

*The Unique and
Diverse Geography
of Australia,
With
Interdisciplinary
Studies*

*Curriculum Project for the
Australian-American
Fulbright Commission by
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SUMMARY OF THIS UNIT

This unit, designed for middle school 8th graders, explores the unique and diverse physical and cultural landscapes of Australia and current issues regarding the environments of Australia. The knowledge, skills, understanding and values students glean from this interdisciplinary unit will help them develop an informed perspective on Australia's unique and diverse geography which enhances their appreciation and understanding of this extraordinary country. This unit will also hopefully motivate students to appreciate, respect, protect, and improve their own environments as well.

This unit is organized by geography lessons in order to help teachers who may wish to use all or part of this unit in their classrooms. Lessons, designed for a 90 minute block, are organized in the following manner: the *Geography Lesson Title*, *Key Questions*, *Background Notes*, *Resources and References*, *Virginia Geography Standards*, *Objectives*, *Materials*, *Strategies*, *Evaluation*, and *Interdisciplinary Connections*. Lessons include reference to my "treasure trunk"--my collection of brochures, books, booklets, wrappers from various food products, kangaroo fur key chains, Aboriginal musical instruments, postcards, videos, a multitude of photographs, posters, Aboriginal prints, jewelry, boomerangs, etc. The culminating unit activity is the Australian Cultural Fair which showcases the projects students have created throughout this unit including displays of reports, posters, charts, graphs, journals, arts and crafts, brochures, maps, etc. and also gives students the opportunity to perform music, give oral readings, and prepare authentic Aussie dishes for their parents, the faculty, and community.

I cherish the opportunity I was given to explore Australia's unique and diverse geography and to capture the essence of Australia to share with my World Geography students and colleagues. There is no replacement for onsite learning which allows immersion into the full sense of a place, such as foods, vistas, topography, climates, customs, history, handicrafts, art, climates, flora, and fauna. However, from the lessons and presentations for students throughout this unit, the students are able appreciate and understand Australia almost as well as if they had visited the continent themselves. In order to truly experience the theme of place, each sensory mode is utilized: tasting native foods, feeling and smelling cultural handicrafts, art and jewelry, seeing the wonderful vistas of the landscapes, hearing the native and popular music, playing the traditional musical instruments, and reading authentic stories and poems written by Aussies. This unit enables teachers to provide students, colleagues, and other professional educators with a solid foundation of physical and cultural geographical knowledge of Australia for years to come.

Items for the Classroom Australian Treasure Trunk

Flag of Australia

The 1000+ photographs which I took in Australia, which will also be made into computerized slide presentations for students and colleagues.

Several screen prints of Australian Aboriginal Art:

- Kangaroo Trail* and *The Corroboree* during Dreamtime by Danny Eastwood, National Aboriginal Artist of the year 1992-93
- Boomerang* by Lewis Burns of the Wiradjuri tribe
- Two Women Looking for Bush Food* and *Two Lovers Meet* by John Smith Gumbula

Canvas bookmarks with various Aboriginal art paintings

Several posters of diverse landscapes including Uluru, Kakadu National Park, Sydney, Melbourne, Canberra, and Phillip Island with the nighttime Penguin Parade.

Steve Parish Discover and Learn: *Amazing Facts about Australia*--*Giant Wall Map*

Wall map on linen comparing the physical size with overlays of Australia with the United Kingdom, Japan, United States, Europe, New Zealand, and South East Asia

Collection of 200 different stamps used in Australia

Stickers of various animal species collected from locations throughout Australia.

Postcards galore from Sydney, Canberra, Albury, Melbourne, Phillip Island, the Twelve Apostles, Great Ocean Road, Uluru, Kata Tjuta, Darwin, Kakadu, Cairns, the Great Barrier Reef, diverse flora and fauna, and various Aboriginal tribes.

Food to sample-Tim Tams and Kangaroo Jerky

Empty wrappers of various products including a Diet Coke bottle, Tim Tams, Milo Energy bars, Weet-Bix, butter Shortbread biscuits, macadamia biscuits, vegemite spread, Red Rock Deli sweet chili and sour cream potato chips

Toys and wrappers from food restaurants including McDonald's and Hungry Jack's
(known in the US as Burger King)

Samples of wool from the sheep shearing demonstration at Walrook Farm in
Victoria

Kangaroo fur key chains

Kangaroo leather wallets

Stuffed Koala Bear

Didgeridoo made by Ameer Brahim of the Gunbalanya community, the Muran tribe, on
the Coburg Peninsula in western Arnhem Land. The didgeridoo has a painted carving
of the Rainbow Serpent from the Dreamtime.

YigiYigi Solo Didgeridoo by David Hudson--CD of didgeridoo Aboriginal music

Timpilypa, or music sticks, from Maruku Arts at Uluru

Several boomerangs made by various Aboriginal artists, some for throwing and
returning, others painted for display with Australian icons and landscapes

Australian opal rings and necklaces

gold plated echidna and platypus broaches from my Ruritan hosts in Albury

egg-shaped container of easy-to-make "Pavlova Magic" dessert mix from my Ruritan
hosts in Albury

handcrafted wooden tops and a small box made of local indigenous woods from an 80
year old craftsman in Albury

Australian coins and currency

DVDs:

The Rabbit Proof Fence

Faces in the Mob

Books:

- Kakadu Australia* by Steve Parish
- Australia Land of Contrast* by various authors and photographers, published by Nucolorvue Productions Pty Ltd
- The Encyclopedia of World Geography: A Country by Country Guide* edited by Graham Bateman and Victoria Egan
- Australia Journey Through a Timeless Land* by Roff Smith
- The State of Australia's Birds 2005* by Penny Olsen, Michael Weston, Chris Tzaros and Andrew Silcocks
- Australia in the Brief* published by the Australian Government
- Impressions of "The Great Barrier Reef" from Above and Below* by Ric J. Steininger
- Uluru Stories* from the Anangu people, english version by David Bonn
- The Boomerang Information Book* by S.G. King
- Play and Enjoy the Didjeridu of the Australian Aboriginal: A Newcomers Guide* by Peter Kaye
- Aussie Country Comedy Australiana* by Neil Hulm
- Australian Bush Cooking* by Cathy Savage and Craig Lewis
- The Future Eaters* by Tim Flannery
- GeoActive 2 Australian Geography* by John Paine and Susan Bliss
- yearbook from Xavier High School in Albury
- Fodor's Australia 2006 Guide Book*

Booklets:

