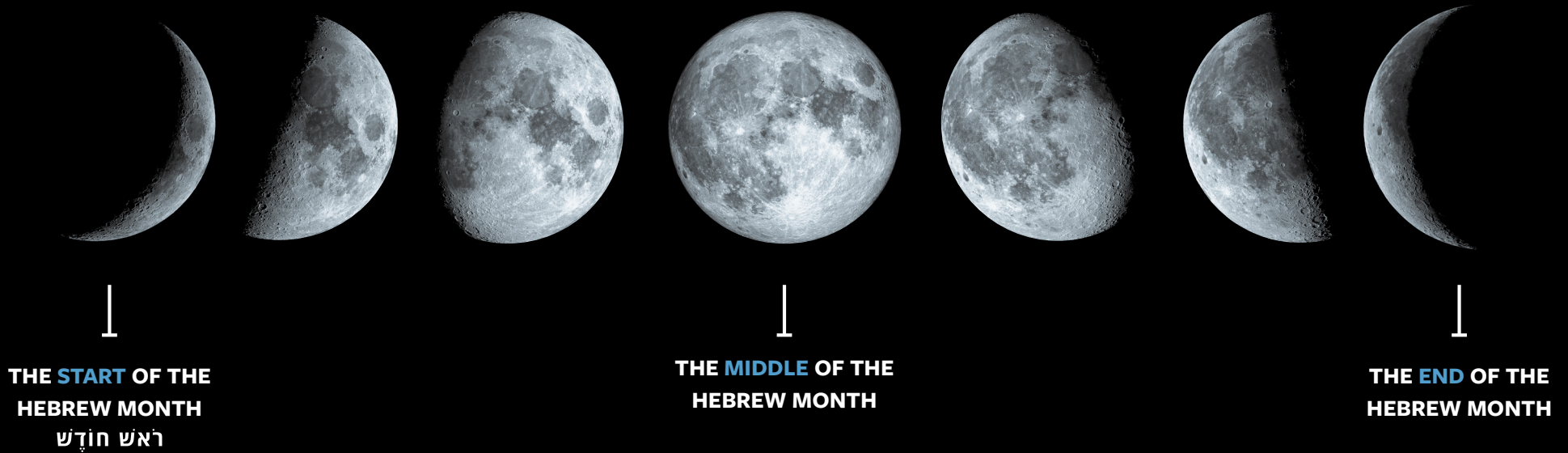
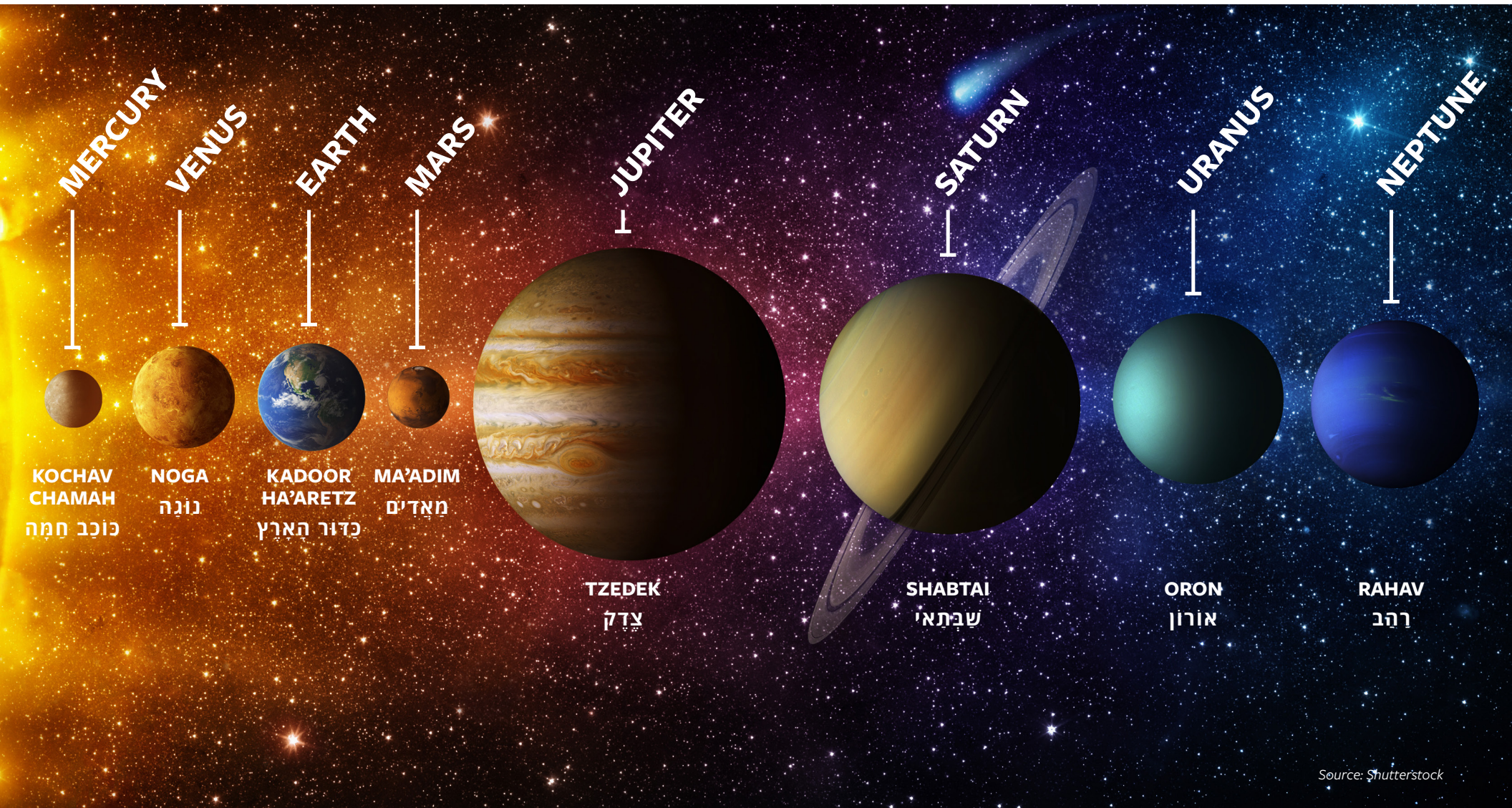


