

COTTON EDUCATION KIT





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INTRODUCTION

Cotton Australia is proud to present this Cotton Education Kit, a resource that we hope will be a useful tool for students and teachers alike.

Whether it's ideas for incorporating agricultural contexts into the curriculum you're after, some great classroom material, or information for a school project, all you need to know about cotton is right here in this book.

The content has been developed by Cotton Australia, the Australian cotton industry's peak grower body, with input from a wide range of Australian and international sources. It is the story of a modern, sustainable agricultural industry that's helping to clothe the world. This kit is the definitive guide for current, authoritative information on the Australian Cotton Industry.

Each chapter is linked to the Key Learning Outcomes in the QLD and NSW Senior Secondary Syllabuses to provide ideas for where cotton contexts may be incorporated into teaching programs in line with syllabus requirements. These will be updated as the curriculum evolves. Although explicit curriculum links are made to the senior secondary syllabuses, the kit is suitable for students and teachers of a range of grades.

The content here is linked to other dynamic resources such as video, other websites, useful articles and photographic material.

Look for this symbol: 

Other Cotton Australia education resources are available by contacting us:

Via the web:

www.cottonaustralia.com.au

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(02) 9669 5222

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Follow us on facebook:

www.facebook.com/cottonaustralia

Your feedback on how this resource could be improved would be most welcome, and we hope you enjoy learning all about cotton.

CURRICULUM LINKS

NSW • QLD

THE FOLLOWING TABLE PROVIDES IDEAS FOR HOW TO INCORPORATE SOME OF THE CONTENT AREAS AND THEMES IN THE EDUCATION KIT INTO THE QLD AND NSW SENIOR SECONDARY CURRICULUM. A LIST OF THE INDIVIDUAL SYLLABUSES THAT HAVE BEEN MAPPED AGAINST THE KIT ARE BELOW. THIS WILL BE UPDATED AS THE NATIONAL CURRICULUM IS ROLLED OUT AND COTTON AUSTRALIA WILL ENDEAVOUR TO MAKE THE CURRICULUM LINKS EXPLICIT FOR ALL STATES AND TERRITORIES.

Blue: NSW syllabus / Maroon: QLD syllabus

CHAPTER 1

The Australian Cotton Industry

- An Introduction to the Australian Cotton Industry
- Where is Cotton grown?
- Cotton Production in Australia: Recent Statistics
- Cotton Yields
- Export Dollars
- Destinations for Australian cotton
- Underpinned by Latest Research, Development and Innovation
- Cotton and the Community

AGRICULTURE P1.1, P1.2, H1.1, P2.1, P2.1

AGRICULTURAL SCIENCE SRM1, SRM2, SRM4, PS2, AB1, AB1, AB2

TEXTILES AND DESIGN P3.2, H3.2, P5.1, H5.2, P6.1, H6.1

HOME ECONOMICS: Textiles & Fashion, Key Concept 1,2

GEOGRAPHY H5, H6

GEOGRAPHY 7.1, 7.2, 7.3

CHAPTER 2

A Sustainable Cotton Industry

- myBMP: Managing the Environment On The Farm
- Water Research and Innovation
- Biotechnology
- Types of Biotech Varieties Grown in Australia
- Resistance to Bt
- New Varieties in the Pipeline
- Cotton and Climate Change

AGRICULTURE P1.1, P1.2, H1.1, P2.1, P2.3, H2.1, P3.1, H3.1, H3.3, H3.4, P5.1, H5.1

AGRICULTURAL SCIENCE SRM1, SRM2, SRM3, SRM2, AB1, AB2

EARTH & ENVIRONMENTAL SCIENCE 9.4.4

BUSINESS STUDIES P2, H3

PRIMARY INDUSTRIES AHCWRK209A, AHCWRK313A, AHCPMG302A

SCIENCE 8.2

BIOLOGY UB1, UB 2, UB 3, IB 1, IB 2, IB3, IB 4, EB1, EB2, EB3, EB4

ORGANIC CHEMISTRY S1, S2, R1, R5

TEXTILES AND DESIGN P3.2, H3.2, P5.1, H5.2, P6.1, H6.1

HOME ECONOMICS: Textiles & Fashion, Key Concept 1,2

GEOGRAPHY H4, H5, H6

GEOGRAPHY 7.1, 7.2, 7.3

CHAPTER 3

The History of Cotton

- World Cotton History – A Brief Summary
- Australian Cotton History – A Brief Summary
- Timeline: History of Cotton Growing in Australia

AGRICULTURAL SCIENCE SRM1, SRM2, SRM3, SRM2, AB1, AB2

AGRICULTURE P1.1, P1.2, H1.1, P3.1, H3.2, H3.4

TEXTILES AND DESIGN P3.2, H3.2, P5.1, H5.2, P6.1, H6.1

HOME ECONOMICS: Textiles & Fashion, Key Concept 1,2

GEOGRAPHY H4, H5, H6, H12

GEOGRAPHY 7.1, 7.2, 7.3

CHAPTER 4

The Cotton Plant

- Parts of the Cotton Plant
- How Cotton Grows
- Cotton's Growth Cycle
- Cotton Grower's Calendar

