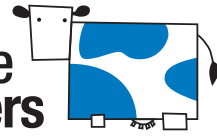


Cows
create
careers



FARM MODULE



Dairy
Australia

Year 9-11 & VCAL Student Handbook

Contents

| | |
|---|-----------|
| Overview | 2 |
| Assessment Summary | 3 |
| A Dairy Day for your Diary | 4 |
| Industry Advocate Visit | 5 |
| Arrival of the Calves in School | 6 |
| Tasks for Submission | 7 |
| 1.1 3D Model Task | 8 |
| <u>Suggested Research Topics</u> | 9 |
| Topic 1: Calf Rearing | 10 |
| Topic 2: Finance Management | 11 |
| Topic 3: Identification and Breeding | 12 - 13 |
| Topic 4: Natural Resource Management | 14 |
| Topic 5: The Dairy Industry | 15 |
| Topic 6: The Fifth Food Group | 16 |
| Topic 7: Researching Animal Behaviours through Cattle Handling | 17 |
| Topic 8: Farm Safety | 18 |
| 1.2 Mootube Moovie / PowerPoint Task | 19 |
| 2.1 Letter / E-mail Task | 20 |
| 2.2 Scientific Report Task | 21 |
| 3. Take a Funny Photo of your Team with the Calves | 21 |
| 4. Student Evaluation (Entry & Exit) | 21 |
| 5. The Final Team Checklist | 22 |

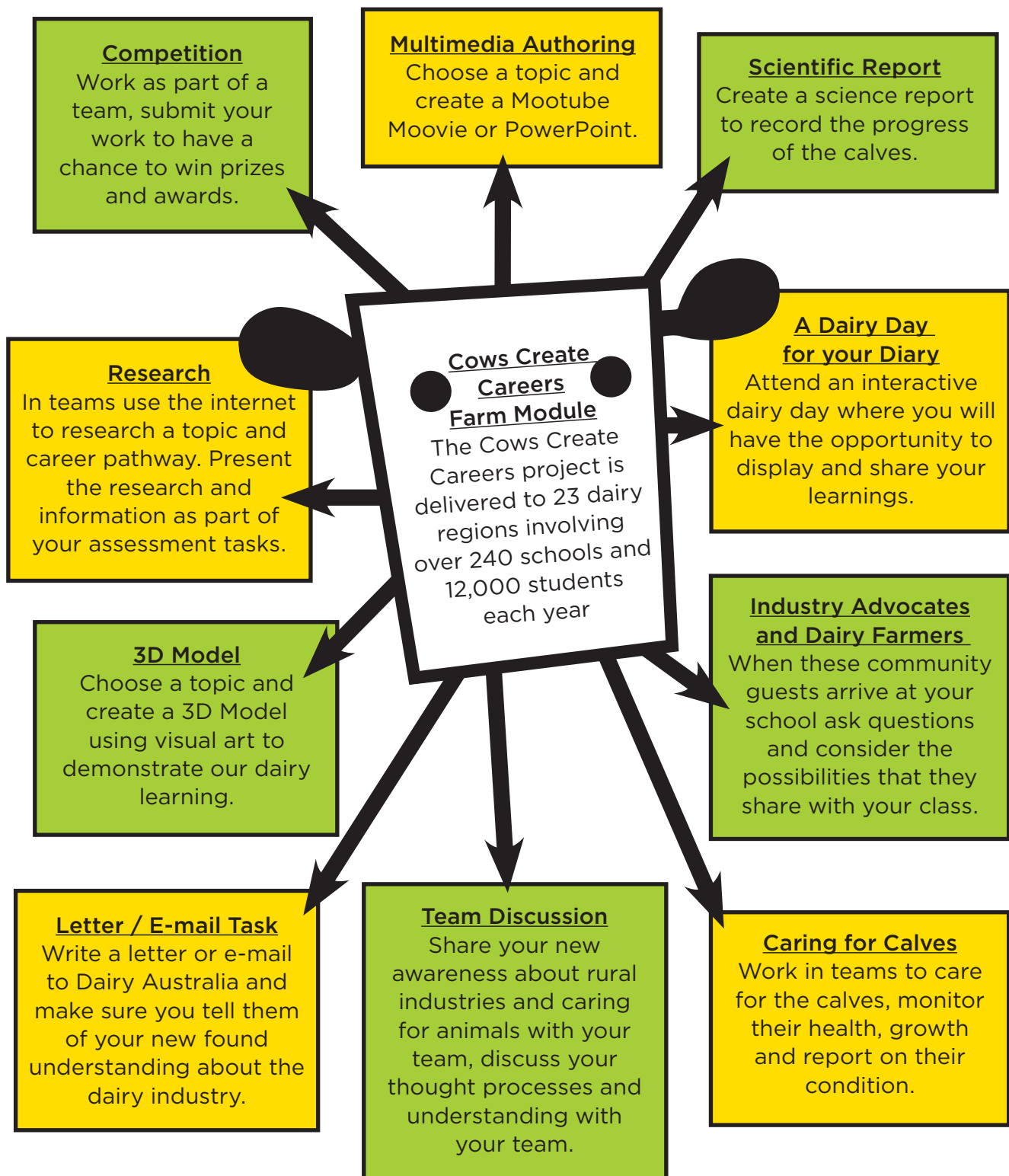
Contact Details:

Cows Create Careers – Farm Module
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Overview

Over the next few weeks you will be significantly involved in the lives of two calves. Caring for and monitoring the calves will be central to your learning about the dairy industry and what it entails. **Cows Create Careers - Farm Module** involves you in:



Assessment Summary



HOW MANY TEAMS ARE ASSESSED?

Schools should only select a maximum of 5 teams to submit for assessment and all student surveys will be done online via a Survey Monkey link!

HERE'S HOW IT WORKS

Immerse yourself in Cows Create Careers by submitting the following tasks. This will allow you to be in the running for school and/or team prizes and awards for your region.

STUDENTS - Years 9-11

Work in a group of 2-5 students and think of a catchy name for your team.

Submit the following tasks for assessment:

- 1.1 3D Model OR 1.2 Mootube Moovie / PowerPoint (pages 8 - 18 OR 19)**
 - Submit photos of your 3D Model as jpg files OR your Moovie as mp4, wmv or ppt files.
- 2.1 Letter / E-mail to Dairy Australia (page 20) OR 2.2 a Scientific Report (page 21)**
 - Submit your Letter / E-mail or a Scientific Report as doc or pub files.
- 3. Take a Funny Photo of your Team with the Calves (page 21)**
 - Submit a fun and creative photo of your Team with the Calves as a jpg file.
- 4. Student Evaluation (Entry & Exit) (page 21)**
 - Submit your Student Evaluation data using the following links:
ENTRY: <https://www.surveymonkey.com/r/2018cccstudententry>
EXIT: <https://www.surveymonkey.com/r/2018cccstudentexit>
- 5. Final Team Checklist (page 22)**
 - What have you submitted? Please ensure that your team completes this form.

