

2026 Year 8 Unit Outline

Agriculture

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Faculty: Science and Agriculture

Unit Duration: Semester 2 2026

The **Australian Curriculum Achievement Standards in Agriculture** is a Design and Technologies course and builds on concepts, skills and processes developed in earlier years. By the end of the course students will have had the opportunity to create designed solutions in food and fibre production

Australian Curriculum Achievement Standard The Australian Curriculum achievement standards for Year 8 in Design and Technologies and Science are reflected in students' ability to apply design thinking and scientific understanding within agricultural contexts. Students explore how innovation in agriculture supports preferred futures, such as sustainable food production and resource management, while developing and refining solutions that respond to environmental and sustainability considerations. They plan and safely manage production processes, both independently and collaboratively, as they create agricultural products or manage onsite farm systems. At the same time, students deepen their scientific understanding by comparing forms of energy and representing how energy is transferred and transformed within agricultural systems, such as in irrigation, machinery, or plant or animal growth. Together, these skills demonstrate how students integrate practical and theoretical knowledge to design sustainable and effective agricultural solutions

Unit Description: *This unit introduces students to the principles of sustainable agriculture by combining design thinking with scientific understanding. Students investigate how food and fibre are produced in ways that support preferred futures, with a focus on environmental sustainability, animal welfare, and efficient resource use. Through hands-on experiences, they design and manage small-scale agricultural systems, such as planning and growing a vegetable garden, propagating plants, or maintaining a school-based production area. In animal care contexts, students may explore the needs of livestock or small animals by designing appropriate housing, feeding plans, and care routines that promote health and wellbeing. Throughout the unit, students document their processes, work collaboratively, and apply their understanding of energy transfer in systems such as plant growth, composting, or the use of tools and machinery. This integrated approach supports students in developing practical skills and informed decision-making for sustainable food production. This unit may contain topics which raise concerns with families in our community. Please contact the class teacher if you have any specific concerns.*

Essential Learning Outcomes developed from the Achievement Standards of the Australian Curriculum:

1. **V9.DST.8.01-** Explains how people design, innovate and produce products, services and environments for preferred futures
2. **V9.DST.8.05-** Independently and collaboratively documents and manages production processes to safely produce designed solutions
3. **V9.DST.8.03-** Creates and adapts design ideas, processes and solutions, and justifies their decisions against design criteria that include sustainability.
4. **V9.S.8.04-** Compares different forms of energy and represents transfer and transformation of energy in simple systems

Materials and Equipment Required: Students are expected to arrive at every class with a class book/folder to write notes for that subject, a writing instrument and a Chromebook or similar, appropriate electronic device. Students are required to provide the following additional materials and equipment: *hat, water bottle, enclosed shoes*

Absences from Class: Students who miss classes due to absence or excursions must negotiate with the class teacher to catch up missed work.

Use of IT in Class: A Google Classroom has been set up for this class. Classroom Code **bnyugtkj** Students will be required to log into this Google Classroom regularly to access course material. Students must bring their Chromebook to all lessons, however, the use of these devices in class will be at the discretion of the teacher.

Homework: Any homework will be directly related to instruction and course requirements, will be assessed appropriately and may impact upon student grades. Examples of homework may include: catch up on missed classwork, revision of classwork, study for tests, assignment work, or preparation for a class presentation.

Late Work: Extensions may be negotiated with individual teachers before the due date

Plagiarism: Plagiarism is copying or using another's work and claiming it as your own. This includes copying, cutting and pasting text or using ideas directly from a text, the internet or some other source without appropriate referencing. If this happens, work may not be graded and students will be asked to discuss the assessment with the classroom teacher and Executive Teacher for that subject. Parents may be contacted as part of this process.

Assessment Portfolio: This contains evidence of work from the opportunities the students have been provided to demonstrate elements of the achievement standard.

Portfolio Assessment Tasks for this subject will include:	Week / Date Due	Essential Learning
1. Safe and effective farm practical activities	Ongoing	2
2. Sustainable Garden Design Project	5	1,3
3. Energy in Agriculture Investigation	11	4
4. Production Task - crop growth	16	2

A-E Reporting Grade Descriptors These are the grades and grade descriptors for reporting at the end of each Semester.

A	Demonstrating excellent achievement of what is expected (Consistently achieving a proficiency level of 4 or above in each of the Essential Learnings)
B	Demonstrating a high achievement of what is expected (Consistently achieving a proficiency level of between 3 and 4 in each of the Essential Learnings)
C	Demonstrating satisfactory achievement of what is expected (Achieving a proficiency level of 3 across the Essential Learnings)
D	Demonstrating partial achievement of what is expected (Achieving a proficiency of between 1 and 3 across the Essential Learnings)
E	Demonstrating limited achievement of what is expected (Achieving a proficiency of 1 or less in each of the Essential Learnings)
S	Status is awarded where unavoidable circumstances have prevented assessment. Must be negotiated with the Principal.

Grade Descriptors and the "C" grade

In ACT public schools the Australian Curriculum Achievement Standard is aligned with a 'C' grade. The 'C' grade indicates that your child has demonstrated a satisfactory level of knowledge, understanding and skill in relation to the Achievement Standard.

Appeals

A student must initiate an appeal for any grade with their subject teacher. If a student is dissatisfied with that initial process, they must pursue further appeal through the Faculty Executive Teacher for that subject.

Executive Teacher

Gary Rolfe 01/07/2026