- Shipwreck Coast Great Ocean Road*
- Melbourne, Victoria, Australia*
- Destination Cairns*
- Grand Pacific Drive*
- Uluru-Kata Tjuta National Park*

Travel Brochures:

- Wirraminna Environmental Education Center Burrumbuttock*
- Australian National Botanical Gardens*
- Healesville Sanctuary-Australian Wildlife Health Centre*
- The Kuranda/Cairns Skyrail Experience*
- Sydney Harbor National Park*
- Blue Mountains National Park*
- Kakadu National Park*
- Royal National Park*
- Aboriginal Illawarra*
- Opals and Australian Gemstones*

- Old Parliament House
- The National Museum of Australia
- Sutherlandshire, Birthplace of Modern Australia
- Sovereign Hill
- Eureka Center
- Warrook Cattle Farm
- Living With Fire
- Grey-Headed Flying Foxes
- Go Wallabies
- Kerranda
- Warradjan Aboriginal Cultural Centre
- The Geology of Kakadu
- Living near Bushland-Are You Prepared
- Cane Toads in NSW
- Maruka Arts Aboriginal Handicrafts
- Toronga Zoo

Geography Lessons with Interdisciplinary Studies

Lesson One:

Introduction to the Uniqueness and Diversity of Australia

Key Questions:

- What are some unique plants and animals found exclusively in Australia?
- Why is Australia's culture so diverse?

Background Notes:

There are many fascinating features of the physical and cultural environments which make Australia such a unique and diverse country. These features give Australia a very special identity that is easily recognized around the world.

Known to the Aussies as "Oz", Australia's many physical features contribute to her rich diversity. The continent has spectacular scenery, vast landscapes and a variety of colors. The red rocks contrasting with the brilliant blue skies at Uluru and the glorious coral colors of the Great Barrier Reef are well-known landmarks, as well as the golden beaches along Australia's expansive shoreline. The wildlife and wetlands at Kakadu National Park have made it internationally famous, thanks in part to the movie Crocodile Dundee. Australia's landscapes range from the barren Outback to modern metropolitan cities.

Another feature of Australia's physical environment is the diversity of flora and fauna. Australia has very distinctive wildlife, including the kangaroo, koala, platypus, wombat, wallaby, fairy penguins, Tasmanian devils, and echidna. These well-known animals are unique to Australia because the continent has been isolated from the other continental land masses for thousands of years. Animal groups such as the marsupials and monotremes survive in Australia because they have no natural predators on this isolated continent. Birds also developed characteristics suited to the Australian environment. Many of indigenous birds, such as parrots and cockatoos are magnificently colored and are well known throughout the world. Australia's plants have also evolved into some of the world's most exotic species. Plants such as the eucalyptus and acacia cover large areas of the nation and have many different varieties. The particular combination of plants and animals found in different parts of the continent reflects the diverse climate of the continent also, from the tropical north to the arid interior.

Australia's cultural environment is as varied as its physical environment. The very long occupation by Aboriginal people, the settlement by the British prison colonies followed by other Europeans, and more recently immigrants from the Asia-Pacific region have contributed to Australia's particular character. Australia has a number of culturally and historically unique features, traditions and influences. People from more than 160 countries now call Australia home. Australia is one of the world's great multicultural societies. Australians seem to have a casual lifestyle perhaps due to love of sports, recreation, and the environment, especially the beach. Australia's temperate climate enables people to engage in a wide range of outdoor activities. A relatively high standard of living enables many Australians to enjoy this lifestyle. This high standard of living is derived from the country's mineral wealth, agricultural production, manufacturing and service industries and the skills and education of its people.

Resources and References:

Books:

- The Encyclopedia of World Geography: A Country by Country Guide* edited by Graham Bateman and Victoria Egan
- Australia Land of Contrast* by various authors and photographers, published by Nucolorvue Productions Pty Ltd

Brochures:

- Wirraminna Environmental Education Center Burrumbuttock*
- Australian National Botanical Gardens*
- Healesville Sanctuary-Australian wildlife Health Centre*
- The Skyrail Experience Cairns*

- Sydney Harbor National Park*
- Blue Mountains National Park*
- Kakadu National Park*
- Royal National Park*

Booklets:

- Shipwreck Coast Great Ocean Road*
- Melbourne, Victoria, Australia*
- Destination Cairns*
- Grand Pacific Drive*
- Uluru-Kata Tjuta National Park*

Lecturers:

- Ted Edwards, *Odyssey Travel Guide* accompanying us throughout our Australian adventure
- Mark Darby, Australia Fulbright Commission
- Joanna Monaghan, Australia Fulbright Commission
- Martin Ludgate, *Guide in Uluru and Kakadu National Parks*
- Alan Greene, *Guide in Cairns and the Great Barrier Reef*

Other:

- Steve Parish *Discover and Learn: Amazing Facts about Australia*--*Giant Wall Map*
- YigiYigi Solo Didgeridoo* by David Hudson--*CD of didgeridoo Aboriginal music*

Virginia Geography Standards:

WG 1a: The student will use maps, globes, photographs, and pictures in order to obtain geographical information and apply concepts of location, scale, and orientation.

WG 1b: The student will use maps, globes, photographs, and pictures in order to develop and refine his or her mental maps of world regions.

WG 4: The student will locate and analyze physical, economic, and cultural characteristics of world regions.

WG 6: The student will analyze past and present trends in human migration and cultural interaction as they are influenced by social, economic, political, and environmental factors.

WG 12.a: The student will apply geography to interpret the past, understand the present, and plan for the future by using geographic knowledge, skills, and perspectives to analyze problems and make decisions.

Objective:

Identify features of the physical and cultural environments of Australia which make it such a unique and diverse continent.

Materials:

- chalk board and chalk or overhead projector with a marker
- world map
- map showing Australia compared to 6 other areas of the world
- Steve Parish Discover and Learn: Amazing Facts about Australia--Giant Wall Map
- photographs or slides taken during our excursions around Australia which illustrate its physical and cultural diversity
- overhead screen
- my "treasure trunk" of items collected throughout Australia
- YigiYigi Solo Didgeridoo* by David Hudson--CD of didgeridoo Aboriginal music
- "upside down maps"
- paper and pencils

Strategies:

As a class, have student volunteers share responses when asked "What comes to mind of when you when you think of Australia?" Keep a list of all responses on the chalk board or overhead.