TEACHERS

Teachers who submit both the teacher evaluation form and the judging rubrics will gain an additional 5 points towards the school prize ([refer to the Teacher Handbook](#)).

BONUS POINTS

A bonus point will be awarded to any school that submits all their work before the due date for that region. This will be added to the school's average score for the school prize.

SUBMIT ASSESSMENT TASKS USING:

Dropbox - E-mail admin@jaydee.net.au to request your Dropbox link, then simply upload your files.

Google Drive Links - Using Google as your mail server? Simply attach all your large files to an e-mail and Google will send via Google Drive Links.

Mail - Post your work on a memory stick to:
Cows Create Careers, PO Box 18, LOCH VIC 3945.

Save all your files with your team name and the type of activity as the name of the file.
Refer to the School Resource Kit for due dates and timelines for the project.



A Dairy Day for your Diary

An interactive day will conclude the Cows Create Careers project for your school. The day will start at 10.30am and finish at 1.30pm.

Lunch is optional, so if schools are not requiring lunch they will be able to depart at 1.00pm.

On this day an overall winning team prize and school prize will be announced and all students will receive a certificate of participation in the project.

Region's Winning Team

Region's winning team wins a \$50 iTunes voucher for each team member (max \$250).

The winning team prize is determined by adding together the score of each of the team assessment tasks along with the score from the teacher's judging rubric.

The highest team score for the region will take out the team prize.

This prize is awarded in both junior and senior sections.

Region's Winning School

Region's winning school will receive \$500.

To be eligible for this prize the school must submit a minimum of **four** teams in that section.

The winning school prize is determined by calculating the average of the score from each of the teams that have been submitted.

The highest average in the region will take out the school prize.

The prize is awarded in both junior and senior sections if there are two or more schools meeting the assessment criteria in that section.

Submit your student evaluations and you will gain 5 points towards your final team score

Teachers who submit their judging rubrics and teacher evaluation will gain an additional 5 points towards the final school score.

If you get your work in before the due date your school can gain an additional point towards the final school score.

Missing assessment work will be recorded as unsubmitted and will not be followed up by the Cows Create Careers team.



2018 School Regions...

East & South Gippsland, Victoria

South West, Victoria

North & North East, Victoria \ New South Wales

Burnie, Hobart & Launceston, Tasmania

South Coast, Central & Far Coast, New South Wales

Hunter Valley, New South Wales

Mid Coast, New South Wales

Lismore, New South Wales

Rockhampton, Queensland

Toowoomba, Queensland

Mount Gambier, South Australia

Fleurieu Peninsula, South Australia

Adelaide Hills & Murray Bridge, South Australia

Barossa Valley & Mid North, South Australia

Busselton (South West), Western Australia

Industry Advocate Visit

Your school has its own industry advocate who will visit to give a presentation to students about their role in the dairy industry. Don't forget to listen carefully and prepare some questions that may assist you with your projects.

Some Key Ideas/Questions

You may wish to investigate in more depth aspects of the industry advocate's work such as:

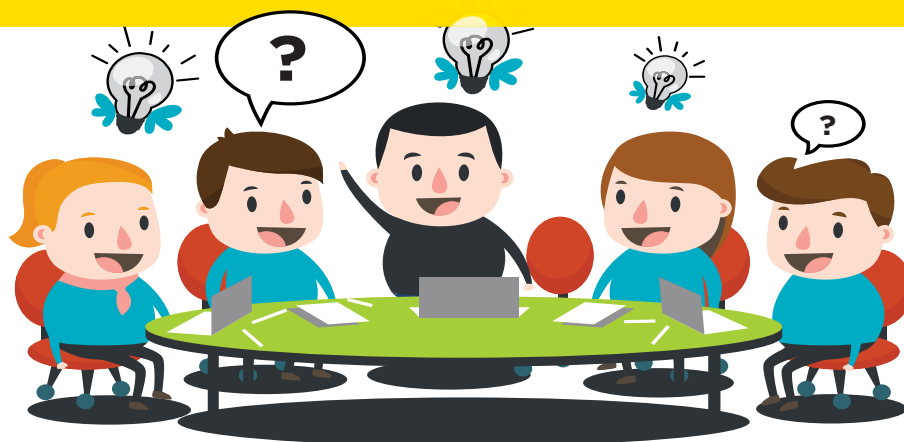
- What pathway did you take to achieve your current position?
- What do you see as the real positives about working in the industry?
- What is the nature of study undertaken to qualify you to do this work?
- What 'duties' do you perform in this position?
- What do you think you will be doing in five years time? What about in ten years time?
- What special talents and interests are needed to succeed in your work?
- Tell us about the latest technology that is being used in relation to your career pathway?
- What do you think your chosen career will look like in 10 years time?

Brainstorming Careers

During the Cows Create Careers journey you should be collecting information and asking questions about work and work futures in the dairy industry.

To help start you off, a number of career areas are listed below:

- Feed Systems
- Artificial Breeding
- Shed Design
- Agronomy
- Nutrition / Stockfeed
- Milking Systems
- Research and Development
- Farm Management
- Environmental Management Systems
- Dairy Farmer
- Manufacturing / Marketing
- Finance
- Technology & Engineering
- Robotics
- Marketing
- Dietician
- Animal Welfare
- Herd Improvement
- Pasture Improvement
- Agricultural Consultant



Arrival of the Calves in School

The calves are going to be arriving in your school soon. How about as a class you work together to ensure that you are well prepared for their arrival.

KEY IDEAS

Research and identify environmental conditions

Identify conditions conducive to calf safety and growth and ensure that your facilities meet these requirements prior to the calves arrival.

Prepare a calf rearing plan

Develop a plan to ensure the health and welfare of the calves whilst they are in your care.

Develop a roster to feed the calves

What is the most effective way for teams to share the care and monitoring of the calves during their stay at school? How can we ensure each team shares responsibilities (including weekends)?

Create a checklist of questions to ask the dairy farmer

The first question will be to ask the dairy farmer about the feeding regime for the calves. Write these details on the poster that has been included in your School Resource Kit. Display the poster somewhere so that everyone can see.

Research and understand the importance of your own personal hygiene

Personal hygiene is extremely important when looking after animals. Make sure that your team and class understands why. Display the poster that has been provided in the School Resource Kit as a reminder to students.

Prepare daily and weekly checklists for monitoring the calves

Have a look over the samples that have been included in the School Resource Kit.

Does the class understand the general principles of calf management?

Do you know what needs to be done, when and why? Perhaps refer to the Dairy Australia Calf Rearing Handbook for helpful tips. A copy of this can be found on the CCC memory stick as a PDF or alternatively your teacher may have a copy in the library.