LUNAR PHASES | מופעי הירח



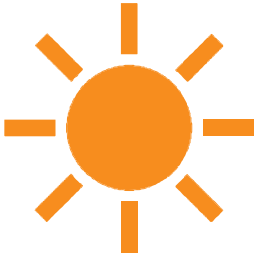
Source: Shutterstock

THE PLANETS | פּוֹכְבֵי לַכֶּת



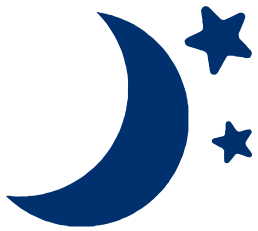
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CALENDARS



A **solar calendar** is based on the Earth's revolution around the sun. An average year (the time it takes for the Earth to complete one revolution around the sun) is 365.25 days. To simplify things, a year is rounded down to 365 days, and every fourth year is a leap year, where one extra day is added to the calendar. This day is February 29th. The year is divided into 12 months each with 28-31 days.

The **Gregorian calendar** is the most widely used solar calendar, including in the Western world. It was named after Pope Gregory XIII who introduced it in 1582.



A **lunar calendar** is based on the monthly cycles of the moon's phases. (The first day of the month is a new moon.) The year is divided into 12 months, each with 29-30 days. This calculation makes a lunar year approximately 10-11 days shorter than a solar year. This in turn means that important days such as religious holidays fall in different seasons as the years pass.

