

QS2: STAR LAWS (Shedding Light on Astronomy) Episode II: What is a Year?

Name: _____

1. Draw a diagram of the Earth orbiting the Sun.

2. What is a year? _____
3. Approximately how many times has the Earth orbited the Sun since you were born? _____
4. Why is a year 365½ days long? _____

5. Fill in the table below.

	Actual Diameter (kilometres, km)	Relative Diameter
Earth		1
Sun		

With respect to the bottom right cell of the table, this means that the sun is _____ times wider than the Earth.

6. The Earth is about _____ km from the sun. This is approximately _____ Sun diameters.
7. On a scale model, if the Sun had a diameter of 1 metre, the Earth would have a diameter of _____ and it would have to be placed _____ from the Sun.
8. Why do we have leap years? _____
9. A circle is divided into 360° and the Earth completes one orbit in 365 days, so, in terms of degrees, the Earth travels about _____ around the sun every day in its orbit. This equates to a distance of about _____ kilometres.
10. If on a particular day, the earth is in the position shown below right, mark in and label its approximate position...
 - (a) 7 days later,
 - (b) 6 weeks later
 - (c) 3 months (90 days) later, and
 - (d) 6 months later.
11. AD stands for _____ which means _____
- BC stands for _____
- CE stands for _____