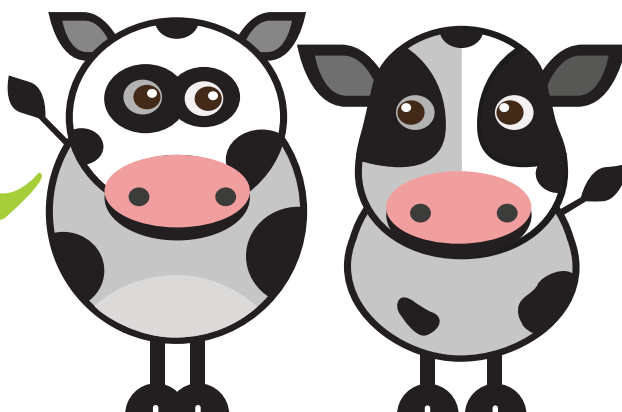
Monitor the calves' weight gain

Make sure you monitor and record the feeding regime and weight gain of the calves whilst they are in your care. Include this in your Scientific Report or Letter / E-Mail to Dairy Australia.

Veterinary Assistance

If your school has a concern about the health and welfare of the calves please contact the dairy farmer or project manager listed on your information sheet. If a vet is required, approval of veterinary expenses must be authorised.

**If a vet is required,
approval of vet expenses
must be authorised by
calling 03 5659 4219**



Tasks for Submission

1. 3D MODEL OR MOOTUBE MOOVIE / POWERPOINT

Choose ONE of these tasks to submit:

1.1 3D Model - Choose from one of the 8 research topics below:

Topic 1: Calf Rearing

Topic 2: Finance Management

Topic 3: Identification and Breeding

Topic 4: Natural Resource Management

Topic 5: The Dairy Industry

Topic 6: The Fifth Food Group

Topic 7: Researching Animal Behaviours through Cattle Handling

Topic 8: Farm Safety

Create an informative and illustrated 3D Model. There are no shape or size requirements. [Further details about this 3D Model Task and these topics can be found on pages 8 - 18.](#)

OR 1.2 Mootube Moovie / PowerPoint - Choose from one of the 4 statements below:

Statement 1: Role-play a career in the dairy industry, include what is fun about the job!

Statement 2: Tell the viewers about best practice when caring for the calves.

Statement 3: Tell the viewers why dairy is an important part of your health and nutrition.

Statement 4: Dress up as scientists and carry out a simple science experiment.

The Mootube Moovie is a movie / PowerPoint which is timed for 3 minutes (+/- 10 seconds). [Further details about this Mootube / PowerPoint can be found on page 19.](#)

2. LETTER / E-MAIL OR A SCIENTIFIC REPORT

Choose ONE of these tasks to submit:

2.1 Letter / E-mail Task

This publishing task involves writing a letter or e-mail. The letter or e-mail should be addressed to Dairy Australia and focus on the industry advocate, the dairy farmer, and how the team felt about the Cows Create Careers project. All letters or e-mails should be presented in business format.

[Further details about the Letter / E-mail Task can be found on page 20.](#)

OR 2.2 Scientific Report Task

Create a Scientific Report which can be submitted to provide a summary of the calves' condition during their time in your care.

[Further details about the Scientific Report Task can be found on page 21.](#)

3. TAKE A FUNNY PHOTO OF YOUR TEAM WITH THE CALVES

Submit a funny photo of your team with the calves as a jpg file. Make sure you are creative! The photo selected for the front page of the Cows Create Careers Annual Report will win a \$100 iTunes voucher!

[Further details about the Funny Photo Task can be found on page 21.](#)

4. STUDENT EVALUATION - ENTRY & EXIT

Submit your Student Evaluation data using the following links:

ENTRY: <https://www.surveymonkey.com/r/2018cccstudententry>

EXIT: <https://www.surveymonkey.com/r/2018cccstudentexit>

[Further reference to the Student Evaluation Survey Monkey link can be found on page 21.](#)

5. FINAL TEAM CHECKLIST

Please ensure that your team completes this form to accompany your assessment work. Print your names clearly for certificates.

[Further details about the Final Team Checklist can be found on page 22.](#)

1.1 3D Model Task



Welcome to Cows Create Careers.
It will benefit all of us if
we work together to learn about the
dairy industry, career options,
pathways and
the many related industries.
Let's get moooving!

TASK: In teams of 2-5, choose a research topic from the list over the page. Work together to create an informative and illustrated 3D Model such as a poster, diorama, working model or sculpture, this will become your 3D Model.

It is important to include illustrations and text to explain what you have learned about your research topic and to link your 3D Model to career pathways in the dairy industry.

Ensure that you use relevant pictures and your own words to explain your learnings.

Use the internet, library, an industry advocate, dairy farmer or maybe even your teacher, to help with ideas and information.

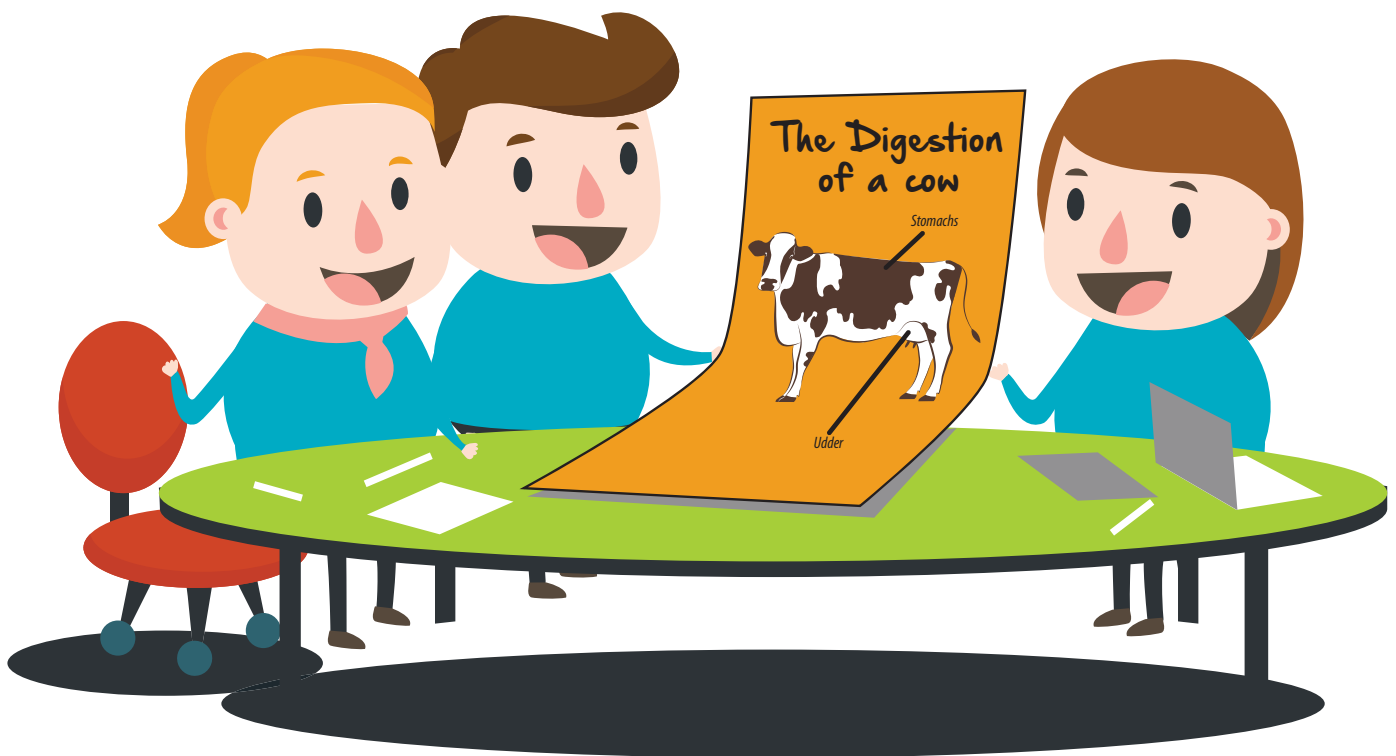
Don't forget there is a full page in this handbook relating to each of the research topics, use this to start your ideas.

