Weather Tree

Education Resources

The Weather Tree poster is a useful teaching aid, as the act of recording and analysing changes over time supports numerous education outcomes in Science, Humanities and Mathematics.

Teachers may wish to incorporate a Weather Tree poster into their class daily routine, affording an opportunity for every student to make observations and contribute data to a collective project. In Steiner Education contexts, this type of activity fits nicely into Morning Circle activities.

Gathered here are syllabus extracts from the Australian, NSW and VIC curricula in use across all types of public, independent and faith school models.

As a visual tool, the poster has useful applications in the teaching of Auslan and foreign languages.

Auslan

Second Language Learner F–10 Sequence – Levels 3 and 4 Achievement Standard
Level description: Students present routine class information, such as weather reports or daily schedules, using visual prompts and signed descriptions.

Jump to...

Australian curriculum

Foundation – **Science** – Science Inquiry Skills
Making observations and representing ideas (ACSIS233).
Processing and analysing data (ACSIS011).

Year 1 – **Science** – Science Inquiry Skills
Making predictions about familiar events (ACSIS024).
Using a range of methods to sort information, including drawings and provided tables and through discussion, compare observations with predictions (ACSIS027).
Exploring ways of recording and sharing information through class discussion.
Comparing observations with those of others (ACSIS213).

Year 2 – **Science** – Science Understanding
Monitoring information about the environment and Earth's resources, such as rainfall, water levels and temperature (ACSHE035).

Year 1 - **Humanities and Social Sciences** – Inquiry Skills
Collect data and information from observations and identify information and data from sources provided (ACHASSI019).
Gathering information about the weather and seasons from the media, their own observations and from stories (for example, Aboriginal and Torres Strait Islander stories).
Explore a point of view (ACHASSI022).
Sharing personal preferences about their world (for example, their favourite weather, activities, places, celebrations) and explaining why they are favoured.

Year 2 - **Humanities and Social Sciences** – Inquiry Skills
Sequence familiar objects and events (ACHASSI037).
Creating a timeline, slideshow or story to show how things develop sequentially (for example, seasonal change in plants, cycles of the weather, personal growth milestones).

Year 3 - **Humanities and Social Sciences** – Inquiry Skills
Sequence information about people's lives and events (ACHASSI055).
Creating visual representations of a sequence of events or happenings (for example, the stages involved in making decisions in a familiar context, such as a planning a class activity, the sequence of seasonal changes in different climates).

Year 1 – **Geography** – Knowledge and Understanding
Describing the daily and seasonal weather of their place by its rainfall, temperature, sunshine and wind, and comparing it with the weather of other places that they know or are aware of (ACHASSK032).

Year 1 – **Mathematics** – Statistics and Probability
Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays (ACMSP263).
Describing displays by identifying categories with the greatest or least number of objects.

Year 2 – **Mathematics** – Measurement and Geometry
Name and order months and seasons (ACMMG040).
Investigating the seasons used by Aboriginal people, comparing them to those used in Western society and recognising the connection to weather patterns.
Use a calendar to identify the date and determine the number of days in each month (ACMMG041).

Year 2 – **Mathematics** – Statistics and Probability
Identify a question of interest based on one categorical variable. Gather data relevant to the question (ACMSP048).
Create displays of data using lists, table and picture graphs and interpret them (ACMSP050).
Comparing the usefulness of different data displays.

Year 3 – **Mathematics** – Statistics and Probability
Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (ACMSP069).
Collecting data to investigate features in the natural environment.
Interpret and compare data displays (ACMSP070).

Year 4 – **Mathematics** – Statistics and Probability
Select and trial methods for data collection, including survey questions and recording sheets (ACMSP095).
Comparing the effectiveness of different methods of collecting data.
Choosing the most effective way to collect data for a given investigation.
Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (ACMSP096).

Year 5 – **Mathematics** – Statistics and Probability
Pose questions and collect categorical or numerical data by observation or survey (ACMSP118).
Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (ACMSP119).
Describe and interpret different data sets in context (ACMSP120).

NSW curriculum

Early Stage 1 (Kindergarten) – **Science and Technology** – Earth & Space
Outcomes: STe-1WS-S / STe-6ES-S | Content: Changes in the environment
Inquiry question: How do daily and seasonal changes affect the environment?
Students:

- identify daily and seasonal changes that occur in our environment, such as day and night, and changes in the weather, for example: (ACSSU004) daily temperature variation monthly rain, snow or frost;
- explore how living things respond to regular changes in their environment, for example: animals that migrate or hibernate;
- changes in human behaviour and clothing;
- observe, ask questions about and describe changes in objects and events (ACSHE013).

Stage 1 (Years 1-2) – **Science and Technology** – Earth & Space
Outcomes: ST1-1WS-S / ST1-10ES-S | Content: Changes in the sky and on the land
Inquiry question: How can we investigate the observable changes that occur in the sky and on the land?
Students:

- record the observable changes that occur in the sky and on the land (ACSSU019);
- collect data related to short-term weather events and long-term seasonal patterns, to inform others using appropriate communication techniques;
- observe, ask questions about and describe changes in objects and events (ACSHE021, ACSHE034).

Stage 1 (Years 1-2) – **HSIE / Geography** – Earth & Space
Outcomes: GE1-1 / GE1-2 / GE1-3 | Content: Weather and seasons
Students:

- investigate the weather and seasons of places;
- compare the daily and seasonal weather patterns of places (ACHASSK032);
- examine how various cultural groups, including Aboriginal or Torres Strait Islander Peoples, describe weather, seasons or seasonal calendars;
- discuss how weather can affect places and activities eg leisure, farming.