Show students where Australia is located on a world map. Note that it is south of the equator, which is why Australia is nicknamed the "Land Down Under". Also note the Tropic of Capricorn runs through central Australia, giving the northern areas a tropical climate year-round. Point out the states, territories, major cities, and the location of the Great Barrier Reef, Uluru-Kata Tjuta National Park, Kakadu National Park, and the Shipwreck Coast.

Show several items from the "treasure trunk" of items collected throughout our adventure in Australia including postcards, books, booklets, the didgeridoo, and music sticks while playing the cd of didgeridoo music from Australia: *YigiYigi Solo Didgeridoo* by David Hudson--CD of didgeridoo Aboriginal music.

Show students the linen cloth purchased in Albury which shows the size of Australia compared to 6 other countries or regions: the US, the British Isles, New Zealand, Japan, Europe, and Southeast Asia. Point out that Australia and the contiguous US are about the same size physically.

Show students the *Giant Wall Map* by Steve Parish Discover and Learn: Amazing Facts about Australia (can be ordered online at through a variety of bookstore websites). Share some of the facts which pertain to today's lesson, for example:

--"The wet tropics world heritage area includes rain forests stretching from Townsville to Cooktown. Many of its plants and animals are found nowhere else on Earth."

--"Arnhem Land, NT, is a traditional Aboriginal area where indigenous cultures are relatively unchanged."

Post this map in the classroom for daily reference while studying Australia.

Students will be shown a variety of photographs made into a digital slide presentation taken during our excursions around Australia which illustrate its physical and cultural diversity. Teachers who have not had such an opportunity yet may wish to download photos from the internet or use photos which may be available in the student textbooks. A good variety of photos could include the following:

- metropolitan cities such as Sydney and Melbourne
- smaller cities such as Canberra and Albury
- the Outback, including Uluru-Kata Tjuta NP
- the Great Barrier Reef
- the Shipwreck coast and Great Ocean road coastal areas
- rain forests
- various photos of animals including kangaroo, fairy penguins, wallaby, koala, crocodile, wombats, parrots, cockatoo, cassowary, fruit bat, dingo, frilled lizard, Tasmanian devil, platypus, emu
- various photos of plants including wattle, eucalyptus, spinifex grass, beech myrtle
- various Aboriginal tribes encountered at Uluru, Kakadu, Darwin, and Kuranda
- photos of the various ethnic areas of Sydney and Melbourne
- the former British prisons in Melbourne and Sydney
- the gold rush settlements in Eureka and Sovereign Hill

Students should note examples of physical and cultural diversity throughout the slide show and share these as a class discussion afterward.

Evaluation:

Divide the class into groups of six. Give each group one of the maps purchased from Map World in Canberra (these can be purchased on line at www.mapworld.com) which shows the world "upside down", with Australia located in the top center of the map. Have groups discuss and note their reaction to seeing an "upside down map". Is it confusing? Would it be confusing or more helpful to Australian students studying the world? Each group will share their responses with the rest of the class.

Have individual students construct a graphic organizer to "organize" the diversity of Australia into these categories, using the information learned in this lesson:

- modern cultures
- history of settlement
- landforms
- plants and animals

Explain to the class how they will also study aspects of Australia's diversity in other subject areas throughout this unit. The culminating final activity and assessment will be participation in the Australian Cultural Fair at the end of our fascinating unit on Australia.

Unit Interdisciplinary Connections:

Art

Students will study Australian Aboriginal art. Students will use paint and canvas to create an Aboriginal art work illustrating an activity from daily life or from a story read in Language Arts classes.

Students will use paint and carvings on small rocks to create rock art similar to that found in Kakadu NP.

Students will also create illustrations to support assignments from other subject areas.

These illustrations and paintings will be displayed at the Australian Cultural Fair.

Language Arts

Students will read a variety of Australian literature including:

- poems by Banjo Patterson and Henry Lawson, including *The Man from Snowy River*
- excerpts from the book *Aussie Country Comedy Australiana* by Neil Hulm
- read stories from *Uluru Stories* from the Anangu people, English version by David Bonn.
- compare the different words used in Australian English and American English which have the same meaning.

Students will also write reports, journals, etc. to supplement lessons learned in other subject areas.

Writings will be displayed and some will be read orally by students at the Australian Cultural Fair.

Math

Students will coordinate topics almost daily with Geography lessons, including making a variety of charts and graphs to interpret data such as population and climates. These charts and graphs will be displayed at the Australian Cultural Fair.

Computer Technology

Students will be able to utilize the internet in the labs to research assignments from other classes pertaining to Australia.

Science

Students will coordinate topics almost daily with Geography lessons, including making a variety of charts and posters to interpret data.

Home Economics

Students will prepare some traditional Australian dishes including Pavlova, Lemon Myrtle Cheesecake, Pumpkin Soup, Damper, Rouseabout Cake, or perhaps recipes from the cookbook *Australian Bush Cooking* by Cathy Savage and Craig Lewis. These recipes will be "practice" for the recipes the home economics classes will prepare and serve at the Australian Cultural Fair at the end of the unit. Students will also neatly write or type the recipe they will prepare for the cultural fair. All of the recipes will then be compiled into a small cookbook, (perhaps including some recipes which are not served at the fair), which will be published and copies sold or given away at the Australian Cultural Fair.

Band/Chorus

Throughout the course of this unit, students will learn to play and sing popular Australian songs such as:

Waltzin' Mathilda, Advance Australia Fair, Botany Bay, Click Go the Shears, The Black Velvet Band, The Dying Stockman, The Overlanders, The Wild Colonial Boy, and The Wild Rover No More

websites with lyrics and info:

(hjem.get2net.dk/niels_quist/waltzing.htm)

(www.australiansongs.com)

Music for particular instruments may need to be ordered through your local music store.

These musical scores will be played and sung at the Australian Cultural Fair.

Agriculture

Throughout the course of this unit, students will study the flora indigenous to Australia. Students will learn to recognize various species based on their flowers, needles, or leaves and sketch them. Sketches will be displayed at the Australian Culture Fair. Some species of flora to study may include:

Desert Rose, Ginger Plant, Hibiscus, Cooktown Orchid, Flame of the Forest, Mulga, Witchetty Bush, Various Eucalyptus including Red River Gum, Coolibah, Bloodwood,, Blue Mallee, Desert Oak, Cycad, White Cypress Pine, Spinifex Grass, Billy Goat Plum, Darwin Woollybutt, Kapok Bush, Sand Palm, Spear Grass, Blue Lily, Red Lily, Mountain Ash, and Wollemi Pine

Technology

Throughout the course of this unit, students will study and make some wooden Aboriginal handicrafts from the central and western desert areas of Australia such as:

Timpilypa--music sticks

Pita/Kanyilpa/Wira--bowls

Kali--boomerangs

Tjara--shield

Tjutinypa/Kantitjara-clubs and chisels

various carvings of desert animals such as goanna, lizards, snakes, and echidna

These items will be displayed at the Australian Cultural Fair.

