

ALMANAC

All times U.T for B.S.T. Add one hour

Rise and set times are for Worthing

December / January

LUNAR

December		Rise	Set
Full Moon	22nd	17.49	16.13 07.03
<i>Perigee</i>	24th	09.49	361,061 km
Last quarter	29th	09.34	23.37 11.53
January			
New Moon	6th	01.29	07.52 16.08
<i>Apogee</i>	9th	04.30	406,114 km
First quarter	14th	06.46	11.29 00.09
Full Moon	21st	05.17	15.59 07.53
<i>Perigee</i>	21st	19.59	347,344 km

EARTH

December	Sunrise	Sunset
22nd	08.00	15.57
29th	08.02	16.02
January		
6th	08.01	16.10
14th	07.57	16.21
21st	07.51	16.32

PLANETS

(As at December 20th)

	Rises	Sets	Mag
Mercury	06.08	14.47	-0.5
Bright morning object visible in the south-east before dawn			
Venus	03.48	13.49	-4.6
Very bright morning object in the south-east pre-approaching elongation			
Mars	11.50	23.19	+0.3
Bright evening object moving into Pisces, visible until late evening			
Jupiter	06.24	14.46	-1.7
Very bright pre-dawn object in the south-east, currently in Ophiuchus			
Saturn	08.45	16.49	+0.5
Evening object on this date but approaching conjunction so not visible			
Uranus	12.54	02.50	+5.7
Retrograding evening object in Pisces, visible until the early hours			
Neptune	11.38	22.33	+7.9
Evening object in Aquarius, visible until quite late in the evening			

PHENOMENA

December

Day	Hour	
18th	04	Uranus 5° N of Moon
21st	15	Jupiter 1° S of Mercury
21st	22	Winter solstice

January

1st	22	Venus 1° S of Moon
2nd	06	Saturn at solar conjunction
3rd	05	Earth at perihelion
3rd	08	Jupiter 3° S of Moon
4th	02	Quadrantid meteor shower peak
6th	05	Venus at western elongation 47.0°
12th	20	Mars 5° N of Moon
14th	18	Uranus 5° N of Moon
21st	05	Total lunar eclipse

Minima of Algol

December	20th 08.36	23rd 05.24	26th 02.12
	28th 23.06	31st 19.54	
January	3rd 16.42	12th 07.12	15th 04.00
	18th 00.48	20th 21.42	

Lunar Occultations Times as at Greenwich U.T.

Date Z.C. No Mag Phase U.T.

December

19th	364	4.3	Diss	00.44
19th	462	6.0	Diss	18.21
21st	650	5.6	Diss	03.29
21st	764	4.9	Diss	19.23
25th	1310	3.9	Reapp	08.29

January

1st	2128	5.8	Reapp	03.50
10th	3356	5.8	Diss	17.46
15th	405	4.3	Diss	16.54
15th	405	4.3	Reapp	17.14
19th	894	4.4	Diss	02.31

Richard Godley