

Planet Ptschunk Worksheet



Astronomers have discovered a new planet orbiting another star, called Ptschunk (pronounced “puh-choonck”). Its characteristics are different from Earth’s:

- Ptschunk’s spin rate (its day) is 21.3 Earth hours.
- The planet’s revolution about its sun (its year) takes exactly 302 Ptschunkian days.
- Ptschunk has two bright moons of about equal size, one taking 20 Ptschunkian days to go through its cycle of phases, the other 60 days.
- Three other planets are visible in Ptschunk’s sky (in addition to the sun and the two moons).

Remember that on Earth we define the cycles of time we use as follows:

- One day is how long it takes for the Earth to turn on its axis, so the Sun appears to return to the same position in the sky (1 day = 24 hours).
- One month is how long it takes the Moon to go through a full cycle of its phases, for example from full moon to the next full moon, about 29.5 days.
- One year is how long it takes for the Earth to go through the full cycle of its seasons (or to orbit the Sun once; 1 year = 365.25 days).
- One week is a made-up unit of seven days (based on the seven wandering objects in the sky visible to the ancients: the Sun, the Moon, and five visible planets.) Nothing happens in the sky in one week.

Please make a calendar system for Ptschunk and be prepared to explain it. If you have time, come up with some important Ptschunkian holidays (be creative).
