) and argue why you think so.

**the ability to conduct systematic surveys**

* come up with questions that can be investigated. e.g. When is shadow year north?
* come up with suggestions for improvement. What changes could be made to improve the results?