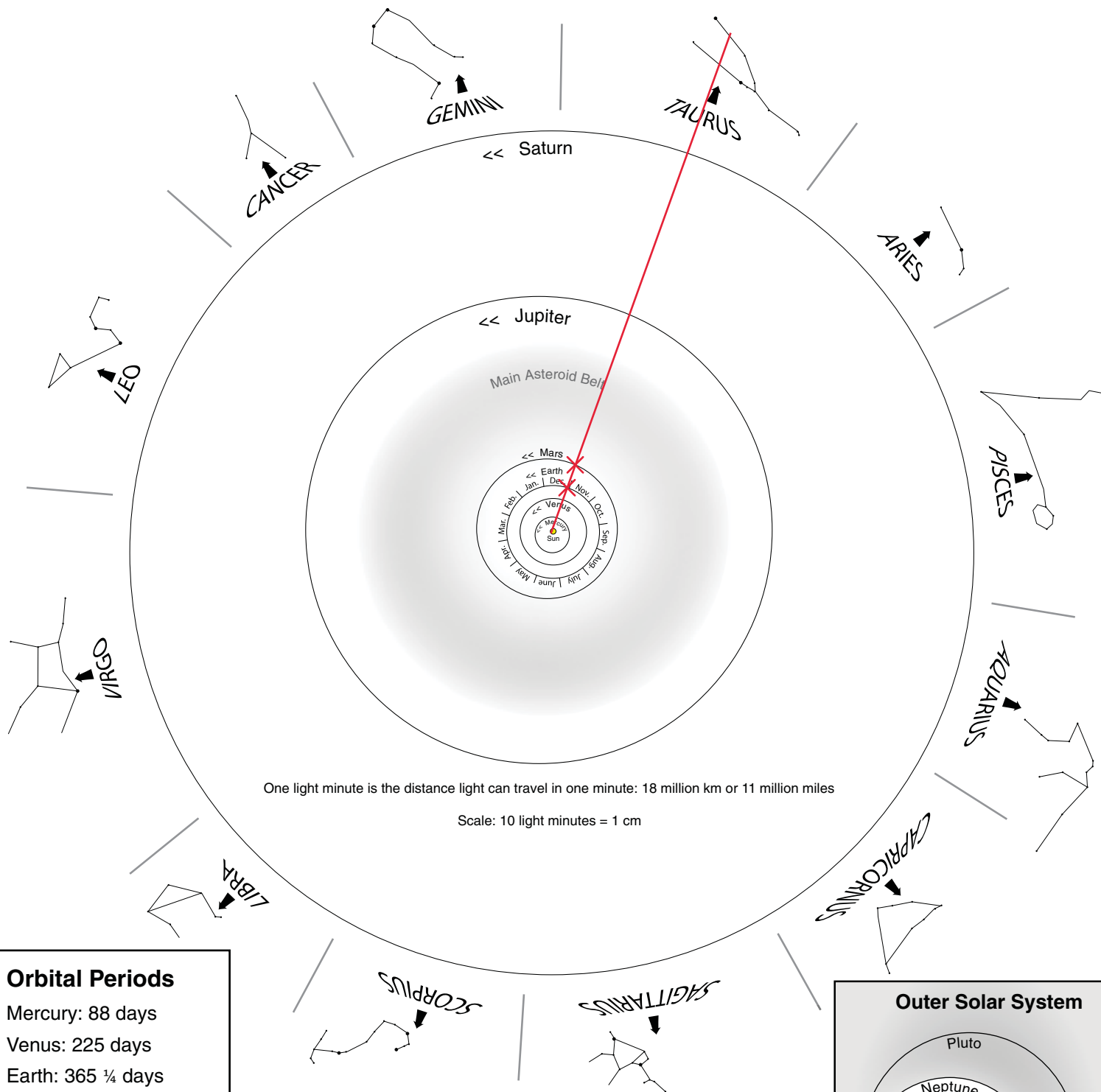




Mars opposition
 December 7, 2022
 Moon - Mars occultation

Exploring the Solar System



One light minute is the distance light can travel in one minute: 18 million km or 11 million miles