Each team may use the completed 3D Model as the focus of a class talk. (All team members must have some involvement in this class talk).

Your team must submit high quality photos that clearly show your 3D model close up so judges can read the text and assess the overall visual appeal.

No physical copies of the models are to be posted to Cows Create Careers, only photos.

Organise with your teacher to bring your 3D Models along to the Dairy Day for your Diary.



Suggested Research Topics

Topic 1: Calf Rearing

Sample core focus

1. Explain the main objectives for calf rearing.
2. Discuss issues such as the management of calves, housing, feeding requirements, disease management and illustrate the important events in a young female calf's life.

Topic 2: Finance Management

Sample core focus

1. Identify the key elements of financial planning in relation to a particular career (of your choice) in the dairy industry.
2. Explain how deep understanding of these key elements will strengthen this career, and describe likely outcomes of poor performance in these areas.

Topic 3: Identification and Breeding

Sample core focus

1. Research the latest technology in the dairy industry in relation to identification, animal genetics or animal reproduction.
2. Evaluate whether these technologies have been effective, shape and report your conclusion.

Topic 4: Natural Resource Management

Sample core focus

1. Identify and explain the projects that the dairy industry has initiated in the area of Natural Resource Management.
2. How have these projects contributed to a healthier catchment and community?

Topic 5: The Dairy Industry

Sample core focus

1. Identify and research the significance of the dairy industry to your local community.
2. Explore the career pathways that relate to dairy in the community.
3. Draw up a concept map showing the industries and other services and how they relate to the dairy industry, community and other services.

Topic 6: The Fifth Food Group

Sample core focus

1. Research the five food groups and where dairy fits in relation to a healthy eating pattern.
2. Conduct a minor survey at class or school level to determine whether dairy is a prominent part of their diet.

Topic 7: Researching Animal Behaviours through Cattle Handling

Sample core focus

1. Consider the facilities that cattle are housed in, and the conditions necessary for best practice when caring for animals.
2. Using scale diagrams, or by making a 3D model, design an animal production facility such as a dairy, cattle yards, or housing for the calves at school.

Topic 8: Farm Safety

Sample core focus

1. Investigate farm safety and present a report on the potential dangers of the dairy farm environment.
2. Recommend guidelines to minimise risks for people who live on, work on or visit dairy farms.



TIP: Make sure you include a list of dairy related career pathways on your 3D Model.

Research Topic 1

Teams can present their research about 'Calf Rearing' to the class.



Topic 1 – Calf Rearing

Key Ideas

- 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. In your team, create a plan for the accommodation of the calves at school.
- Refer to the checklists for monitoring cattle included in your School Resource Kit. Is your team equipped to handle this? For example, can you demonstrate the correct method of weighing the calves?
- Research the standard growth curves for calves and use these to develop targets for your calves. While the calves are at school, monitor their growth and compare the results with standard growth rates.
- 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.

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

| | | | |
|-------------|--------------------------|-----------------------|---------------------------|
| Science | AC SIS164, ACSIS198 | Technologies/Literacy | ACTDEP049, ACELY1746/1756 |
| Mathematics | ACMSP228, ACMSP253 | The Arts | ACAVAM126, ACAVAM128 |
| Humanities | ACHES045/57, ACHES048/60 | | |

Research Topic 2

Teams can present their research about 'Finance Management' to the class.



Topic 2 - Finance Management

Key Ideas

An important aspect of dairying is understanding finance. In any business there is always a bottom line, and efficient use of the resources will help ensure a healthy bottom line.

A dairy farm is a business, and many who work in the dairy industry manage their own businesses.

Provide a report on the key elements of financial planning, including:

- Planning and budgeting
- Recognising unnecessary/excessive spending
- Monitoring weekly/monthly progress
- Setting goals and targets
- Understanding credit
- Planning for the future.

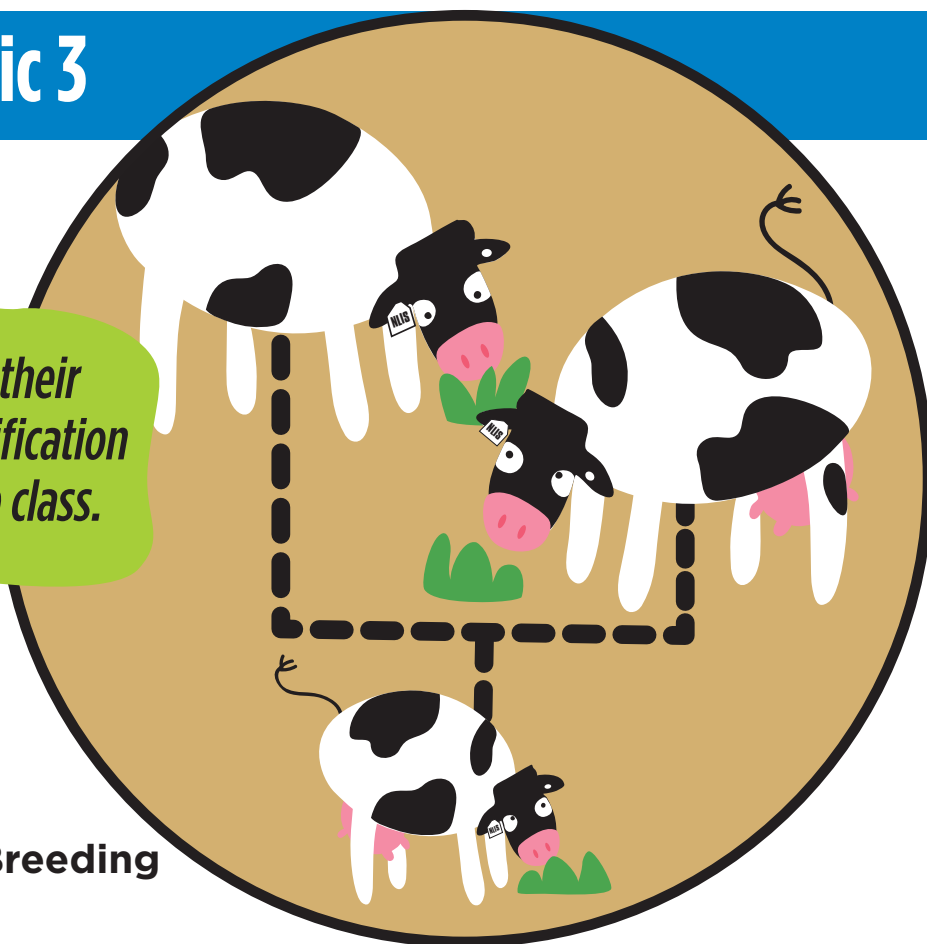
ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

