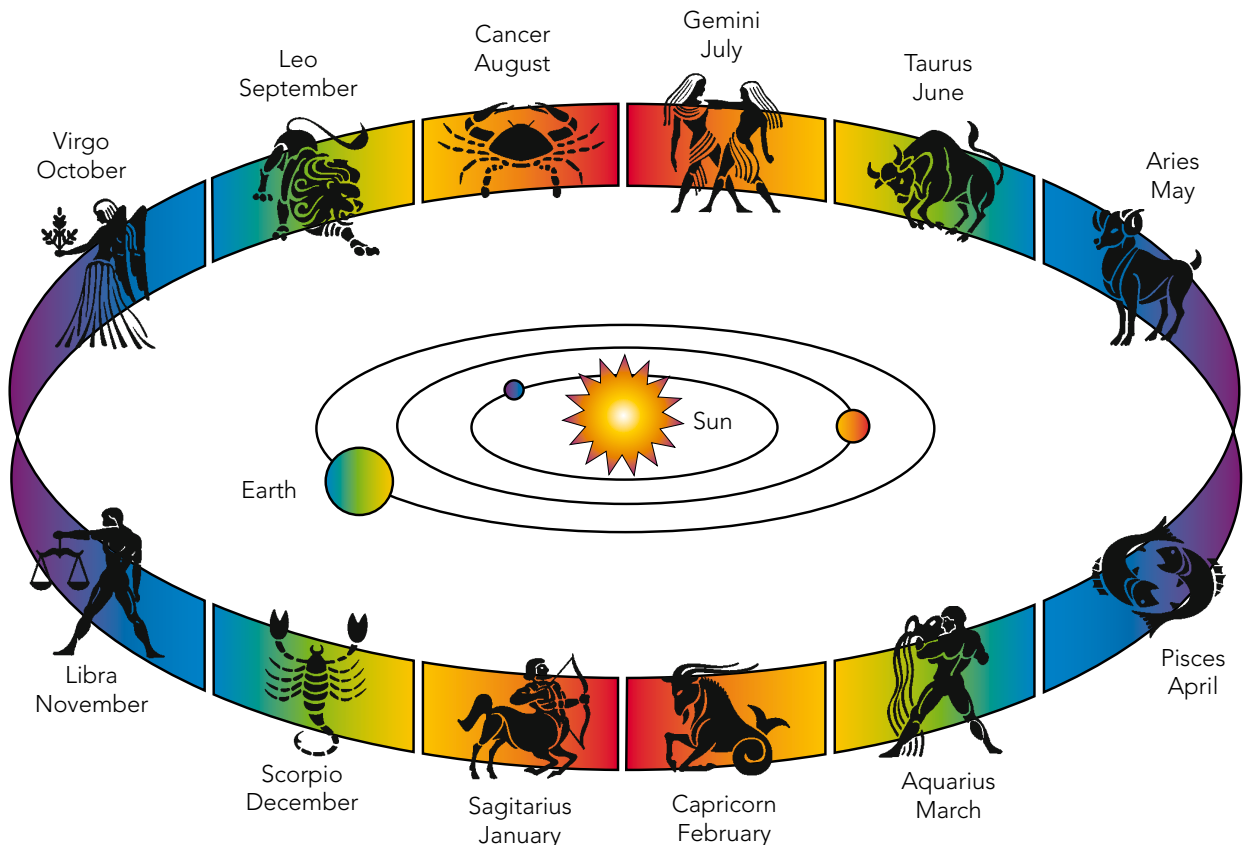


The Zodiac: "The Circle of Life"

The ancient astronomers thought the Sun went around the Earth (because that is what it looks like!). They identified 12 groups of stars (or "Constellations") that they could see at various times through the year, and that the Sun seemed to pass through. They worked out that when they could see a particular constellation at midnight then the Sun must appear to be in the constellation opposite. In this way they tracked the apparent position of the Sun over the seasons. Every year at the same time it came back to the same position as the previous year, and they referred to this movement as the "Zodiac", which means the "Cycle of Life".

The Zodiac in Day and Night

- 1 In the picture below, which Zodiac Constellation would be behind the sun as seen from the position of Earth in the morning? _____
- 2 Which Zodiac Constellation would be seen overhead at midnight for the position of the earth in the drawing? _____
- 3 Draw the earth in the proper place for your birthday and list the following information:
 For my birthday (list date) _____
 a The Constellation behind the sun is _____
 b The Constellation overhead at midnight is _____



Notes:

1 The dates that the non-scientific "Astrologers" give us for our "Birthday signs" are now about 30 days wrong (they were closer about 2000 years ago!), because the Earth wobbles as it spins, like a giant top. One "wobble" takes about 26,000 years, and it is called "the precession of the equinoxes".

2 Also the 12 Zodiac constellations are different sizes, so the Sun takes a different number of days to pass through them, instead of 12 equal divisions. Actually the Sun passes through 13 constellations! The extra one is "Ophiuchus", the "Serpent bearer". See <http://www.geocities.com/astrologyconstellations/ophiuchus.htm> if you want more information.