

Besides the above nine planets, Indian astronomers take into account a starry sphere in the sky called Saptarṣis and the star called Dhruva.

1) *Sūrya*. The sun gives light to all the other planets. It has an area of 50 crore yojanas and its distance from the earth is 22 crore yojanas. Sūrya exists within the universe, and is called also Mārtaṇḍa as it originated from dead (mṛta) egg (aṇḍa). Sūrya divides the sky, heaven, hell, the earth, east, west, north, south etc. from one another. According to the course of Sūrya three periods of time or 'seasons' like uttarāyaṇa, dakṣiṇāyana and viṣuvat are caused. Five months from May is the uttarāyaṇa period, five months from November the dakṣiṇāyana period, and the months of April and October are the Viṣuvsats. Since during the uttarāyaṇa the sun rises up comparatively slowly (mandagati) during this period the day is longer than night. As in dakṣiṇāyana the course of the sun is quicker in pace (Śighragati) night is longer than day, and during viṣuvat, (samagati) day and night are of equal duration.

The other planets have three positions called Jaradgava, Airāvata and Vaiśvānara, the first being the central position, the second the northern position and the third the southern position. Nine stars, Aśvinī, Bharanī, Kṛttikā, Rohiṇī, Mṛgaśiras, Ārdrā, Punarvasu and Puṣya occupy the Airāvata vīthī (northern position or segment). Another nine stars, Maghā, Pūrva Phalgunī, Uttara Phalgunī, Hasta, Citrā, Svātī, Viśakhā, Anurādhā and Jyēṣṭhā occupy the central position, and the last nine stars, Mūla, Purvāṣāḍha, Uttarāṣāḍha, Śravaṇa, Śraviṣṭhā, Śatabhiṣak, Pūrva-proṣṭhapada, Uttaraproṣṭhapada and Revatī occupy the southern position.

To the east, south, west and north of Mount Mahāmeru exist Devadhānikā (Indrapurī) Samyamani (Yamapurī) Nīmlocanī (Varuṇapurī) and Vibhāvarī (Kuberapurī) respectively. When Sūrya appears in Devadhānikā it will be dawn, when he has travelled to Samyamani it will be noon, when he is in Nīmlocanī it will be sunset and when he is in Vibhāvarī it will be mid-night. This is how Sūrya circles the Mahāmeru. Within 15 nādikās (6 hours) the sun travels $2\frac{1}{2}$ crores plus $2\frac{1}{2}$ lakhs of yojanas. Sūrya's chariot has one wheel and twelve spokes. The wheel represents a year and the twelve spokes stand for the twelve months of the year. The chariot has also three nābhīs representing the three cāturmāsyaś, and six bands representing the six seasons. The height of the chariot is 36 lakhs yojanas and it has a width of 8 yojanas inside. Aruṇadeva is the charioteer, and the seven chandas are the horses. The seven chandas are, Gāyatrī, Bṛhatī, Uṣṇik, Jagatī, Triṣṭubh, Anuṣṭubh and Paṅkti).

Night is called Uṣā and day Vyuṣṭi and the time in between is Sandhyā. When Sandhyā begins the terrible Rākṣasas called Mandehas attempt to consume Sūrya. They have been granted the boon that everyday they will be dying though they may not be losing their bodies. So, everyday there rages a fierce fight between them and Sūrya. When the fight is on, noble brahmins throw up water sanctified by Gāyatrī mantra with 'Om'. The water turns into Vajrāyudha and burns the Rākṣasas to ashes. The first offering in Agnihotra is made with the recitation of the mantra beginning 'Sūryo Jyoti' because of which the sun is able to shine

with thousands of rays with the result that the Rākṣasas are burned to death. The Bālakhilyas who number more than 60,000 form Sūryā's body-guard. (See under Sūrya for Purāṇic stories about him).

2) *Candra*. (*The Moon*). Candra exists at one lakh yojanas away from Sūrya, and it revolves round the earth. A cāndra month of twentyseven days is divided into twelve rāśis (houses) viz. Simha (Leo), Kanyā (Virgo) Tulā (Libra) Vṛścika (Scorpio) Dhanus (Sagittarius) Makara (Capricorn) Kuṁbha (Aquarius) Mīna (Pisces) Meṣa (Aries) Vṛṣabha (Taurus) Mithuna (Gemini) and Karkaṭaka (Cancer). Every month Candra stays in each of the above houses only for $2\frac{1}{4}$ days.

The full moon makes Piṭṛs happy, divides the month into two halves, Kṛṣṇa Pakṣa (the dark fortnight) and Śukla Pakṣa (the bright fortnight) and functions as the very life of all living beings. The twentyseven stars from Aśvinī to Revatī are the wives of Candra. There is another view that Candra has twentyeight wives including another star called Abhijit. Candra has another name, Sarvamaya. Candra with his pleasing rays, as sweet as Amṛta (Nectar) bestows happiness on devas, Piṭṛs and all other living beings. So he is called Sarvamaya.

Candra's chariot has three wheels. Ten beautiful horses white as Jasmine flowers draw the chariot. These horses also like those of Sūrya live for a Kalpa era. Because the Devas drink its digits Candra wanes into one digit (Kalā). Then Sūrya makes him wax again with one single ray of his called Suṣumnā. When only two Kalās of his remain Candra enters the orbit of Sūrya and stays there in the ray called 'amā', and that day, therefore is called amāvāsyā. And on that day Candra enters waters for the first time, and after that dwells in trees, creepers etc. While Candra is thus in trees etc. those who cut them will be committing the sin of brahmahatyā. (slaughter of a brahmin). When only a little of the 15th kalā remains on new moon day hordes of Piṭṛs gather round the enfeebled Candra to drink him, and they drink the amṛta kalā, one of the two kalās still remaining with him. Thus the three classes of Piṭṛs, Barhiṣadas, Saumyas and Agniṣvāttas get absolutely satisfied for one month. Thus Candra nurtures Devas in the Śukla Pakṣa and piṭṛs in Kṛṣṇa Pakṣa, and grows trees, creepers etc. with life-giving water. (For details see under Candra).

3) *Śukra* (*Venus*). Śukra is an auspicious Deva very much interested in doing good to the world and making people happy. His course is also, like that of Sūrya, of three types, intense (quick), slow and of equal pace. Two-and-a-half yojanas above Sūrya, Śukra follows a course alternating in front of and behind Sūrya. Śukra never goes very far away from Sūrya, and he possesses a big chariot drawn by horses from earth. (For details see under Śukra).

4) *Budha* (*Mercury*). Though inherently auspicious Budha, in contact with inauspicious planets takes their character and becomes weak. Budha also has the three paces, quick, slow and medium. Budha moves close to Sūrya and if he moves from Sūrya storms, failure of rain etc. will be the result. He is considered to be the son of Candra. His chariot is made of wind and fire, golden in colour and is drawn by eight horses having the speed of wind. (See under Budha for more details).