

# Explore 2020

## *Why is 2020 a special year?*

- 2020 is a new decade. A decade is a period of 10 years.
- People born on the 29<sup>th</sup> February could celebrate on their actual birthday.
- 2020 is like 1818 or 1919. The first 2 digits match the second 2-digits. This happens only once in a century. (A century is hundred years).
- Many dates of official and non-official holidays will fall on either Friday, Saturday, Sunday or Monday.  
You can check it out.

Write down 2 more facts about 2020.

E.g.

- a) 2020 is the Year of the Rat according to Chinese zodiac.  
In 2020, people born in the year of Rat have good fortune in wealth and career.
- b) The Roman Numerals for 2020 is MMXX.
- c) 2020 is a leap year.
- d) 2020 is the 20<sup>th</sup> year in the 3<sup>rd</sup> millennium.
- e) 2020 is the 20<sup>th</sup> year of the 21<sup>st</sup> century.
- f) 2020 is the first year of the 2020 decade.

1	<p>Is 2020 a leap year? Why?</p> <p>Which would the next leap year be?</p>	<p>Yes.</p> <p>Every 4 years an extra day is added. Instead of 365 days there are 366 days. This date is the 29<sup>th</sup> February.</p> <div style="border: 1px solid black; width: 100px; margin: 20px auto; text-align: center; padding: 5px;">2024</div>
2	<p>How many more leap years will there be in the next 100 years?</p> <p>List them all.</p>	<div style="border: 1px solid black; width: 100px; margin: 20px auto; text-align: center; padding: 5px;">24</div> <p>2024, 2028, 2032, 2036, 2040, 2044, 2048, 2052, 2056, 2060, 2064, 2068, 2072, 2076, 2080, 2084 2088 2092, 2096, 2104, 2108, 2112, 2116, 2120.</p> <p><i>Note: Every year that is exactly divisible by 4 is a leap year however centurial years (a year ending with 00) must be divisible by 400 to be a leap year. Therefore 2100 is not a leap year.</i></p>
3	<p>Is an ordinary year or a leap year exactly 52 weeks?</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px 15px;">Yes</div> <div style="border: 1px solid black; padding: 5px 15px;">No ✓</div> </div> <p>(ordinary year) <math>365 \div 7 = 52 \text{ r } 1</math> 52 weeks and 1 day</p> <p>(leap year) <math>366 \div 7 = 52 \text{ r } 2</math></p>

	Work it out and explain why?	52 weeks and 2 days
4	On which day is/was your birthday this year?	Personal answer
5	How many days/months/years till your next birthday?	<p><b>(Example answer)</b></p> <p>My next birthday is on the 7<sup>th</sup> April 2021.</p> <p>If today is the 1<sup>st</sup> May 2020 then:</p> <p>May – 31 days, June – 30 days, July – 31 days, ..... January 2021 – 31 days, February 2021 – 28 days, March 2021 – 31 days, April (7<sup>th</sup>) – 7 days</p> <p>Therefore, Total: 342 days</p>
6	Which months have 5 Wednesdays?	<p>January 2020</p> <p>April 2020</p> <p>July 2020</p> <p>September 2020</p> <p>December 2020</p>
7	Which months start on a Tuesday?	<p>September 2020</p> <p>December 2020</p>
8	Which is the 100 <sup>th</sup> day of the year in 2020? Show your work.	<p>January 31 days</p> <p>February 29 days</p> <p>March 31 days</p> <hr/> <p>Total 91 days</p>

	<p>Is this date always the 100<sup>th</sup> day of the year?</p>	<p>91 + 9 (more days) = 100<sup>th</sup> day 9<sup>th</sup> April 2020</p> <p>No. In a leap year, it's the 9<sup>th</sup> April however in an ordinary year it's the 8<sup>th</sup> April.</p>
9	<p>What date marks the second half of the year?</p>	<p>In a leap year: ½ of 366 is 183 days. The 184<sup>th</sup> day marks the start of second half of the year. 2<sup>nd</sup> July 2020 is the end of the first half of the year. 3<sup>rd</sup> July 2020 is the start of the second half of the year.</p>
10	<p>Earth Day is celebrated on the 22nd April 2020. What day will it be?</p> <p>Can you tell on which day will it fall next year?</p>	<p>Wednesday</p> <p>Thursday</p> <p>Since next year is an ordinary year it's 52 weeks + 1 day exactly. In 52 weeks, it will be Wednesday again + 1 day (Thursday)</p>

<p>11</p>	<p>Any date in March of 2020 is the same day of the week as any date in November 2020. E.g. Both 1st of March 2020 and 1st of November 2020 fall on a Friday.</p> <p>Does this happen every year?</p> <p>Why?</p> <p>Are there any other matching months?</p>	<p>Yes both in a leap year and an ordinary year.</p> <p>If March 1<sup>st</sup> falls on a Tuesday November 1<sup>st</sup> falls on a Tuesday because there are exactly 35 weeks from 1<sup>st</sup> March till the 1<sup>st</sup> November.</p> <p>In a leap year January, April and July also share the same date with matching days of the week.</p>
<p>12</p>	<p>One year is full of celebrations. Some are very popular like St. Valentine's day (14<sup>th</sup> February) while others are not so popular. Did you know that 15<sup>th</sup> May is International Day of Families? Also, to honour brothers' and sisters' relationships the 31<sup>st</sup> May is Siblings Day.</p>	

Find out other celebration days which have a special meaning to you, your family and your friends and share them with us.

E.g.

World Maths Day – 15<sup>th</sup> October

World Teacher's Day – 5<sup>th</sup> October

Children's Day – 20<sup>th</sup> November

World Chocolate Day – 7<sup>th</sup> July