Lesson Two: Australia's Unique Physical Environments

Key Question:

--What are the diverse environments, climates and landforms of Australia?

Background Notes:

Australia is known as the Land Down Under because of its location south, or "under" the equator. The name Australia comes from the Latin word that means "southern." Almost the same size physically as the contiguous United States, Australia is the smallest, flattest, and driest continent. Australia can be divided into three main landform regions: the Great Dividing Range, the Central Lowlands, and the Western Plateau. The Great Dividing Range stretches from Cape York Peninsula to Tasmania, and is the continental divide of the Australia. The Central Lowlands stretch from the Gulf of Carpentaria to the Indian Ocean. The Western Plateau covers about two-thirds of Australia and is mostly desert.

Australia has a diverse and unique spectrum of physical environments due to millions of years of weathering and erosion. The range of diversity includes the dry Australian Outback, the splendor of colors in the Great Barrier Reef, the lush vegetation of the rain forests, and the vast expanses of coastal beaches. The climate ranges from temperate to tropical, with seasons occurring opposite of those in the Northern Hemisphere. The western and central areas are very arid, while the northern and some coastal areas are very humid. The richness of Australia's unique and varied environments is amazing.

Resources and References:

Websites:

- Shipwreck coast (www.shipwreckcoast.com.au)
- Grand Pacific Drive (www.grandpacificdrive.com.au)
- Melbourne (visitmelbourne.com)

Books:

- Kakadu Australia* by Steve Parish
- Australia Land of Contrast* by various authors and photographers, published by Nucolorvue Productions Pty Ltd
- The Encyclopedia of World Geography: A Country by Country Guide* edited by Graham Bateman and Victoria Egan
- Impressions of "The Great Barrier Reef" from Above and Below* by Ric J. Steininger

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Others:

- Steve Parish *Discover and Learn: Amazing Facts about Australia*--Giant Wall Map

Virginia Geography Standards:

WG 1a: The student will use maps, globes, photographs, and pictures in order to obtain geographical information and apply concepts of location, scale, and orientation.

WG 1b: The student will use maps, globes, photographs, and pictures in order to develop and refine his or her mental maps of world regions.

WG 2a: The student will analyze how selected physical and ecological processes shape the earth's surface by identifying regional climatic patterns and weather phenomena and their effect on people and places.

WG 4: The student will locate and analyze physical, economic, and cultural characteristics of world regions.

Objective:

- Identify, evaluate, and illustrate Australia's diverse landforms, climates and environments.

Materials:

- chalk board and chalk or overhead projector with a marker
- large map of Australia drawn on large sheet of paper--chalk board size or larger
- photographs or slides of various locations throughout Australia
- overhead screen
- Steve Parish Discover and Learn: Amazing Facts about Australia--Giant Wall Map
- my "treasure trunk"
- paper and pencils for students
- old magazines such as Traveler, National Geographic, travel brochures, the internet with a color printer, etc.
- posterboard
- glue sticks

Strategies:

Show several items from the "treasure trunk" of items collected throughout our adventure in Australia.

Students will be asked what they envision when they think about the landscapes of Australia. Make a class list of their ideas on the board or overhead.

Show students the *Giant Wall Map* by Steve Parish Discover and Learn: Amazing Facts about Australia. (can be ordered online at through a variety of bookstore websites) Share some of the facts which pertain to today's lesson, for example:

--"The Great Barrier Reef was declared a World Heritage area in 1981. It is the world's largest coral structure, made up of more than 2900 individual coral reefs and about 900 islands supporting a rich population of marine life."

--"The Twelve Apostles are jagged limestone rocks rising up to 60 m from the sea along Victoria's Shipwreck Coast. Once part of the sea bed, the limestone houses many marine fossils."

Students will be shown a variety of photographs made into a digital slide presentation taken during our excursions around Australia which illustrate its unique physical diversity. Teachers who have not had such an opportunity yet may wish to download photos from the internet or use photos which may be available in the student textbooks. A good variety of photos could include the following locations:

- the Kakadu National Park wetlands and bird sanctuaries (wetland ecosystem)
- Uluru and Kata Tjuta with spinifex grasses in the Outback (savanna ecosystem)
- the 12 Apostles on the Great Ocean Road (coastal ecosystem)
- the Eucalyptus Forest on Phillip Island or in the Dandenongs (eucalypt forest ecosystem)
- Sydney Harbor (coastal ecosystem)
- Daintree Rain Forest or the river and rain forests at Mossman Gorge near Cairns (tropical rain forest ecosystem)
- the Murray River (freshwater aquatic ecosystem)
- the Great Barrier Reef (coral reef ecosystem)
- the Great Dividing Range (mountain ecosystem)
- the Kakadu National Park escarpments and flood plains (wetlands ecosystem)
- Mait's Rest (subtropical rain forest)

For each photograph or slide, students should note on their paper outstanding physical features, plus identify the climate and ecosystem if possible.

Small groups of students will choose 3 or 4 photographs on which to focus further investigation. Each group should explain the conditions under which these climates and environments developed. Questions students may use for investigation include:

- In which environments is wind erosion a key factor?
- In which environment is water erosion a key factor?
- In which environment is lack of water a key factor?
- Which environment would do you think tourists would most like to visit and why?

Evaluation:

Organize the class into 3 groups and assign each group a landform region: the Great Dividing Range, the Central Lowlands, and the Western Plateau. Using the large paper map of Australia per group, have each group draw the main physical features of its assigned region, such as mountains, rivers, national parks, etc. Have students add pictures from magazines or drawings of landforms, animal and plant life, and climates of those environments. These will be displayed at the culminating activity, the Australian Cultural Fair.

Interdisciplinary Connections:

Art

Using colored pencils or pastels, sketch a landscape or climate of Australia, including as many geographical features as possible from the photos shown in geography classes. These sketches will be displayed at the Australian Cultural Fair.

Language Arts

Have students imagine they are explorers who are leading an expedition across Australia during the mid 1800s. Beginning at Sydney or Melbourne, students should plot a course for their expedition to follow. Each student will write a series of journal entries in which he/she records information about the landforms, bodies of water, plant and animal life, and any other aspects of the natural environment encountered on the journey. The entries should also include any physical hardships or dangers caused by the environment. These will be displayed, and some read aloud, at the Australian Cultural Fair.