| | | | |
|-------------|-------------------------|-----------------------|---------------------------|
| Science | AC SIS169, AC SIS206 | Technologies/Literacy | ACTDEP049, ACELY1746/1756 |
| Mathematics | AC MSP228, AC MSP253 | The Arts | ACA VAM126, ACA VAM128 |
| Humanities | AC HES044/56, AC HEK053 | | |

Research Topic 3

Teams can present their research about 'Identification and Breeding' to the class.



Topic 3 - Identification and Breeding

Key Ideas

Well, you've no doubt worked out by now that dairying is big business. No wonder farmers spend so much time studying and applying the latest science and technology to their business.

Technology is advancing quickly in the areas of identification and breeding on dairy farms. The following page of this handbook will help you to shape your research and focus for this activity. Research either herd identification, animal genetics or animal reproduction. Whilst researching consider and report on the latest technologies that have been introduced in each of these areas. Take the time to evaluate what the technologies set out to achieve and whether this has been effective. Make sure you explore these technologies on a global basis and then consider the possibilities of this technology being suitable for Australia.

Research, then list, the main reasons for identifying animals in the herd.

- What methods of identification are used by the owner of the calves?
- Prepare a 'pedigree report' of each calf.
- List five characteristics that could be passed on by the sire and dam of each calf.
- Identify the countries represented in each pedigree.
- Research, then list, some of the roles of herd-testing and artificial-breeding organisations.
- Find out why the National Livestock Identification System was introduced.
- The following page of this handbook will help you shape your research focus for this activity.

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

Science

AC SIS174, AC SIS208

Technologies/Literacy

ACTDEP049, ACELY1746/1756

Mathematics

ACMSP228, ACMSP253

The Arts

ACAVAM126, ACAVAM128

Humanities

ACHES045/57 ACHES048/60

Research Support

Research Support for Identification and Breeding

Identification Activity

- Research then list the main reasons for identifying animals in the herd.
- Find out why the National Livestock Identification System was introduced.
- What is an NLIS tag? When does an animal receive its own NLIS tag?
- What disease outbreaks have occurred in dairy industries overseas? Discuss why tracking the movement of animals is so important in Australia.
- What methods of identification are used by the owner of the calves?
- Some purebred dairy cows are registered in breed societies. Go to www.holstein.com.au or www.jersey.com.au to find out what breed societies do.
- Research the latest technologies available in the area of identification.

Animal Genetics Activity

- List five characteristics that could be passed on by the sire and dam of each calf.
- A pedigree is a family tree for an individual animal. Prepare a 'pedigree report' of each calf.
- Identify the countries represented in each pedigree.
- Find out some information about the dam of each calf. For example, how much milk did the dam produce last year? How many calves has she had? How old is she? When did she have her first calf?
- Find out some information about the sire of each calf. For example, what country does he live in? How many daughters does he have? How does he compare to other bulls? Hint... go to www.adhis.com.au – Bull ABV Quick Search to find out.
- What are the names of six breeds of dairy cattle found in Australia? What makes each breed different?
- Find out what the difference between inbreeding and crossbreeding is.
- Australian cows are mated using artificial insemination or a natural bull. What are the advantages and disadvantages of these two practices? Discuss this as a class.
- Research the latest technologies available in the area of animal genetics.

Animal Reproductive Activity

- Prepare a 36-month (3-year) calendar and mark on it the key events in the life of a calf. For example:
 - When was she born?
 - How long will it be before she can be mated?
 - When will she have her first calf?
 - When will she start producing milk?
 - When will she be mated for the second time?
 - When will she be dried off (take a holiday from milking)?
- Pretend that a bull calf was born on the same day as your calf. When will he begin to produce semen?
- When cows are ready to be mated, they show signs of oestrus (heat). People say 'that cow is on heat'. What are the signs of a cow on heat? Hint... The InCalf Book at www.incalf.com.au will help you.
- Research the latest technologies available in the area of animal reproduction.



Research Topic 4

Teams can present their research about 'Natural Resource Management' to the class.



Topic 4 - Natural Resource Management

Key Ideas

The Australian dairy industry is recognised for its proactive approach to environmental management, an approach that is delivering significant outcomes in terms of on-farm change in environmental practices.

- As part of your research you can also investigate the nature of water scarcity and role of humans in creating and overcoming it and relate that to dairy farming.
- The cornerstone of the Australian dairy industry's success in facilitating on-farm change is the industry-led Dairying for Tomorrow (DfT) program, managed by Dairy Australia.
- The projects and underlying philosophy of DfT actively encourage collaborative partnerships between the dairy industry and catchment managers to set on-farm targets for change that will contribute to healthy catchments and communities.
- In recent years projects under Dairying for Tomorrow have changed the way farmers think about their environmental management and changed how the community looks at the role of farming.
- The Dairying for Tomorrow website <http://www.dairyingfortomorrow.com.au> will help you with your research into Natural Resource Management.

