**The Australian Curriculum & AusVELS Science Standards addressed during the Observing Decomposing Fruit & Vegetables Experiment**

The science experiment met the following Australian Curriculum & AusVELS Science areas:

**Standards:**
Level 4:

* *They explain how the key stages in the life cycle of a plant or animal relate to growth and species survival.*
* *They describe how they use science investigations to identify patterns and respond to questions.*
* *Students follow instructions to identify questions that they can investigate about familiar contexts and predict likely outcomes from these investigations.*
* *They discuss ways to conduct investigations and suggest why their methods were fair or not.*
* *They safely use equipment to make and record formal measurements and observations.*
* *They use provided tables and simple column graphs to organise and identify patterns in data.*
* *Students suggest explanations for observations and compare their findings with their predictions.*
* *They use diagrams and complete simple reports to communicate their methods and findings*.

Level 5: *At Level 5, the student is working towards the Level 6 standard.*

Level 6:

* *They analyse how structural and behavioural adaptations of living things enhance their survival, and predict and describe the effect of environmental changes on individual living things.*
* *Students compare the properties and behaviours of solids, liquids and gases.*
* *They compare observable changes to materials and classify these changes as reversible or irreversible.*
* *They analyse how structural and behavioural adaptations of living things enhance their survival, and predict and describe the effect of environmental changes on individual living things.*
* *Students explain how scientific knowledge develops from many people’s contributions and how scientific understandings, discoveries and inventions affect peoples’ lives.*
* *Students follow procedures to develop questions that they can investigate and design investigations into simple cause and effect relationships.*
* *When planning experimental methods, they identify variables to be changed and measured in fair tests.*
* *They make predictions based on general rules or previous experiences.*
* *They identify and manage potential safety risks.*
* *They make and record accurate observations as tables, diagrams or descriptions.*
* *They organise data into tables and graphs to identify and analyse patterns and relationships.*
* *They suggest where improvements to their experimental methods or research could improve the quality of their data.*
* *They refer to data when they report findings and communicate their ideas, methods and findings using a range of text types.*

**Strand: Science Understanding**
**Sub-Strand:** **Biological Science**

* Level 6 Content Descriptor and Elaboration *- 'The growth and survival of living things are affected by the physical conditions of their environment - ACSSU094' \* Observing the growth of fungi such as yeast and bread mould in different conditions*

**Strand:**Science as a Human Endeavour
**Sub-Strand:** Nature and Development of Science

* Level 3 Content Descriptor - *Science involves making predictions and describing patterns and relationships (ACSHE050)*
* Level 4 Content Descriptor and Elaboration - *Science involves making predictions and describing patterns and relationships (ACSHE061) \* Exploring ways in which scientists gather evidence for their ideas and develop explanations*
* Level 5 Content Descriptor and Elaboration - *Science involves making predictions and describing patterns and relationships (ACSHE081) \** *Testing predictions relating to the behaviour of solids, liquids and gases by conducting observational experiments*
* Level 6 Content Descriptor - *Science involves making predictions and describing patterns and relationships (ACSHE098)*

**Strand: Science Inquiry Skills**
**Sub-Strands:** **All**

* All content descriptors for levels 3-6.

**The Australian Curriculum & AusVELS Mathematics Standards**

The science experiment met the following Australian Curriculum & AusVELS Mathematics areas:

**Strand: Number & Algebra**
**Sub-Strand: Number & Place Value**

Level 5 Content Descriptors

* Use estimation and rounding to check the reasonableness of answers to calculations (ACMNA099)
* Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (ACMNA291)

Level 5 Standard

* They estimate to check the reasonableness of answers and approximate answers by rounding.

Level 6 Content Descriptors:

* Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (ACMNA123)

**Sub-Strand: Fractions and decimals**

Level 6 Content Descriptor & Elaboration

* Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers (ACMNA128) \* Exploring and practising efficient methods for solving problems requiring operations on decimals, to gain fluency with calculating with decimals and with recognising appropriate operations

Level 6 Standard:

* They solve problems involving all four operations with whole numbers and describe the use of integers in everyday contexts.
* Students add, subtract and multiply decimals and divide decimals where the result is rational.