Math

Divide each math class into three groups: the Great Dividing Range, the Central Lowlands, and the Western Plateau. Using information from computer classes, on posterboard, list as many interesting geographical statistics about your group's physical region. These will be displayed at the Australian Cultural Fair.

Comp Tech

Students will do research on Australia's deserts, elevations, highest mountains, longest rivers, tallest waterfalls, and largest bodies of water gathering information from the Geoscience Australia website: (www.agso.gov.au). This information will be utilized in Geography, Math, and Science classes to assist with those projects.

Science

Small groups of students will use discarded magazines such as National Geographic, Traveler, travel brochures, colored images printed from the internet, etc. to make collages depicting the diverse natural environments of Australia. These will be displayed at the culminating activity, the Australian Cultural Fair.

Home Economics

Today's recipe:

Australian Pavlova:

Ingredients:

3 egg whites
1 pinch salt
3/4 cup castor sugar
1/4 cup white sugar
1 tablespoon corn flour
1 teaspoon lemon juice
1/2 pint cream
kiwifruit or strawberries for garnish

Directions:

Preheat the oven to 150 C, 300 F or gas mark 2 (the temperature is reduced for baking). Beat the egg whites to a foam, add the salt and beat until soft peaks form which fold over when the beater is removed. Slowly beat in the castor sugar, beating well after each addition. Keep beating until the mixture is stiff and the peaks stand up when the beater is removed. Mix together the white sugar and corn flour. Lightly fold into the meringue with the lemon juice. Line an oven tray with baking paper. Spread the meringue into a circle and pipe a decoration around the edge or swirl with a spoon if desired. Bake in a cool oven (80 C or 180 F) for 2 to 2 1/2 hours. Turn off the heat and leave in the oven overnight to cool. Top with whipped cream and decorate with sliced kiwi fruit, sliced strawberries, passion fruit, or just about any tropical fruit, just before serving. The Pavlova is a dessert invented in Australia and named after the great ballet dancer Anna Pavlova.

Research and type recipes for the cookbook while the dish is cooking.

Band/Chorus

Students will continue to learn and perform Australian songs.

Agriculture

Students will continue to study the flora indigenous to Australia.

Technology

Students will continue to work on the wooden Aboriginal handicrafts.

Lesson Three: Australia's Diverse Cultural Environment

Key Questions:

- How has Australia's population changed throughout the past 300 years?
- Which factors have contributed to the diversity of Australia's cultural environment?
- How have recent immigrants influenced the Australian way of life?
- What is unique about Australia's Aboriginal heritage?

Background Notes:

The very long occupation by Aboriginal people and the settlement by Europeans have contributed to Australia's diverse cultural environment. Australia has a number of culturally and historically unique features, traditions and influences. These include its Aboriginal heritage, British cultural, political and legal traditions, American commercial and media influences, ethnically diverse population, and location in the Asia-Pacific region.

Australia's first peoples were the Aborigines, who migrated from Southeast Asia at least 40,000 years ago. Early Aborigines lived a nomadic way of life, hunting with spears, nets, and boomerangs. There were many groups with different names and languages spread throughout Australia. It is estimated that possibly 300,000 Aborigines lived in Australia when European settlers arrived in the late 1700s.

The British settled Australia as a prison colony. The first settlement, started in 1788, later became the city of Sydney. Because of their reliance on maritime trade, the first European settlements were located on the coast. Soon more settlers came to farm or raise sheep, and some came during the gold rush of the 1850s. Australia's harsh climate, scarce water resources and poor soils limited the area of the continent that was suitable for food production and settlement, so the early European settlements were limited to the areas that could sustain the agricultural systems with which the settlers were most familiar. Unfortunately, these new settlers forced many Aborigines from their land, plus these original inhabitants were susceptible to the diseases brought by the white Europeans, so populations were demolished. During the mid-1800s, more towns were founded, and six large colonies developed, which joined to form the Commonwealth of Australia in 1901. Australia became a great ally of Britain and the United States, and has been the only country to fight in every foreign war along side the U.S. to date.

The current influx of immigrants to Australia in the last fifty years has created a ethnic and cultural diversity evident within the Australian population and gives the nation a unique quality. People from more than 160 countries now call Australia home. Immigrants have brought with them their own cultural traditions, including different religions, languages, foods, sports and arts. These make Australia an interesting and vibrant multicultural society.

Resources and References:

Books:

- The Encyclopedia of World Geography: A Country by Country Guide* edited by Graham Bateman and Victoria Egan
- Australia in Brief* published by the Australian Government
- Aussie Country Comedy Australiana* by Neil Hulm
- Cookbook: Australian Bush Cooking* by Cathy Savage and Craig Lewis

Brochures:

- Sutherland Shire: Birthplace of Modern Australia*
- Sydney Harbor National Park*
- Blue Mountains National Park*
- Kakadu National Park*
- Royal National Park*
- Aboriginal Allawarra*
- Maruku Arts Aboriginal Handicrafts*
- Warwook Cattle Farm*
- Sovereign Hill Visitors' Guide*
- The Eureka Centre at Ballarat Visitors' Guide*

Lecturers:

- Ted Edwards, *Odyssey Travel Guide* accompanying us throughout our Australian adventure
- Mark Darby, Australia Fulbright Commission
- Joanna Monaghan, Australia Fulbright Commission
- Martin Ludgate, *Guide in Uluru and Kakadu National Parks*
- Alan Greene, *Guide in Cairns and the Great Barrier Reef*

Others:

- Steve Parish *Discover and Learn: Amazing Facts about Australia*--*Giant Wall Map*

Virginia Geography Standards:

WG 1b: The student will use maps, globes, photographs, and pictures in order to develop and refine his or her mental maps of world regions.

WG 4: The student will locate and analyze physical, economic, and cultural characteristics of world regions.

WG 6: The student will analyze past and present trends in human migration and cultural interaction as they are influenced by social, economic, political, and environmental factors.

WG 12a: The student will apply geography to interpret the past, understand the present, and plan for the future by using geographic knowledge, skills, and perspectives to analyze problems and make decisions.

Objective:

--Describe the past and current population patterns in Australia.

