Quarterly Problem

- Math Edition -

The weather on your 100th birthday

Your birthday is a very special day of the year. Hopefully the weather will be fine so you can do special things: throw snowballs, have a garden-party in the sun, enjoy the colored leaves on a forest hike or fly a kite in the storm.
What do you think will happen to the weather on your birthday if the climate changes?

Task:
Find out how the weather was on your birthday in the past years: what was the temperature on that day (lowest, highest, average), how many hours did the sun shine, what was the windforce, was their any rain or snow, how much etc.? You may find this kind of data in weather reports, graphs or tables on the website of your national meteorological (weather) institute.
Collect the data and make a table, or a graph to show your findings.

Brainstorm-Box
You may ask yourself if the weather on your date of birth was the same in the past 100 years. Try to find out! You can use steps of 10 years

The weather on one specific day may vary a lot during the years. To find a pattern you need more data. You may explore patterns over a range of years for the month or the season in which you have our birthday.

Meteorlogists monitor the weather and study changes in the climate. Climate change is happening. You can find data and graphs for example on the global temperature over time.
What do you think: will climate change influence the weather on your 100th birthday? Investigate this using climate data.

Whose method is the most accurate?

Base your findings on data and try to discover and extrapolate a pattern.
Be sure you make clear visual representations of your data to support your findings.

International Centre for STEM Education (ICSE)
University of Education Freiburg · Kunzenweg 21 · 79117 Freiburg
icse@ph-freiburg.de · www.ph-freiburg.de/icse

Pädagogische Hochschule Freiburg
Université des Sciences de l'Education · University of Education