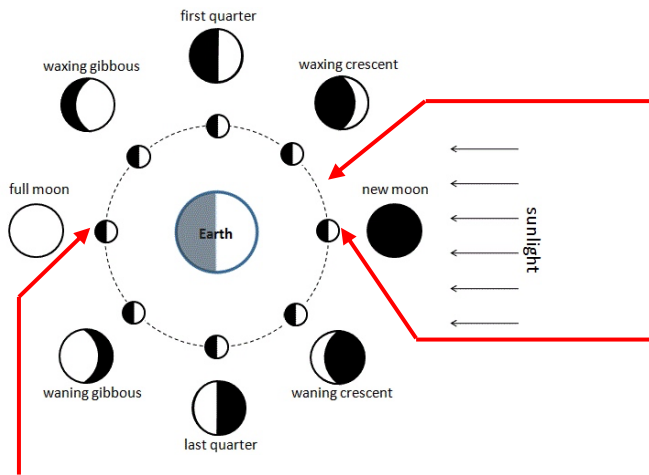


Eclipses and the Hebrew Calendar — Handout



New Moon-observed new moons are rarely visible earlier than 17 hours past the conjunction, usually about 30 hours. Therefore, observed new moons can vary by one or two days.



Solar eclipses can only occur during a new moon conjunction when the moon is directly between the earth and the sun. They occur on the first day of the month and can occur during the Feast of Trumpets.



Lunar eclipses can only occur during a full moon on 14/15th day of the month. They often occur on the Passover and the first day of the Feast of Tabernacles.

Length of the Lunar month = 29.53059 days X 86,400 sec = 2,551,442.9 sec

Feasts of God

Sabbath = 7 days

Passover = 1st month, 14th day (full moon)

First Day Unleavened Bread = 1st month, 15th day

Last Day Unleavened Bread = 1st month, 21st day

Pentecost = 50th day from the wave sheaf offering

Trumpets = 7th month, 1st day of the month (new moon)

Atonement = 7th month, 10th day of the month

Tabernacles (first day) = 7th month, 15th day of the month (full moon)

Last Great Day = 7th month, 22nd day of the month

The Sun is 400 times bigger than the Moon.

Sun = 865,000 miles

Moon = 2,159 miles

$865,000 \div 2,159 = 400$

But the Moon is almost 400 times closer to the Earth than the Sun.

Distance from Earth to Moon = 238,900

Distance from Earth to Sun = 93,000,000

$93 \text{ million} \div 238,900 = 389$

$389 \div 400 = 0.9\%$

This ratio makes for perfect Solar Eclipses

No other planet/moon in the Solar System can have perfect total eclipses