

TECHNOLOGY MANDATORY: FOOD

D Jones



Task Number: 1 **Notification Date:** Tuesday 7th March 2023 (Term 1, Week 7)

Weight: 25% **Due Date:** Friday 24th March 2023 (Term 1, Week 9) – **By the end of Period 3**

DAIRY RESEARCH TASK

OUTCOMES ASSESSED

TE4-5AG investigates how food and fibre are produced in managed environments

TASK DESCRIPTION

Choose ONE research topic from the options listed on the attached task sheet and create an informative and creative presentation.

The dot points below each topic in the work booklet are suggested ideas that you could base your research on.

TASK INSTRUCTIONS

Present your information using PowerPoint, Google Slides, Prezi or similar.

Include a Bibliography that outlines your sources of information.

When you have completed the task, submit by:

- Email: danielle.forbes1@det.nsw.edu.au, OR
- Print and submit in class on Friday 24th March 2023.

Teacher's signature: _____

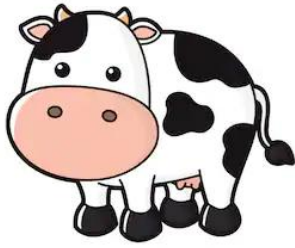
D Jones

Head Teacher's signature _____

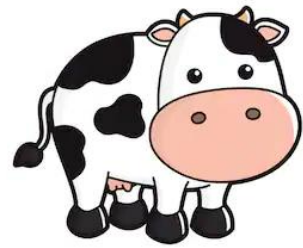
A Nott

Deputy Principal's Signature: _____

A Lawrence



Dairy Research Task



TASK:

Choose ONE research topic from the options listed below and create an informative and creative presentation.

It is important to include both text and pictures to explain what you have learned about your research topic. Ensure that you use relevant pictures and your own words.

To present your information you can use PowerPoint, Google Slides, Prezi or similar. If you don't have access to a computer, you can handwrite your information.

RESEARCH TOPICS:

Topic 1: Calf rearing

Topic 2: The Dairy industry

Topic 3: The fifth food group

Topic 4: Farm safety

The dot points below each topic are suggested ideas that you could base your research on.

Topic 1 – Calf Rearing

- What are the nutritional requirements of a calf?
- Discuss, then calculate the quantity of various feed sources required.
- Identify environmental conditions conducive to calf safety.
- Research the standard growth curve for calves.
- Create a timeline that illustrates the important events in a young female calf's life (birth, weaning, mating, first calving, etc.)
- Estimate the quantity of milk, fat and protein the calf will produce during her first lactation.





Topic 2 – The Dairy Industry

Have a look at your community and visit the Dairy Australia website which will showcase that the dairy industry is the heart of many careers. It also supports and is supported by many other services and industries.

- Brainstorm your local community for links to the dairy industry. How significant is the dairy industry in your community?
- Use the internet to make a list of dairy related services and careers.
- From the various dairy-related careers in your community, list those that appeal to you. What special skills and/or training are required to work in these careers?
- Draw up a 'concept map' showing these industries and services, and how they relate to 1) the dairy industry, 2) the community, and 3) each other.



Topic 3 - The Fifth Food Group

The Australian Dietary Guidelines identify five food groups that are essential for daily diets. The fifth food group is dairy. Dairy is essential to everybody and every day.

Dairy foods provide a unique package of over 10 essential nutrients with a wide range of benefits. These nutrients are important for healthy blood, nervous and immune systems, eyesight, muscle and nerve function, healthy skin, energy levels and growth and repair in all parts of your body.

- Research the place of dairy in a 'healthy eating pattern'. Where are dairy products in a 'balanced diet'? How frequently should we eat dairy products and in what quantities? Do these answers vary for different situations?
- Research the importance of regular serves of dairy for teenagers, and for those who are active in sport (sports nutrition). What specific elements of dairy affect human growth and performance (such as calcium for bone density), and what are the dangers of a deficiency of dairy for these people?

Topic 4 – Farm safety

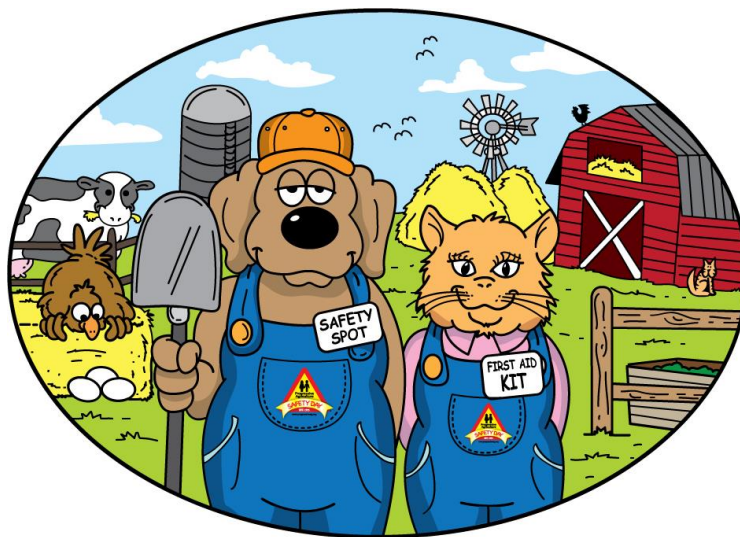
Dairy farms are special places, as they are usually both a home for the family, and a busy workplace.

As a home for the family, issues of health and safety are even more extreme than usual, given the dangers associated with big trucks driving up and down the driveway twice a day, heavy machinery, big awkward animals, even snakes and electric fences can bite!

All workplaces have rules to ensure worker health and safety is protected, and there are heavy penalties for unsafe work practices.

Health and safety issues related to dairy farms include:

- Vehicles (quad bikes, tractors, milk tankers, general traffic)
 - Chemicals (along with water and effluent)
 - Power and electrical (don't touch that electric fence!)
 - Farm machinery
 - Working spaces (confined spaces, outside spaces, heights)
 - Visitors and children
- Investigate farm safety. Present a report on the potential dangers of the dairy farm environment, and recommend guidelines to minimise risks for people who live on, work on, or visit dairy farms. You might be interested to explore the nature, number and seriousness of farm accidents in Australia (many of which involve children on and around tractors and quad bikes).



When you have completed this task submit your task by:

- Email, OR
- Print and submit in class to the teacher.