Materials:

- chalk board and chalk or overhead projector with a marker
- a variety of photographs or slides depicting Australia's cultural diversity
- overhead screen
- my "treasure trunk"
- kangaroo jerky
- Tim Tams
- Steve Parish Discover and Learn: Amazing Facts about Australia--Giant Wall Map
- large sheets of posterboard and markers
- rulers or yardsticks
- the internet
- textbooks
- magazines
- resource books on Australia
- travel brochures

Strategies:

Show several items from the "treasure trunk" of items collected throughout our adventure in Australia.

Students will be asked what they envision when they think about the people, culture, and history of Australia. Make a class list of their ideas on the board or overhead.

Show students the Giant Wall Map by Steve Parish Discover and Learn: Amazing Facts about Australia. Share some of the facts which pertain to today's lesson, for example:

"25,000 years ago, the world's earliest cremation took place in Mungo National Park."

"Sydney is Australia's oldest European settlement (1788). The oldest building in Australia, built by the settlers in 1793, is Elizabeth Farm House, west of Sydney."

Students will be shown a variety of photographs made into a digital slide presentation showing evidence of Australia's historical and cultural diversity taken during our excursions around Australia. Teachers who have not had such an opportunity yet may wish to download photos from the internet or use photos which may be available in the student textbooks. A good variety of photos could include the following:

- various Aboriginal tribes encountered at Uluru, Kakadu, Darwin, and Kuranda
- photos of the various ethnic areas of Sydney and Melbourne including the Chinese, Japanese, Italian, and Greek
- the former British prisons in Melbourne and Sydney
- Victorian style homes and hotels in Ballarat
- the gold rush settlements in Eureka and Sovereign Hill
- various working farms including Warwook Farm near Melbourne

Students will be given samples of Kangaroo Jerky and Tim Tams brought back from Australia (Tim Tams are actually imported from New Zealand) to have a taste of two of Australia's cultural foods.

Evaluation:

Organize each class into 4 or 5 groups, depending on the size of each class. Using poster board, markers, and perhaps rulers or yardsticks if needed, have each group create a timeline that includes information on the cultures that developed in Australia before or since 1700. Students may use a variety of resources to find information for their timelines: the internet, textbooks, magazines, resource books on Australia, travel brochures from Australia of places shown in the photographs, etc. Students should also draw pictures or cut photos from old magazines to illustrate the various cultures on the time lines. Students should also provide written explanations on their time lines of how each culture has contributed to Australia today. These time lines will be displayed at the Australian Cultural Fair at the end of the unit.

Interdisciplinary Connections:

Art

Students will examine a variety of Aboriginal art prints, including those which I purchased while in Australia. A good website for reference is Aboriginal Art, culture, and Didgeridoo (www.aboriginalaustralia.com). Using canvas and paint, students will create "authentic" prints which convey a story using symbols found in much of the Aboriginal dot art. These will be displayed at the Australian Culture Fair.

Language Arts

Students will read poems by Henry Lawson about life in the bush and by Banjo Patterson about Australia's gold mining and pioneer life, including "*The Man from Snowy River*." The teacher will read aloud excerpts from the book *Aussie Country Comedy Australiana* by Neil Hulm to illustrate the Aussies' witty sense of humor. This is a good website to use to find Australian poems to use: (www.cultureandrecreation.gov.au)

Students will write a poem or short story depicting Australian life in the bush or gold mining towns. These poems will be displayed at the Australian Culture Fair.

Math

Students will construct population pyramids using the statistics gathered in computer classes. A population pyramid is a type of bar graph used to show the population, including age and gender distribution, of a particular county or location. The vertical axis of the graph shows the various age groups of the population. The horizontal axis shows the percentage of the population of by gender. These pyramids represent 100% of the population and can be used to examine characteristics of the population including growth, the average age of the population, impacts of war or disease on a particular group, and baby booms.

Computer Technology

Using the internet, students will research information for math class on constructing a population pyramid or Australia's current population using the Australian Bureau of Statistics website (www.abs.gov.au). Students may also want to do research on Australian recipes to prepare in home economics classes.

Science

Using a map showing Australia's population distribution, determine physical factors which may have caused people to live or settle where they did. Questions which may be good to ask:

- Why were some Aboriginal tribes nomadic?
- Why are most large metropolitan areas along the coast?
- What role may the availability of plants and animals for food played in settlement locations?
- What role did natural waterways such as harbors and rivers play in settlement patterns?
- Why did many recent immigrants settle in cities?
- What effect my climate have on where people live?

Have students write a short report in which students make conclusions about possible answers to these questions.

These reports will be displayed at the Australian Cultural Fair.

Home Economics

Today's recipe:

Lemon Myrtle Cheesecake:

Ingredients:

Filling:

- 500g cream cheese
- 150g castor sugar
- 1 tbsp lemon juice
- 2 tsp fresh ground lemon myrtle
- 400g cream
- 2 tsp gelatin
- 50 ml hot water

Base:

- 1 packet Nice biscuits
- 200g bunya nut meal
- 250g rolled oats (ground but not too fine)
- 120g castor sugar
- 125g unsalted butter (or use any cheesecake base)

Directions:

To make base, melt butter and add to combined ingredients and press into cake mold and set.

For filling, whip cream and set aside. Combine cream cheese, sugar, lemon juice and lemon myrtle and beat until smooth. Add gelatin dissolved in hot water and fold in whipped cream. Pour mixture onto base and set in fridge. Decorate with whipped cream.

Research and type recipes for the cookbook.

Band/Chorus

Students will continue to learn and perform Australian songs.

Agriculture

Students will continue to study the flora indigenous to Australia.

Technology

Students will continue to work on the wooden Aboriginal handicrafts.

**Lesson Four:
Australia's Diverse Fauna**

Key Questions:

- Why does Australia have unique and diverse fauna?
- What are the three classes of mammals found in Australia?
- Why are marsupials so prominent in Australia?

Background Notes:

Australia's unique fauna has evolved from the species that were present when the land mass broke away from Pangea millions of years ago. Australia was physically isolated from the effects of evolution taking place on other continents. Today Australia has many unique endemic species found nowhere else on earth.

Australia is the only continental land mass occupied by all three classes of mammals: monotremes, marsupials and placentals. The marsupials compose the largest group of mammals in Australia. The marsupial's offspring is born at a very early stage of its development. It then lives in the mother's pouch, where it completes its development while attached to its mother's teat. Marsupials include kangaroos,

wallabies, wombats, and koalas. Monotremes are unique because they are the only mammals to lay eggs. Two of these three species are found only in Australia: the duck-billed platypus, which incubates its eggs in a nest inside its burrow, and the echidna, which incubates its eggs in its pouch. Placental mammals are animals whose young develop inside the mother and receive nourishment through the placenta. Examples include some rodents and bats. Australia's marsupials and monotremes are among the most primitive mammals on earth. The continent's isolation meant that they remained unaffected by the development of more-advanced placental mammals, with which they would have been unable to compete for resources.