Scale: 10 light minutes = 1 cm

Orbital Periods

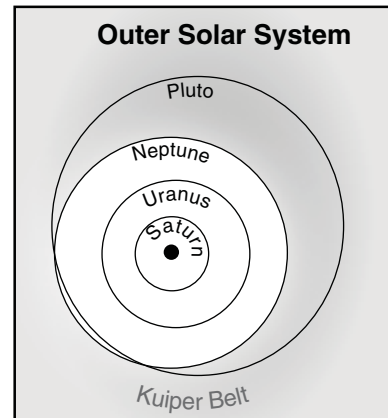
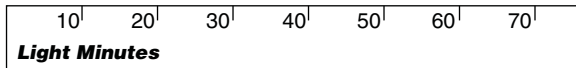
- Mercury: 88 days
- Venus: 225 days
- Earth: 365 ¼ days
- Mars: 687 days
- Jupiter: 11.9 years
- Saturn: 29.5 years
- Uranus: 84.0 years
- Neptune: 164.8 years
- Pluto: 247.7 years

What missions are exploring the Solar System?

<http://solarsystem.nasa.gov>

Where are the planets today?

<http://www.fourmilab.ch/solar/> or <http://www.heavens-above.com>



Events for

Show
 All Events Visible Events Only

Events ▼

Night	Event	Night	Event	Night	Event	Night	Event
2022 Oct 2	First Quarter Moon	2022 Dec 7	Moon occults Mars	2023 Feb 15	Saturn in Conjunction with the Sun	2023 Feb 19	New Moon
2022 Oct 8	Draconids peak	2022 Dec 7	Full Moon	2023 Feb 24	delta-Leonids peak	2023 Feb 26	First Quarter Moon
2022 Oct 9	Full Moon	2022 Dec 7	Mars Opposition	2023 Mar 6	Full Moon	2023 Mar 13	gamma-Normids peak
2022 Oct 17	Third Quarter Moon	2022 Dec 8	Monocerotids peak	2023 Mar 14	Third Quarter Moon	2023 Mar 21	New Moon
2022 Oct 18	epsilon-Geminids peak	2022 Dec 11	sigma-Hydrids peak	2023 Mar 28	First Quarter Moon	2023 Apr 5	Full Moon
2022 Oct 21	Orionids peak	2022 Dec 13	Geminids peak	2023 Apr 11	Jupiter in Conjunction with the Sun	2023 Apr 12	Third Quarter Moon
2022 Oct 24	New Moon	2022 Dec 15	Third Quarter Moon	2023 Apr 19	New Moon	2023 Apr 22	Lyrids peak
2022 Oct 31	First Quarter Moon	2022 Dec 21	Ursids peak	2023 Apr 23	pi-Puppids peak	2023 Apr 27	First Quarter Moon
2022 Nov 5	Southern Taurids peak	2022 Dec 22	New Moon	2023 May 5	Full Moon	2023 May 5	eta-Aquarids peak
2022 Nov 7	Full Moon	2022 Dec 29	First Quarter Moon				
2022 Nov 11	Northern Taurids peak	2023 Jan 3	Quadrantids peak				
2022 Nov 15	Third Quarter Moon	2023 Jan 6	Full Moon				
2022 Nov 17	Leonids peak	2023 Jan 14	Third Quarter Moon				
2022 Nov 21	alpha-Monocerotids peak	2023 Jan 21	New Moon				
2022 Nov 23	New Moon	2023 Jan 27	First Quarter Moon				
2022 Nov 29	First Quarter Moon	2023 Feb 5	Full Moon				
2022 Dec 6	Phoenicids peak	2023 Feb 7	alpha-Centaurids peak				
2022 Dec 6	Puppis-Velids peak	2023 Feb 12	Third Quarter Moon				

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Local Date/Time	Description	Object	Mag	Object	Mag	Sep	Alt	Dark %
2022 Dec 7 20:55	First Contact	Moon	-12.7	Mars	-1.9	+00° 15'15"	47°	74
2022 Dec 7 20:56	Second Contact	Moon	-12.7	Mars	-1.9	+00° 14'58"	47°	74
2022 Dec 7 21:23	Mid-occultation	Moon	-12.7	Mars	-1.9	+00° 09'36"	52°	73
2022 Dec 7 21:52	Third Contact	Moon	-12.7	Mars	-1.9	+00° 14'59"	57°	73
2022 Dec 7 21:53	Last Contact	Moon	-12.7	Mars	-1.9	+00° 15'16"	58°	73