Food and fibre: Mathematics

Mathematics

The Australian Curriculum addresses learning about food and fibre predominantly in Design and Technologies and F-6/7HASS/Geography, however there are opportunities to make connections with aspects of Mathematics, particularly Measurement and geometry and Statistics and probability.

Food and fibre dimensions

Mathematics - Years 3 and 4

Year 3
Measurement and geometry
Location and transformation
Content description with elaborations:
Create and interpret simple grid maps to show position and pathways (ACMMG065)

- creating a map of the classroom or playground

Statistics and probability
Data representation and interpretation
Content description with elaborations:
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

Year 4
Number and algebra
Money and financial mathematics
Content description with elaborations:
Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies (ACMNA080)

- carrying out calculations in another currency as well as in dollars and cents and identifying both as decimal systems

Measurement and geometry
Location and transformation
Content description with elaborations:
Use simple scales, legends and directions to interpret information contained in basic maps (ACMMG090)

- identifying the scale used on maps of cities and rural areas in Australia and a city in Indonesia and describing the difference
- using directions to find features on a map

Data representation and interpretation
Content descriptions with elaborations:
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)

- exploring ways of presenting data and showing the results of investigations
- investigating data displays using many-to-one correspondence

Evaluate the effectiveness of different displays in illustrating data features including variability (ACMSP097)

- interpreting data representations in the media and other forums in which symbols represent more than one data value
- suggesting questions that can be answered by a given data display and using the display to answer questions