Australia has the most diverse reptile fauna in the world. There are more than 500 species of lizards ranging in size from the giant goannas, which can grow to 2 meters in length, to tiny skinks and geckoes. Australia also has the highest proportion of venomous snake species in the world. The territorial estuarine crocodile of northern Australia, referred to as the saltwater crocodile, is as much at home in rivers and billabongs as in the open seas and may even travel overland. Freshwater crocodiles can also be found in these northern wetland areas. There are also about 130 species of amphibians in Australia and invertebrates, the most well known being the termites, which build their mounds facing north in Australia because of its location in the southern hemisphere.

Australia has more migrating birds than any other country. About 30 per cent of all species move from region to region, taking advantage of places where conditions are more favorable. Water birds often avoid drought in central Australia by traveling to more humid coastal areas. Some of the most distinctive Australian birds are the black swan, kookaburra, lyrebird, galah, cockatoo, rosella, the emu, and the cassowary.

Resources and References:

Websites:

--National Australia Library's Australian Science and Technology: selected websites. (www.nla.gov.au/oz/sciencew.html)

--Australian Bureau of Statistics website (www.abs.gov.au)

Books:

--*Kakadu Australia* by Steve Parish

--*Australia Land of Contrast* by various authors and photographers, published by Nucolorvue Productions Pty Ltd

--*The Encyclopedia of World Geography: A Country by Country Guide* edited by Graham Bateman and Victoria Egan

--*The State of Australia's Birds 2005* by Penny Olsen, Michael Weston, Chris Tzaros and Andrew Silcocks

- Australia Journey Through a Timeless Land* by Roff Smith
- Australia in Brief* by the Australian Government
- Impressions of "The Great Barrier Reef" from Above and Below* by Ric J. Steininger

Brochures:

- Healesville Sanctuary-Australian wildlife Health Centre*
- Blue Mountains National Park*
- Kakadu National Park*
- Royal National Park*
- Aboriginal Illawarra*
- Warrook Cattle Farm*
- Grey-Headed Flying Foxes*
- Go Wallabies*
- Cane Toads in NSW*
- Toronga Zoo*

Lecturers:

- Ted Edwards, *Odyssey Travel Guide* accompanying us throughout our Australian adventure
- Martin Ludgate, Guide in Uluru and Kakadu National Parks

Others:

- Steve Parish *Discover and Learn: Amazing Facts about Australia*--Giant Wall Map

Virginia Geography Standards:

WG 1b: The student will use maps, globes, photographs, and pictures in order to develop and refine his or her mental maps of world regions.

WG 4: The student will locate and analyze physical, economic, and cultural characteristics of world regions.

WG 12a: The student will apply geography to interpret the past, understand the present, and plan for the future by using geographic knowledge, skills, and perspectives to analyze problems and make decisions.

Objectives:

- Explain why Australia has unique and diverse fauna.
- Describe some of the species of animals indigenous to Australia.

Materials:

- a variety of photographs or slides depicting Australia's diverse fauna
- overhead screen
- my "treasure trunk"
- Steve Parish Discover and Learn: Amazing Facts about Australia--Giant Wall Map
- large sheets of bulletin board paper with maps of Australia drawn on them before class
- slips of paper on which to write the names of animals shown in the slideshow
- an opaque container such as a hat, bowl, etc.
- pens or pencils
- notebook paper for students
- the internet
- textbooks
- magazines
- resource books on Australia
- travel brochures

Strategies:

Show several items from the "treasure trunk" of items collected throughout our adventure in Australia including kangaroo pelt key chains, gold plated echidna and platypus broaches from my Ruritan hosts in Albury, stuffed koala bear, and books and postcards showing various animals found in Australia.

Show students the *Giant Wall Map* by Steve Parish Discover and Learn: Amazing Facts about Australia. Share some of the facts which pertain to today's lesson, for example:

"The Great Barrier Reef contains nesting sites for 6 of the world's species of marine turtles, and 5 of those 6 species are endangered."

"A live Thylacine has not been seen since 1936 when the last known one died at Hobart Zoo. Many people still hope to find Thylacines living in Tasmania's wild southwest corner, and inconclusive reports of sightings are fairly common."

Students will be shown a variety of photographs made into a digital slide presentation showing evidence of Australia's diverse fauna taken during our excursions around Australia. Teachers who have not had such an opportunity yet may wish to download photos from the internet or use photos which may be available in the student textbooks. A good variety of photos could include various species of the following:

Indigenous:

- kangaroo
 - wallaby
 - wombat
 - emu
 - python
 - blue-tongued lizard
 - echidna
 - platypus
 - cockatoo
 - fairy penguins
 - kookaburra
 - rosella
 - frilled lizard
 - koala
 - crocodile
 - Tasmanian devil
 - termite mounds
 - ibis
 - pelican
 - egret
 - jabiru
 - fruit bats
 - sea eagle
 - cassowary
 - sea turtles
 - coral
 - tropical fish
 - sting ray
- Nonindigenous:
- wild camel
 - sheep dogs
 - sheep being sheared
 - cane toads
 - water buffalo
 - dingo

Discuss what the students may already know about some of these species and add knowledge gleaned on the trip to further educate the students.

Have the name of each of the animal species viewed during the slide show written on individual slips of paper. Have each student draw a slip of paper from an opaque container, hat, bowl, etc. Using the internet, books, brochures, magazines, and other resources, each student is responsible for finding out information about the animal species he or she chose:

--In which particular area of Australia does your animal live?

--What type of food does this animal eat?

--What type of climate does this animal prefer?

--Is this animal a monotreme, marsupial or placental mammal, or a reptile, amphibian, bird, fish, invertebrate, or something else?

--Describe what this animal looks like--average adult height, weight? does it have fur, feathers, gills, etc.? What color(s) is it?

--On average, how many young does that animal have and how often does it reproduce?

--Is this particular animal endemic to Australia? If not, from where did it originate?

Collect their findings at the end of class.

