

## Astronomy 270

Table of dates of perihelion, aphelion, equinoxes, and solstices for Quiz on Chapter 5 of Millar

2006							
What	When	UT	What	When	UT	When	UT
Perihelion	Jan 4	15	Equinoxes	Mar 20	18	Sept 23	04
Aphelion	July 3	23	Solstices	June 21	12	Dec 22	00
2007							
Perihelion	Jan 3	20	Equinoxes	Mar 21	00	Sept 23	09
Aphelion	July 7	00	Solstices	June 21	18	Dec 22	06
2008							
Perihelion	Jan 3	00	Equinoxes	Mar 20	05	Sept 22	15
Aphelion	July 4	08	Solstices	June 20	23	Dec 21	12
2009							
Perihelion	Jan 4	15	Equinoxes	Mar 20	11	Sept 22	21
Aphelion	July 4	02	Solstices	June 21	05	Dec 21	17
2010							
Perihelion	Jan 3	00	Equinoxes	Mar 20	17	Sept 23	03
Aphelion	July 6	11	Solstices	June 21	11	Dec 21	23

For each year, figure out how many days passed (include fraction of a day as well): vernal equinox, summer solstice, autumnal equinox, winter solstice, vernal equinox. Write those lengths of time in the table below. You may share calculations, but the answer to the question on the on-line quiz needs to be in your own words.

2006	Mar 20 - June 21	June 21 - Sept 23	Sept 23 - Dec 22	Dec 22 - Mar 21 (2007)
2007	Mar 21 - June 21	June 21 - Sept 23	Sept 23 - Dec 22	Dec 22 - Mar 20 (2008)
2008	Mar 20 - June 20	June 20 - Sept 22	Sept 22 - Dec 21	Dec 21 - Mar 20 (2009)
2009	Mar 20 - June 21	June 21 - Sept 22	Sept 22 - Dec 21	Dec 21 - Mar 20 (2010)
2010	Mar 20 - June 21	June 21 - Sept 23	Sept 23 - Dec 21	Dec 21 - Mar 20 (2011)

\*\*\*Thought questions: What effect does the leap day in 2008 have? How does UT (Universal Time) differ from local time? Will it make a difference what time reference you use?