Statistics: Time to play

**(Y5)**

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| To read the most recent version of this sequence, download associated resources, and view embedded professional learning including classroom videos and work samples, visit: [https://resolve.edu.au/teaching-sequences/year-5/statistics-time-play](https://resolve.edu.au/teaching-sequences/year-5/statistics-time-play?utm_source=docx&utm_medium=sequence_overview&utm_campaign=time_play) |

# Sequence Overview

## About this sequence

Students learn how to collect and analyse historical weather data, and use this data to make predictions about the best time to play outside at different times of the year.

## Australian Curriculum: Mathematics (Year 5)

### Achievement standard

Students plan and conduct statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools. Students identify the mode and interpret the shape of distributions of data in context. They interpret and compare data represented in line graphs.

### Statistics

**AC9M5ST01 -** Acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables to address a question of interest or purpose using software including spreadsheets; discuss and report on data distributions in terms of highest frequency (mode) and shape, in the context of the data

**AC9M5ST02 -** Interpret line graphs representing change over time; discuss the relationships that are represented and conclusions that can be made

**AC9M5ST03 -** Plan and conduct statistical investigations by posing questions or identifying a problem and collecting relevant data; choose appropriate displays and interpret the data; communicate findings within the context of the investigation

# Lessons in this sequence

## Lesson 1 • Playing outside

Students decide which weather elements influence the best time to play outside and make a plan to collect data on these elements.

## Lesson 2 • Weather data

Students access secondary data on weather for their local area and determine the best way to represent this data.

## Lesson 3 • Analysing weather data

Students analyse their weather data to determine the best time to play outside.

## Lesson 4 • Yearly data

Students access historical weather data from reliable secondary sources and use this data to inform their decisions about the future.

## Lesson 5 • The shape of our data

Students analyse the historical weather data that they have collected and decide the best time to play outside for the different months of the year.

## Lesson 6 • The best time across Australia

Students build their use of 10 as a benchmark to quantify and compare collections.

## Suggested implementation

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|  | **Week 1** | **Week 2** |
| **Monday** | **Lesson 1 • Playing outside**Problem & Plan* Playing outside
* Making plans
 | **Lesson 6 • The best time across Australia**Analyse & Conclusion* What about other places?
* Comparing different places
* Class discussion
* Time to play
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| **Tuesday** | **Lesson 2 • Weather data**Data* Collecting data
* Representing data
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| **Wednesday** | **Lesson 3 • Analysing weather data**Analyse & Conclusion* When is the best time?
* Displaying data
* The day has been and gone!
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| **Thursday** | **Lesson 4 • Yearly data**Problem, Plan & Data* Data for a year
* Secondary data
* Historical data
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| **Friday** | **Lesson 5 • The shape of our data****Analyse & Conclusion*** Using data to make predictions
* Our data story
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