Stage 1 (Years 1-2) – **Mathematics** – Time
Outcomes: MA1-1WM / MA1-2WM / MA1-13MG
Students:

- name and order months and seasons (ACMMG040);
- recall the number of days that there are in each month;
- name and order the seasons, and name the months for each season;
- use a calendar to identify the date and determine the number of days in each month (ACMMG041).

Stage 1 (Years 1-2) – **Mathematics** – Data
Outcomes: MA1-17SP
Students:

- choose simple questions and gather responses (ACMSP262);
- investigate a matter of interest by choosing suitable questions to obtain appropriate data;
- interpret information presented in data displays where one object, picture or drawing represents one data value, eg weather charts;
- write a simple sentence to describe data in a display, eg 'The most common weather type is sunshine'.

Stage 2 (Years 3-4) – **Mathematics** – Data
Outcomes: MA2-18SP
Students:

- construct suitable data displays, with and without the use of digital technologies, from given or collected data; include tables, column graphs and picture graphs where one picture can represent many data values (ACMSP096);
- evaluate the effectiveness of different displays in illustrating data features, including variability (ACMSP097);
- discuss and compare features of data displays, including considering the number and appropriateness of the categories used.

Stage 3 (Years 5-6) – **Mathematics** – Data
Outcomes: MA3-18SP
Students:

- construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (ACMSP119);
- recognise which types of data display are most appropriate to represent categorical data;
- describe and interpret different data sets in context (ACMSP120);
- identify and describe relationships that can be observed in data displays;
- use information presented in data displays to aid decision making.

VIC curriculum

Humanities / Geography – **Level A** – Geographical Knowledge
Places and our connections to them
Sub-strand: Experience weather and seasons (VCGGK011).
Elaboration: weather conditions being linked to pictures, words and images.

Humanities / Geography – **Level B** – Geographical Knowledge
Places and our connections to them
Sub-strand: Observe and identify major weather types (VCGGK025).

Humanities / Geography – **Level C** – Geographical Knowledge
Places and our connections to them
Sub-strand: Connection of weather to seasons (VCGGK039).
Elaboration: using structured activities to observe and develop an understanding of how changes in the weather can affect a desired activity.

Humanities / Geography – **Level D** – Geographical Knowledge
Places and our connections to them
Sub-strand: Ways weather and seasons are described (VCGGK053).
Elaboration: investigating the seasons and their associated weather, clothes and events.

Humanities / Geography – **Foundation to Level 2** – Geographical Knowledge
Places and our connections to them
Level Description: The concept of environment is introduced as students study the daily and seasonal weather patterns and natural features of their place and of other places, including how seasonal change is perceived by different cultures.

Sub-strand: Weather and seasons and the ways in which different cultural groups, including Aboriginal and Torres Strait Islander peoples, describe them (VCGGK067).
Elaboration: describing the daily and seasonal weather of their place by its rainfall, temperature, sunshine and wind, and comparing it with the weather of other places that they know or are aware of.

Sub-strand: Collect and record geographical data and information from the field and other sources (VCGGC060).
Elaboration: recording what they have learned about the different weather and seasons of places in a picture diary or a series of paintings, and annotating them with changes that occur throughout a year.

Mathematics – **Level 2** – Measurement and Geometry / Using units of measurement
Sub-strand: Name and order months and seasons (VCMMG118).
Elaboration: investigating the seasons used by Aboriginal people, comparing them to those used in Western society and recognising the connection to weather patterns.

Science – **Level A** – Science Inquiry Skills
Planning and conducting + Science Understanding / Earth and space sciences
Level Description: Students are exposed to change in the world around them, including changes that impact on them, for example the weather.
Sub-strand: Gather information about objects and events (VCSIS007).
Elaboration: participating in supported activities related to natural and constructed changes in the environment such as weather, tree planting, vegetable growing.
Sub—strand: Changes in the world around us can affect responses (VCSSU004).

Science – **Level B** – Science Understanding
Earth and space sciences
Level Description: Students use their senses to gather information and learn that explorations and observations are a core part of science.
Sub-strand: The weather and time of day can change (VCSSU014).
Elaboration: answering with a 'yes' or 'no' response to questions related to changes in the weather, for example, 'Is the weather today different from yesterday?', 'Do you think the weather will change after lunch?'

Science – **Level C** – Science Understanding
Earth and space sciences + Science Inquiry Skills / Recording and processing
Sub-strand: Weather involves sun, rain, wind and clouds and can be hot, cold and warm (VCSSU024).
Elaboration: responding to questions related to the weather, for example, 'Do you think it will rain?', 'Do you feel hot?, 'Is it snowing?'
Sub-strand: Use pictures and words to describe observations and findings and begin to categorise objects (VCSIS028).
Elaboration: using pictures, photos, symbols and concrete objects to record observations about the weather.

Science – **Level D** – Science Understanding
Earth and space sciences
Sub-strand: The weather and time of day affect events and clothing choices (VCSSU034).

Science – **Foundation to Level 2** – Science Inquiry Skills
Questioning and predicting + Science Understanding / Earth and space sciences
Level Description: Students observe patterns of growth and change in the world around them, including weather.
Sub-strand: Respond to and pose questions, and make predictions about familiar objects and events (VCSIS050).
Elaboration: considering questions relating to objects used in everyday life and changes in the weather thinking about 'What will happen if...?' type.

Sub-strand: Observable changes occur in the sky and landscape; daily and seasonal changes affect everyday life (VCSSU046).
Elaboration: recording short and longer term patterns of events that occur on Earth and in the sky, for example, the appearance of the moon and stars at night, the weather and the seasons.