

# The sun, the moon, and some planets

[dmeyer@math.ucsd.edu](mailto:dmeyer@math.ucsd.edu)



1. If today is Monday, what day of the week will it be 8 days from now?
2. Si aujourd'hui c'est lundi, quel jour de la semaine sera-t-il 10 jours après demain?
3. If the first day of January is a Tuesday, what day of the week is the last day of January?  
[Hint: January has 31 days.]
4. If the first day of 2019 is Tuesday, what day of the week is the last day of 2019? [Hint: 2019 has 365 days.]



5. The next full moon is called a “Full Hunter’s Moon” because it is the one after the full moon closest to the autumnal equinox (which is called the “harvest moon”); it will be on 24 October 2018. Which is the last month in which there were two full moons? [Hint: Full moons are about 29.5 days apart.]

6. How many full moons will there be in 2018?

7. How many full moons will there be in 2019?

In the Mayan calendar there were 20 day names: *Imix’, Ik’, Ak’b’al, K’an, Chikchan, Kimi, Manik’, Lamat, Muluk, Ok, Chuwen, Eb’, B’en, Ix, Men, K’ib’, Kab’an, Etz’nab’, Kawak, Ajaw*. Each day was labeled by a number from 1 to 13 and a day name. In order it went *1Imix’, 2Ik’, . . . , 13B’en, 1Ix, 2Men, . . . , 7Ajaw, 8Imix’, . . .*

8. If today is *8Ok*, what will next Monday be?

9. How many days after today will be the next *8Ok*? What day of the week will it be?