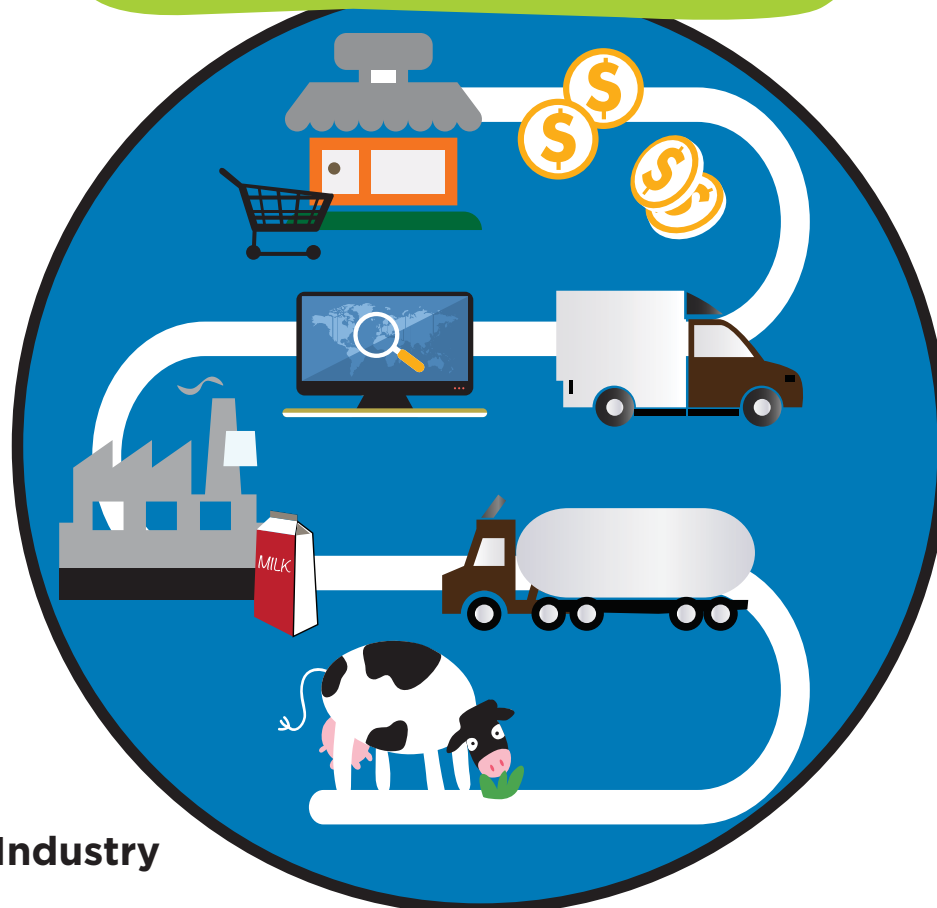
ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

| | | | |
|-------------|----------------------|-----------------------|---------------------------|
| Science | AC SIS164, AC SIS198 | Technologies/Literacy | ACTDEP051, ACELY1746/1756 |
| Mathematics | ACMSP228, ACMSP253 | The Arts | ACAVAM126, ACAVAM128 |
| Humanities | ACHGK063, ACHGK073 | | |

Research Topic 5

Teams can present their research about the 'Dairy Industry' to the class.



Topic 5 - The Dairy Industry

Key Ideas

- Have a look around 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 (including employment situation of family and friends) 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 yourselves. 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.

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

Science ACSIS164, ACSIS198

Technologies/Literacy

ACTDEP049, ACELY1746/1756

Mathematics ACMSP228, ACMSP253

The Arts

ACAVAM126, ACAVAM128

Humanities ACHES043, ACHES055

Research Topic 6

Teams can present their research about the 'Fifth Food Group' to the class.



Topic 6 - The Fifth Food Group

Key Ideas

- 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 everyday.
- 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?
- Conduct a minor survey at class or school level to determine whether the importance of dairy nutrition is reflected in the eating habits at your school. Does your school need a strategy to improve its dietary habit - if so can you provide one?

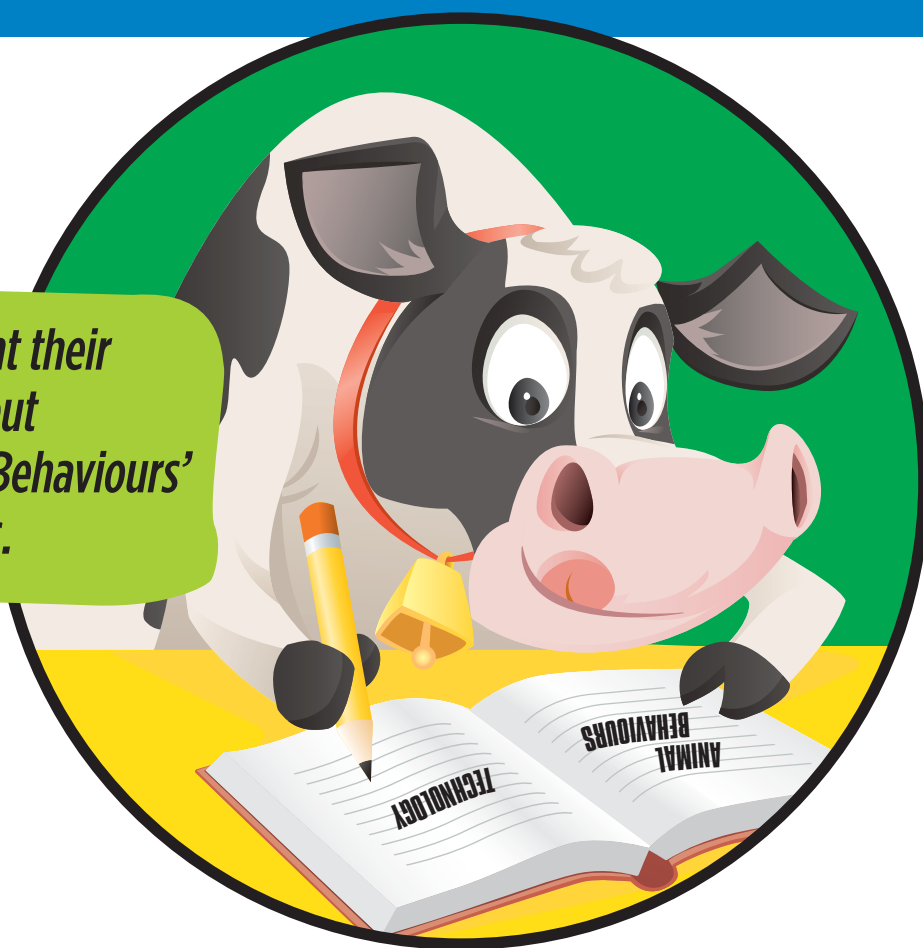
ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

| | | | |
|-------------|----------------------|---------------------------|-----------------------------|
| Science | AC SIS164, AC SIS198 | Technologies/Literacy | ACTDEK044/45 ACELY1746/1756 |
| Mathematics | AC MSP228, AC MSP253 | The Arts | ACA VAM126, ACA VAM128 |
| Humanities | ACHES045, ACHES057 | Health/Physical Education | ACPPS095 |

Research Topic 7

Teams can present their research about Researching 'Animal Behaviours' to the class.