AGRICULTURE P1.1, P1.2, H1.1, P2.1, P2.3, H2.1, P4.1, H4.1

AGRICULTURAL SCIENCE SRM1, SRM2, SRM3, SRM4, PS1

SCIENCE 8.3.2, S 8.3.3

PRIMARY INDUSTRIES AHCBCAC201A, AHCBCAC202A, AHCBCAC306A, AHCBCAC307A, AHCBCAC308A

CURRICULUM LINKS cont

NSW • QLD

CHAPTER 5

How Cotton is Grown

- Growing Conditions
- Preparing the Land
- Soil Types and Achieving Healthy Soils
- Planting
- Managing the Crop
- Watering by Irrigation
- Types of Irrigation
- Crop Water Requirements
- Nutrition
- Controlling Weeds
- Managing Diseases
- Controlling Insects
- Defoliation
- Picking

AGRICULTURE P1.1, P1.2, H1.1, P2.1, H2.1, P2.3, P3.1, H3.1, H3.2, H3.3, H3.4, P4.1, H4.1, P5.1, H5.1

AGRICULTURAL SCIENCE SRM1, SRM2, SRM3, SRM2, PS1, PS2, AB1

PRIMARY INDUSTRIES AHCPMG202A, AHCPMG302A, AHCBC201A, AHCBC202A, AHCBC203A, AHCBC301A, AHCBC305A, AHCBC306A, AHCBC307A, AHCBC308A, AHCIRG201A, AHCSOL201A

SCIENCE 8.2.4, 8.2.5, P.24, P.25

EARTH & ENVIRONMENTAL SCIENCE 9.4.4

SCIENCE21 LS3

GEOGRAPHY H5, H6

GEOGRAPHY 7.1

CHAPTER 6

The Business of Cotton Farming

- The Cost of Production
- Pricing and Marketing
- Cotton Seed Marketing

BUSINESS STUDIES P1, P2, H2, P3, H3, H5, P4, P6, P10, H10

PRIMARY INDUSTRIES AHCAGB301A

BUSINESS ORGANISATION AND MANAGEMENT NB, OM, E, MM, OP, HR, FM

DESIGN AND TECHNOLOGY H5.1, DT H5.2, BS 9.1, BS H1, BS H2, BS H3, BS H4, P6.1, H6.1

CHAPTER 7

Processing: from gin to fabric

- Ginning
- Processing Cottonseed
- Classing
- Shipping the Cotton to Market
- Shipping the Cotton to Market
- Spinning to Produce Yarn
- Manufacturing Fabrics
- Case Study – the Story of Denim

AGRICULTURAL SCIENCE AB1

TEXTILES & DESIGN P3.1, P3.2, H3.1, H3.2, P4.1, H4.2, P5.1, H5.2, P6.1, H6.1

HOME ECONOMICS: Textiles & Fashion, Key Concept 1,2

BUSINESS ORGANISATION AND MANAGEMENT OP

CURRICULUM LINKS cont

NSW • QLD

CHAPTER 8

Cotton as a Commodity

- Cotton's Share of the World Fibre Market
- Positioning Australian Cotton in the World Market
- Marketing Case Study – Dri Glo Towels: Iconic Brand Warms to an Aussie Grown Story
- Organic Cotton

AGRICULTURAL SCIENCE AB1, AB2

DESIGN AND TECHNOLOGY H5.1, DT H5.2, BS 9.1, BS H1, BS H2, BS H3, BS H4, P6.1, H6.1

BUSINESS STUDIES 9.1, 10.2

AGRICULTURE P1.1, P1.2, P3.1, H3.1, H3.2, H3.4, P5.1, H5.1

HOME ECONOMICS: Textiles and Fashion, Key Concept 2

BUSINESS ORGANISATION AND MANAGEMENT NB, MK, BP

GEOGRAPHY 7.3

CHAPTER 9

Cotton as a Consumer Product

- The Properties of Cotton
- Cotton Products
- Products Made from Cotton Lint/Fibre
- Products Made from Cotton Seed
- Products Made from Cotton Linters

TEXTILES AND DESIGN P1.2, H1.2, P3.1, P3.2, H3.2, P6.1, H6.1

HOME ECONOMICS: Textiles and Fashion, Key Concept 1

CHAPTER 10

Cotton Careers

GEOGRAPHY 7.2

GEOGRAPHY P4, H4, H6

SYLLABUS THAT HAVE BEEN ALIGNED TO THE EDUCATION KIT SO FAR

QLD AGRICULTURAL SCIENCE(2013)

NSW PRIMARY INDUSTRIES CURRICULUM FRAMEWORK STAGE 6 SYLLABUS (2011)

NSW AGRICULTURE STAGE 6 SYLLABUS (AMENDED 2009)

NSW DESIGN AND TECHNOLOGY (2009)

NSW TEXTILES AND DESIGN STAGE 6 SYLLABUS (2009)

QLD HOME ECONOMICS SENIOR SYLLABUS (2010)

NSW BUSINESS STUDIES (2010)

QLD BUSINESS ORGANISATION AND MANAGEMENT SENIOR SYLLABUS (2007)

NSW GEOGRAPHY STAGE 6 SYLLABUS (1999)

QLD GEOGRAPHY SENIOR SYLLABUS (2007)

NSW EARTH AND ENVIRONMENTAL SCIENCE (2002)

NSW SENIOR SCIENCE (2002)

QLD SCIENCE21 SENIOR SYLLABUS (2010)

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