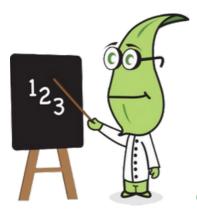
### Spring Bulbs for Schools Investigation



#BulbBuddies @Professor\_Plant @Amgueddfa\_Learn

Spring Bulbs for Schools is a climate change investigation run by Amgueddfa Cymru - National Museum Wales and The Edina Trust.

School scientists across the UK plant bulbs in their school grounds and record observations to study climate change. They keep local weather records and record flowering dates to see how changes in weather patterns are affecting flowering in daffodil and crocus bulbs. The project has been running in Wales since 2005 and across the UK since 2011.

This year we are inviting schools to study this data for themselves. We will be sharing a full data set and bite size numeracy quizzes that focus on understanding graphical data.

Here is an animation to introduce the investigation: <u>https://youtu.be/-zm\_rARbnG4</u> (2mins)







The following quizzes were developed to support the end of year report and provide an interactive element by asking participants to answer questions based on the information displayed in graphs, tables and charts.

# Quiz 1: When will our daffodils flower?

Compare weather data for 2022-23 from across the UK and against previous years to predict when daffodils will flower.

- What do plants need to grow?
- · Which country was the warmest / coldest?
- Which country had the least rain?

Link: https://kahoot.it/challenge/003354399 Game PIN: 003354399

#### Quiz 2: Bulb Project Quiz 2022-23 Level 1

Study bar graphs to deduce which were the wettest and warmest countries.

- Answer questions about plants.
- Discover which countries had the most and least rainfall.
- Discover which countries had the highest and lowest temperatures.

Link: https://kahoot.it/challenge/001027735 Game PIN: 001027735

#### Quiz 3: Bulb Project Quiz 2022-23 Level 2

Study bar graphs to deduce national trends in temperature and rainfall.

- Study units carefully to calculate average monthly rainfall records for Wales, England, Scotland and Northern Ireland.
- Work out the monthly temperatures for Wales, England, Scotland and Northern Ireland.
- Answer general knowledge questions.

Link: https://kahoot.it/challenge/002754825 Game PIN: 002754825

# Quiz 4: Compare weather records from different years

Study line and bar chats to look for trends in the weather data.

- Order countries from warmest to coolest.
- · See which years had the most and least rainfall.
- · Deduce which years had the most hours of sunshine.

Link: https://kahoot.it/challenge/002592662 Game PIN: 002592662

#### Quiz 5: UK Flower data

Study line and bar charts to look for trends in the flower data.

- Answer questions about average weather readings.
- Sort years from earliest to latest flowering dates.
- Study bar charts to see whether plants flowered earlier or later than expected.

Link: https://kahoot.it/challenge/0001030414 Game PIN: 001030414

#### **Quiz 6: Wales Weather Data**

Study line and bar charts to look for trends in the weather data.

- Study line graphs to pick out high and low monthly average temperatures.
- Study line graphs to answer true or false questions about monthly rainfall.
- Study Bar charts to order years from warmest to coolest.

Link: https://kahoot.it/challenge/005792191 Game PIN: 005792191

#### **Quiz 7: Wales Flower Data**

Study bar and line graphs to determine whether our data shows patterns for the flowering dates of spring bulbs.

- · Use tables to deduce which years saw plants flower earliest.
- · Study combination charts to deduce trends in the data.
- Compare findings from different charts to see if there are patterns that explain anomalies in the data.

Link: https://kahoot.it/challenge/002248739 Game PIN: 002248739



The following resources are available on the Spring Bulbs for Schools website: <u>https://museum.wales/spring-bulbs/</u>

#### 1. Read the end of year report

The Spring Bulbs for Schools Investigation Report is presented as three interactive PowerPoints. These reports take a closer look at the weather and flower data and explore trends in the data.

- Introduction Spring Bulbs for Schools Report 2023
- UK Spring Bulbs for Schools Report 2023
- Wales Spring Bulbs for Schools Report 2023

## 2. Download spreadsheets to study the data for yourself

The weather data is available on the website as an Excel spreadsheet. You can download the data and create your own graphs.

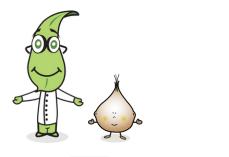
The flower data for each year is available on the website. You can select years from the tabs at the top of the page. You can explore this and make your own graphs!

Crocus data Daffodil data

# 3. Compare weather data from different parts of the UK

- <u>Click here</u> to explore our map of participating schools. You can click on the map to find out the names of schools from different areas. You can also scroll back in time to see which schools have taken part before.
- Once you have chosen the schools you'd like to compare, you can find their weather data by selecting the name of the school from the drop down menu on the right of <u>this page</u>.
- If schools have taken part before then the years they have taken part will appear at the top of the page. This means you are able to compare weather readings from different years.

#### **Good luck exploring Bulb Buddies!**



## AMGUEDDFA Cymru