Topic 7 - Researching Animal Behaviours through Cattle Handling

Key Ideas

- New technologies have allowed agricultural industries to develop models for 'best practice' - best practice for handling animals, best practice for creating facilities for animals, and best practice for food production. Studying animal behaviours helps lead to new understandings of best practice.
- Having the calves at school creates the opportunity for students to learn about animal behaviour through cattle handling. While monitoring the health and growth of the calves, research the big ideas about best practice when handling cattle, and the links between cattle handling and production.
- As part of your learning, consider the facilities that cattle are housed in, and the conditions necessary for best practice when caring for animals. These facilities could be the dairy, cattle yards, or simply the accommodation you provide the calves at school.
- Using scale diagrams, design an animal production facility such as a dairy, cattle yards or housing for the calves at school.
- You may wish to explain your learning and design.

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

Science ACSIS164, ACSIS198

Technologies/Literacy

ACTDEK047, ACELY1746/1756

Mathematics ACMSP228, ACMSP253

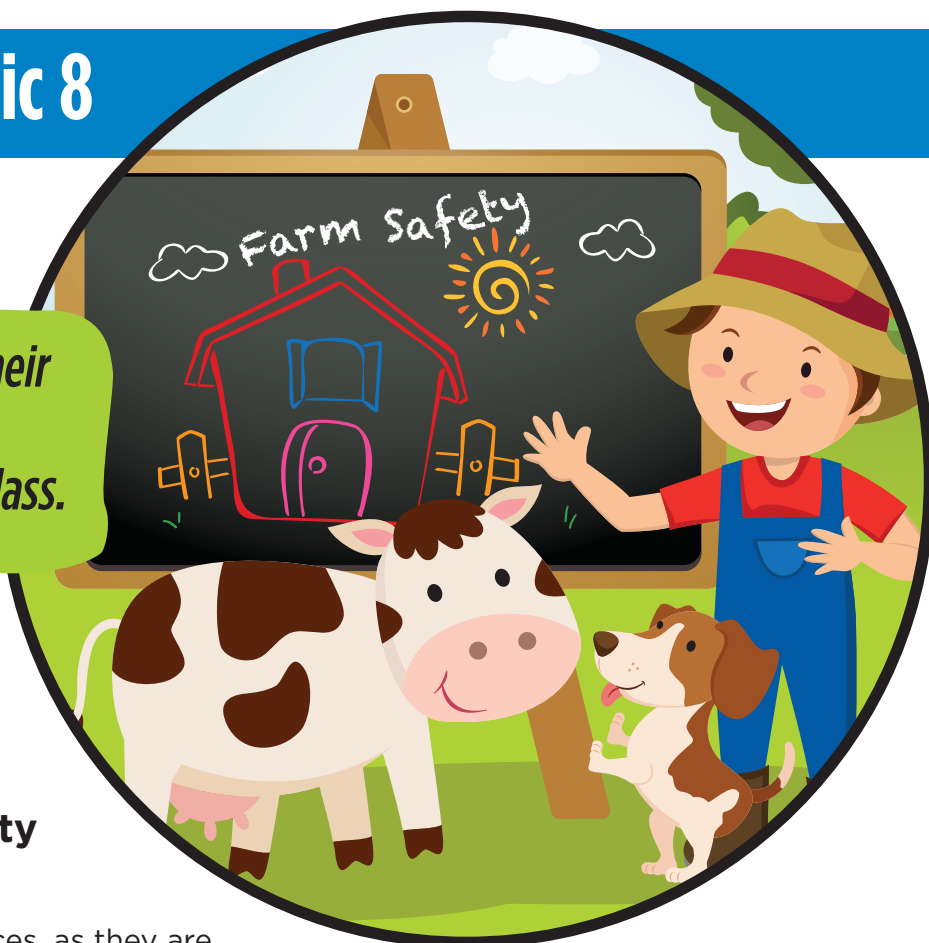
The Arts

ACAVAM126, ACAVAM128

Humanities ACHES045, ACHES057

Research Topic 8

Teams can present their research about 'Farm Safety' to the class.



Topic 8 - Farm Safety

Key Ideas

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 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).

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

| | | | |
|-------------|--------------------------|---------------------------|---------------------------|
| Science | AC SIS164, AC SIS198 | Technologies/Literacy | ACTDIP043, ACELY1746/1756 |
| Mathematics | ACMSP228, ACMSP253 | The Arts | ACAVAM126, ACAVAM128 |
| Humanities | ACHES043/55, ACHES045/57 | Health/Physical Education | ACPPS096, ACPPS098 |

1.2 Mootube Moovie / PowerPoint Task

THE TASK

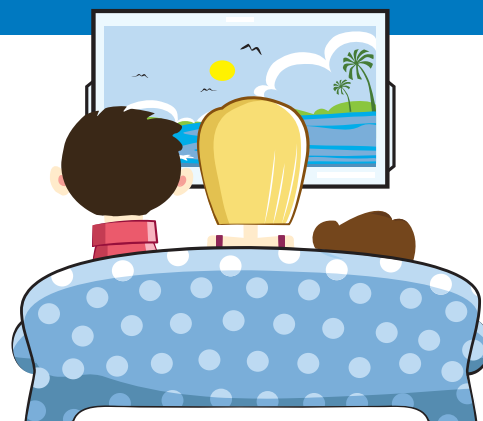
Your Mootube Moovie/PowerPoint must:

- Run or be timed for 3 minutes (+/-10) seconds
- Present on a file that will run on freely available software (preferably mp4, wmv or ppt).

HELPFUL TIPS

Be sure to read this section carefully before you get started...

- When using cows or calves in your pictures, make sure they are dairy.
- Ensure when you research the internet that your information is from Australia.
- When creating your Mootube keep the messages positive!
- * Remember to thoroughly plan your Mootube before you start, this isn't a home video!
- Ensure that there is no background noise interfering with your Mootube ie. wind.
- If you decide to sing a song, make sure you have the words scrolling along the bottom so the viewers don't miss out on all the lyrics.
- Try and keep the Mootube at the same recording volume throughout.
- Carefully choose your music as the lyrics need to line up with the message.
- The final tip... 'If you are having fun whilst learning, then so will the viewers'!



Statement 1

As a team, chose a career in the dairy industry and role-play this career for the viewers. Be sure to tell the viewers about the education and daily activities required for this career. Make the viewers laugh, be sure to tell them the fun parts of this job! You only have 3 minutes!

Statement 2

As a team tell the viewers what you have learnt about calf rearing. Share your personal experiences and stories about the calves, tell us about their feeding regime and personality! Your style here is important, perhaps you should dress up as a Media presenter. Make your Mootube Moovie fun and engaging to keep the viewers interested. You only have 3 minutes!