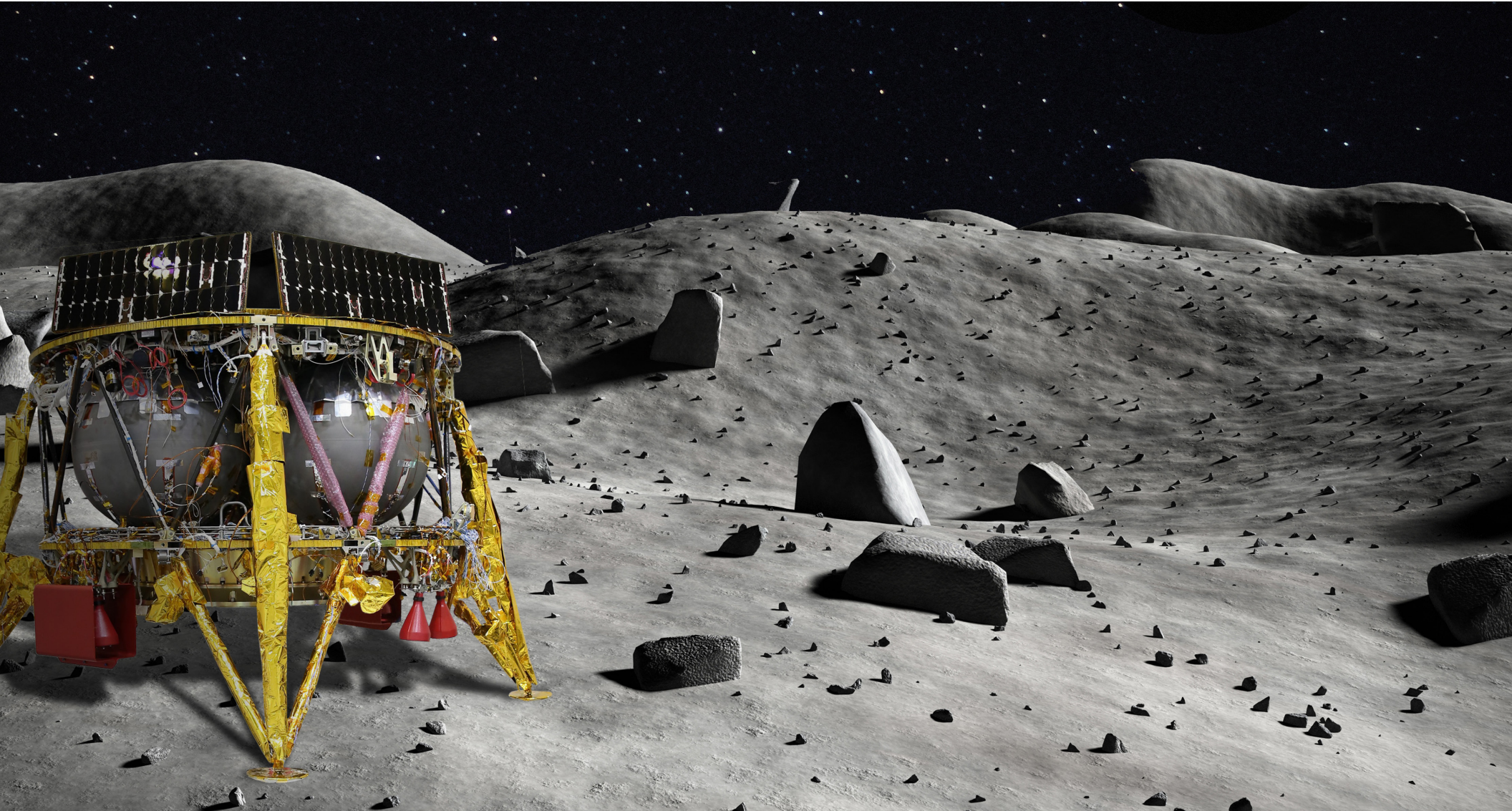
The most well-known example of a lunar calendar is the **Hijri or Islamic calendar**, which was established in 622 CE (the year Muhammad and his followers migrated from Mecca to Medina).



A **lunisolar calendar** uses both the lunar phases and the solar year.

The best-known example of this is the **Hebrew or Jewish calendar** which was set in the 4th century CE under Hillel II. The Hebrew calendar is made up of 12 months of 29-30 days in accordance with the lunar calendar. However, the majority of biblical holidays were agriculture-related events in Israel; so the difference between the lunar and solar year had to be bridged to ensure the holidays would fall in the right season. Therefore, the Hebrew calendar has a leap year, seven times every 19 years, where an extra month (Adar 1) is added.

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WHAT WOULD YOU BRING TO SPACE?
מה הייתם לוקחים אתכם לחלל?