

TOPIC: Easter, Full Moons and the March Equinox

Student: _____ Year: _____

Date (Activity A): _____ Date (Activity B): _____

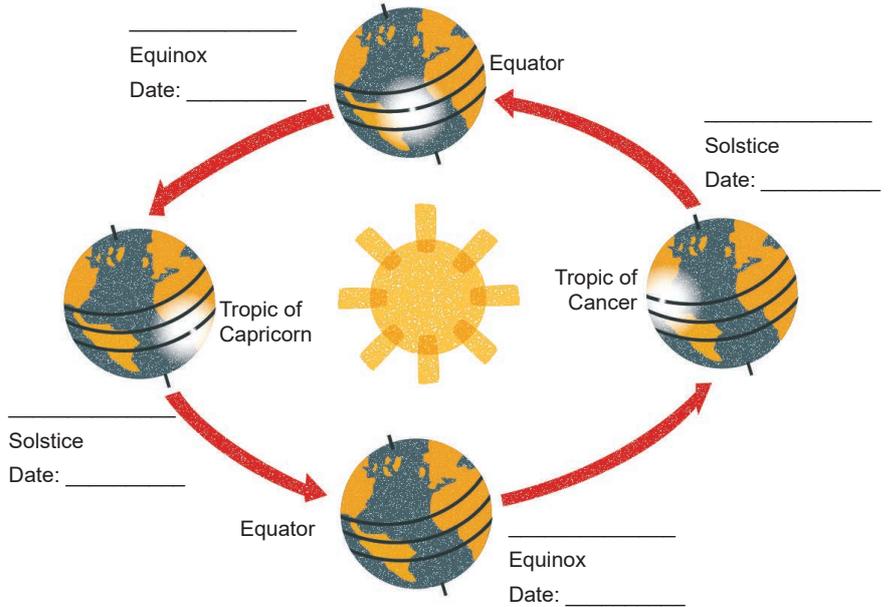
Parent/Tutor Signature _____
Activity A | Activity B

Activity A: Easter, Full Moons and the March Equinox

1. Solstice and Equinox

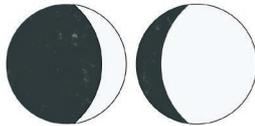
Find the meaning of solstice and equinox, then label the diagram on the right to show, for the Southern Hemisphere:

- the summer and winter solstice positions and their dates;
- the spring and autumn equinox positions and their dates.



2. Track the moon

Find the current phase of the moon, and track its progress over the next two months by sketching it and noting the date every week. Use shading to show the dark and light parts, like the examples on the right. Note any interesting patterns.



○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○

3. Finding the date of Easter

Easter is celebrated on the first Sunday after the first Full Moon after the March Equinox.

- What is the date of this year's March Equinox:

- Find the date this year for the first Full moon after the March Equinox: _____
- Find the date for the first Sunday after the date you just found: _____
- Is this the same date as Easter Sunday? (Yes/No)

Parent feedback/comments: _____

Activity B: Calculating the date of Easter

1. Calculation

Here's a method that works for the Gregorian calendar for the years 1900 to 2199, and a fun way to test your Maths skills.

Follow these instructions carefully:

1. Divide the year number by 19.
For example $2020 / 19 = 106.32$
2. Multiply the number before the decimal point by 19.
For example $106 \times 19 = 2014$
3. Then subtract the result from Step 2 from the year number.
For example: $2020 - 2014 = 6$
4. Add 1 to get the 'Golden Number'. **For example:** $6 + 1 = 7$

Look up the 'Golden Number' in the table to the right. Easter is on the first Sunday after the date in the table. If the 'Golden Number' date falls on a Sunday, Easter will be the following Sunday. In the example, Easter was on April 12, so it works!

Golden Number	Date	Golden Number	Date
0	27 March	11	25 March
1	14 April	12	13 April
2	3 April	13	2 April
3	23 March	14	22 March
4	11 April	15	10 April
5	31 March	16	30 March
6	18 April	17	17 April
7	8 April	18	7 April
8	28 March	19	27 March
9	16 April		
10	5 April		

Try it Yourself

What will the date of Easter be for these years?

1. Your birth year. _____
2. This year (Is it the same answer as you worked out in Activity A?) _____
3. Next Year. _____
4. 2034 _____
5. 2060 _____

2. THINK!

1. In Activity A, you tracked the moon phases over a couple of months. From your results, how often does a full moon appear? _____

The March Equinox occurs at almost exactly the same time each year.

From what you learned in Activity A, and from what you have learned about the occurrence of the full moon, write why you think Easter is not celebrated on the same date each year.

Parent feedback/comments: _____