Statement 3

As a team, tell the viewers why dairy is an important part of your health and nutrition. Keep your Mootube Moovie unique and be sure to make the viewers laugh and remember to have DAIRY in their day! You only have 3 minutes!

Statement 4

As a team, dress up as scientists and carry out a simple science experiment. In your Mootube Moovie explain the methodical thinking and processing that is likely to be undertaken by a person in this career pathway. Google 'milk experiments' on the internet to help give your team some ideas. You only have 3 minutes!

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

Literacy ACELY1748, ACEL Y1776

Technologies ACTDIP037, ACTDEP049

Humanities ACHES043, ACHES055

The Arts ACAVAM126, ACAVAM128

2.1 Letter / E-mail Task

Write a letter or send an e-mail of thanks to Dairy Australia.

LETTER / E-MAIL TASK

As a team, word process a letter or write an e-mail in business format to Dairy Australia.

The letter / e-mail should talk about your experiences and what you have learned about the dairy industry and your calves. Outline what you have learned from the industry advocate and dairy farmer who visited your school.

Students should address their letter to Dairy Australia, Mr. Ian Halliday, 60 City Road, Southbank VIC 3006.

Students should send their e-mail addressed to Mr. Halliday to their own e-mail address and copy the text into a word document to submit with other assessments tasks.

Don't forget to include your team name and school name as part of the letter / e-mail.

Letter / E-mail Writing Tips...

- Create a letter / e-mail to Dairy Australia that talks about your experiences and what you have learnt from the dairy industry and your calves.
- Outline what you have learnt from the industry advocate and dairy farmer who visited your school. What did they tell you about the calves that you didn't know before?
- Make sure you provide the reader with some scientific information about your calves, what did you feed them, did they gain weight, if so how much?
- Describe the calves and their personality traits, what are their names, did you visit the calves to feed them every day or were you part of a roster?
- Tell us some gossip, did anything funny happen whilst the calves were staying at school?

Useful Tips...

- The letter / e-mail should be presented in a business style format.
- Use a font that is easy to read e.g. Arial or Times New Roman.
- Check the letter / e-mail for spelling and grammar.
- Use proper sentence structure and layout.
- Write clearly, concisely and avoid long sentences.
- Provide meaningful text in the "Subject" field.
- Avoid abbreviations, acronyms and emoticons (e.g. smiley faces).
- Do not write in CAPITALS.
- Read the letter / e-mail before you send it.

Further details to assist with the Letter / E-Mail Task can be found on your memory stick or on the A4 sheets inside your School Resource Kit.

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

Literacy ACELY1746, ACELY1756

Science

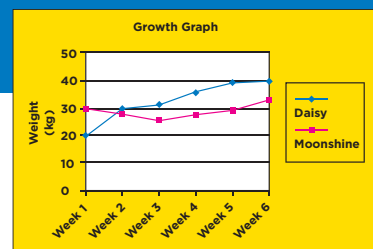
ACSIS164, ACSIS198

Humanities ACHES044, ACHES056

5



2.2 Scientific Report Task



Create a Scientific Report

The Scientific Report should provide a summary of the calves' condition during their time in your care. The report must include data on each calf's growth, feed intake and health status.

A suggested format for your report writing is 'the Scientific Method'.

The key elements of the Scientific Method are:

- Identification of the problem
- Data collection and analysis
- Scientific information
- Forming a hypothesis
- Deriving a conclusion
- Grammar and spelling.
- Using deductive reasoning
- Friendly text

Scientific Report Tips...

- Your Scientific Report must follow some basic rules.
- Your report must have a title, and begin with an overview (or abstract).
- Describe / explain your method (what you did) and your materials (what you used).
- Next describe/explain (what you found). Results should include data and statistics.
- Lastly, describe/explain the results. What do the results mean? Include a bibliography.

Further details to assist with the Scientific Report Task can be found on your memory stick or on the A4 sheet inside your School Resource Kit.

ACARA Outcomes - (Years 9 & 10)

Outcomes presented here are indicative, and will vary depending on the direction individual projects take.

Literacy

ACELY1746, ACELY1756

Science

ACSIS164, ACSIS198

Humanities

ACHES044, ACHES056

3. Take a Funny Photo of your Team with the Calves

This task should be fun! Take a funny photo of your team with the calves, make sure you are creative with your photography.

What makes your photo stand out from the rest of the submissions? Make sure you think about your point of difference.

The photo selected for the front page of the Cows Create Careers Annual Report will win a \$100 iTunes voucher!



Arts

ACAVAM128

4. Student Evaluation (Entry & Exit)

Submit your Student Evaluation data using the following links:

ENTRY: <https://www.surveymonkey.com/r/2018cccstudententry>

EXIT: <https://www.surveymonkey.com/r/2018cccstudentexit>

5. The Final Team Checklist

Photocopy this as a checklist for your team and submit with your work



TEAM NAME _____ YEAR LEVEL _____

STUDENT NAMES: (for certificates, please write neatly!)

Has your team submitted the following work?

Missing assessment work will be recorded as unsubmitted and will not be followed up.

Please circle what your team has submitted:

Mootube Moovie / PowerPoint Task OR 3D Model Task
Letter / E-mail Task to Dairy Australia OR a Scientific Report Task
A Funny Photo of your Team with the Calves
Student Evaluation - Entry & Exit - Survey Monkey link

Mail or digitally submit your assessment work:

Save all your files with your team name and the type of activity as the name of the file.

What are the options?

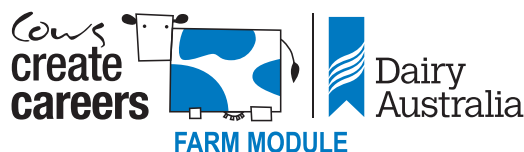
Dropbox - E-mail admin@jaydee.net.au to request your Dropbox link, then upload your files.

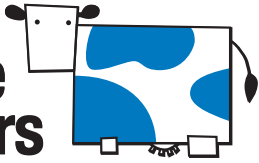

Google Drive links - Using Google as your mail server? Simply attach all your large files to an email and Google will send via Google Drive Links.

Mail - Post your work on a memory stick to:
Cows Create Careers, PO Box 18, LOCH VIC 3945.

Contact Details:

Cows Create Careers - Farm Module
Dairy Australia - National Project Co-ordinators
John Hutchison & Deanne Kennedy
Jaydee Events Pty Ltd
A: PO Box 18, LOCH 3945 P: 03 5659 4219
M: 0412 368 739 (John) & 0419 878 055 (Deanne)
E: admin@jaydee.net.au



**Cows
create
careers**  |  **Dairy
Australia**
FARM MODULE



www.dairyaustralia.com.au

Dairy Australia, Level 3, HWT Tower,
40 City Road, Southbank, Victoria, 3006

Tel: 03 9694 3777

