Stage 5 Agricultural Technology: Year 9
Unit 2: Poultry

Name of enterprise: Poultry production **Duration:** 6–8 weeks **Factors to consider:** Timing of chicks for the farm is ideally in September. Save eggs in storeroom for stale eggs.	
Date started:	**Date completed:**

Outcome	Enterprise specific objectives At the end of this unit students should be able to:	Suggested teaching and learning strategies
5.1.1	• Recognise that the poultry industry not only includes chickens but such birds as turkeys, ducks, geese, game birds etc.	• Brainstorm and complete worksheet.
5.1.1	• State that poultry in Australia can be divided into farm and home fowl, show birds, layers and broilers	• Kemp, *Pure Breed Poultry Raising*, diagram p. 13 and Chapter 2
5.1.1	• Draw and label a hen and a rooster	• *Dynamic Agriculture 1*, p. 227; *Enterprising Agriculture*, p. 234
5.1.1 5.3.4	• Name, classify and briefly describe 8 pure breeds of fowl • Describe a breed in detail including characteristics, uses, use in commercial flocks/breeding programs etc	• Farm walk. • *Dynamic Agriculture 1*; *Pure Breed Poultry Raising*, *Australian Poultry Standards*, Internet etc. • Breed slides. • Research assignment – each student to do a different breed. Could be presented as a short talk. • Question sheet on a poultry standard. • Visit from poultry club member.
5.4.3 5.6.2	• Catch, restrain and carry fowl correctly	• Farm demonstration and practice.
5.1.1 5.3.1 5.3.4 5.5.1	**Eggs and layers** • State the role of an egg • State a chicken takes about 3 weeks to hatch • Describe the development of the chicken within the egg including reproduction • Name the parts of an egg as follows: – shell – membrane – thin white	• Hatch chickens either under a broody or in an incubator. • Slides, poster, video. *Enterprising Agriculture*, pp. 253–259. • Make a model egg: three-dimensional fold out in book or drawing with labelling. • Discuss features and roles.

Outcome	Enterprise specific objectives At the end of this unit students should be able to:	Suggested teaching and learning strategies
	– thick white – chalazae – yolk – nucleus • Explain clutch length and its importance. • Draw the development of an egg.	• *Agriculture and You Book 1*, p. 59. Complete questions proposing varying clutch lengths. Refer to light manipulation.
5.3.4 5.5.1	• Distinguish between fresh and stale eggs. • Explain why stale eggs float.	• Stale eggs float, may rattle, have a less domed yolk, the two whites are less distinct and they have a larger air sac. Save some eggs from a few months before. • Bigger air sac: demonstrate.
5.1.1 5.3.1 5.3.4	• Compare and contrast intensive and extensive animal production systems placing layer production in context. • Identify the features of the digestive tract and compare it to a ruminant.	• Brainstorm, *Dynamic Agriculture*, *Senior Australian Agriculture.* • *Enterprising Agriculture*, p. 234, *Agriculture and You 1,* p. 51.
5.1.1 5.3.4 5.5.1	• Define the term hybrid and explain the role of hybrids in the layer industry.	• Investigate and evaluate classic hybrid crosses and compare and contrast their features. This could be an assignment or a worksheet. • Run a production trial comparing a pure breed with hybrids. Monitor both egg numbers and weights and food intake.
5.3.2 5.3.4 5.4.2 5.4.3	• Briefly describe the Australian layer industry including the inputs, processes and outputs, production systems and marketing. • Describe the management of layers including feeding, lighting (photo periodism), climate control, ventilation, egg collection, waste removal etc. • Develop a calendar of events for layer production.	• ASMP slides. • Describe system at school farm. Investigate layer systems in Australia including battery, barn and free range. Web site of Australian Egg Corporation Ltd: http://www.aecl.org/r&d/ • Look at feed labels. Worksheet comparing crumbles to layer pellets.
5.3.2 5.4.2 5.4.3	• Debate the advantages and disadvantages of different production systems: battery, barn raised and free range.	• Introduce animal welfare issues and guidelines. • Research legislation appropriate to the industry. • Look at the information on egg cartons. • Survey public opinion and relate to willingness to pay.

Outcome	Enterprise specific objectives At the end of this unit students should be able to:	Suggested teaching and learning strategies
5.3.2 5.4.2 5.5.2 5.6.2	• Collect and correctly store eggs at farm. • Keep records of production over a period of time. • Compare production costs with income for period covered. • Investigate marketing of eggs, e.g. egg size.	• Point down. • Keep daily records using computer spreadsheets. • Graph over time. • Simple gross margins.
5.3.1 5.3.4 5.4.3 5.5.1 5.5.2 5.6.2	• Care for and raise poultry. • Keep records. • Handle poultry correctly. • Describe the requirements of young birds and monitor their comfort level.	• In September, bring in day old pullets. • Carry out and record daily husbandry activities. • Monitor growth and development and keep records. • Research guidelines for caring for and keeping poultry. • *Growing Poultry* – Resource folder. •
5.3.1 5.3.4 5.4.3 5.5.1 5.5.2 5.6.2	• Describe the requirements for backyard poultry keeping.	• Care for and raise poultry. • Design and produce a pamphlet covering such things as breed selection, care and management, housing, feeding and welfare using computer applications.

Resources:

Books:	**Web sites:**
Bannerman et al, *Enterprising Agriculture* Bishop, *Australian Poultry Standards* Brown et al, *Dynamic Agriculture 1–4* Clarke, *Senior Australian Agriculture* Dept of Education, *Growing Poultry – Resource folder* Francis et al, *Agriculture and You 1* Kemp, *Pure Breed Poultry Raising* Reading, D. *A Guide to Keeping Poultry in Australia* Pattinson, B. *Poultry in Australia*, Volumes 1–3	***Gazza's poultry pages*** General information about poultry production. http://www3.turboweb.net.au/~garrys/poultry.html ***FeatherSite*** Information about various breeds of fowl. http://www.cyborganic.com/People/feathersite/Poultry/BRKPoultryPage.html ***The chook shed*** Australian web site containing information about breeds, care and show details. http://www.webone.com.au/~greggles/ ***NSW Agriculture*** Information about animals by category. http://www.agric.nsw.gov.au/reader/12 ***Breeds of livestock*** Information about poultry breeds. (See the bottom of the web page). http://www.ansi.okstate.edu/breeds/

Ways of assessing student progress:

- Breed assignment: written, or as an oral presentation.
- Notes for debate topic.
- Pamphlet.
- Practical assessment: catch and handle poultry.

Skills achieved in this topic:

- Catch, hold and carry poultry
- Care for animals
- Incubate eggs
- Distinguish between fresh and stale eggs
- Keep records
- Use spreadsheets
- Design an experiment/trial
- Gather data
- Graph information