Evaluation:

On a large sheet of bulletin board paper hung in the front of the classroom, have a map of Australia outlined, including various areas already mentioned in previous lessons such as the Great Barrier Reef, Uluru and Kata-Tjuta, Kakadu, Sydney, Melbourne, the Great Ocean Road, etc. Using the photos, stickers and postcards of various animals species taken and collected from various locations in Australia, have students suggest (based on their findings from the prior activity) where the photo, sticker, or postcard should be placed on the map to indicate the area where that particular species lives. Each class' animal location map will be displayed at the Australian Cultural Fair.

Interdisciplinary Connections:

Art

Students will continue to create their "authentic" prints which convey a story using symbols and indigenous animals found in much of the Aboriginal dot art. These will be displayed at the Australian Culture Fair.

Language Arts

Students will also study Australian words which are unique to the culture and compare them with the American English equivalents. Some examples may include:

Australian/American:

biscuit/cookie

cue/line

tucker/food

car park/parking lot

damper/bread

paddock/pasture

no worries/you are welcome

mate/buddy, pal

bewdy/good one

bangers/sausages

bloke/fellow, man

chin wag/chat

lipper/smoker

dunny/toilet

g'day/hello

mob/group

sheila/female

Students will a short story using at least 8 words from Australian lingo. These poems and stories will be displayed at the Australian Culture Fair.

Computer

Students will use the internet to conduct research on the number of species of mammals, amphibians, invertebrates, fish, reptiles, and birds in Australia, and which percentage of each group are indigenous to that continent. A great website to use for this research is (www.nla.gov.au/oz/sciencew.html), which is the link the the National Australia Library's Australian Science and Technology: selected websites.

Math

Construct a column graph and a pie graph showing the number of species in each animal group. Once your graphs are complete, transfer them to poster board. color each column and each wedge of the graphs to show the proportion of the species that are endemic in each group. These will be displayed at the Australian Culture Fair.

Science

Students will go to the school library to use resource books, magazines, or the internet to research one of the animals endemic to Australia. Each student will create a colorful poster or brochure which includes:

- the name of the animal
- a photo or drawing of the animal
- a description and illustration of its distribution, habitat and place in the food chain
- a list of any adaptations that allow it to adapt to the climate
- a list of its predators
- a description of how people's activities affect it

These posters and brochures will be presented at the Australia Culture Fair.

Home Economics

Today's recipe:

Australian Pumpkin Soup:

Ingredients:

2 cups (500 ml) vegetable stock
800g (1 3/4 lb) pumpkin, chopped
2 onions, chopped
2 cloves garlic, grated
1/2 teaspoon nutmeg
salt, pepper
60 ml (2 fl oz) cream

Directions:

Bring the vegetable stock to the boil. Add pumpkin, onion and garlic, simmer for 20 minutes or until soft. Puree soup in a blender until smooth. Return soup to the pot to reheat, season with nutmeg, salt and pepper. Pour the soup into bowls. Decorate with a dollop of cream.

Research and type Australian recipes for the cookbook.

Band/Chorus

Students will continue to learn and perform Australian songs.

Agriculture

Students will continue to study the flora indigenous to Australia.

Technology

Students will continue to work on the wooden Aboriginal handicrafts.

Lesson Five: The Diversity of Kakadu National Park

Key Questions:

- Why Kakadu National Park is such an important part of Australia's natural and cultural heritage?
- From what is the name 'Kakadu' derived?
- What is unique about Kakadu's climate?
- What is the impact seasonal variations in climate have on the environment of Kakadu National Park?
- Which current issues are potential threats to Kakadu and analyze what might be done to avoid or solve these issues?

Background Notes:

Australia's second largest national park, Kakadu, is an important part of Australia's natural and cultural diversity. It has spectacular scenery, a variety of wildlife, endangered species and the world's largest and most captivating collection of prehistoric rock art. Kakadu is rich in biodiversity with hundreds of indigenous species of plant, bird, reptile, mammal, amphibian, fish, and insect species. This diversity, combined with the controversy surrounding the exploitation of its vast mineral wealth, including uranium mines, have brought Kakadu to international attention.

Kakadu is unique because of its size, (approximately the size of Switzerland), and its biodiversity. It is representative of the wetlands and tropical savanna ecosystems in northern Australia, and there have been no known animal or plant extinctions. Adding to these natural qualities is the cultural heritage of the region. Of particular significance is the Aboriginal rock art. It provides us with an insight into the lives of the Aboriginal people who have lived in the area for over 50,000 years. Kakadu has more than 5000 rock art sites which depict scenes of hunting, religion, stories, sorcery, recreation, and the spiritual connection with their ancestors.

The name Kakadu comes from the name of the traditional Aboriginal settlers of this area, the Gagudju. The descendants of these people play a major role in the management of the World Heritage listed Kakadu National Park. Kakadu's Aboriginal community maintains a very close relationship with its traditional lands, as the spiritual landscape is as important as the physical one. As the traditional owners and managers of the land, the Aboriginal community enjoys certain rights and responsibilities. The Aboriginal custodians of Kakadu call themselves Bininj. There are about 500 Aborigines living in ten different settlements within the boundaries of Kakadu. To meet their responsibilities, the Bininj play an active role in managing the land and are an instrumental part of Kakadu National Park.

The savanna climate of Kakadu is often described as having two seasons: wet and dry. This distinctive climate is the result of the monsoon, which is a seasonal reversal in wind direction. During summer, warm, moist air blows in from over the ocean to the north of Australia, bringing heavy rain. During winter, very dry winds blow from the center of Australia towards the north. During the wet season, large amounts of water flow from the Arnhem Land plateau, plunging down the escarpment in a series of cascading waterfalls on to the flood plain below. Large areas of low lying land are transformed into wetlands. Aquatic plants grow rapidly and the animals that feed on them start breeding. In turn, they provide a rich source of food for other animals and the birds that make Kakadu their home. The dry season sets in at the beginning of May. During the dry, the flow of water in the rivers and streams is reduced, wetlands drain and the plants dry out. According to the Aboriginal community of Kakadu, there are 6 seasons: the Monsoon Season (Dec-Mar), the Harvest Time (Mar-May), the Cool Weather time (May-June), the Early Dry Season (June-Aug), the Hot Dry Season (Aug-Oct) and the Pre-Monsoon Season (Oct-Dec).

Kakadu is rich in biodiversity with hundreds of indigenous species of including plants, 280 species of birds, 120 species of reptiles, 60 native mammal species, 25 species of amphibians, 50 species of fish, and over 10,000 species of insects. Introduced plants and animals pose a risk to Kakadu's unique physical environment. Careful management is required to eradicate them or to minimize their impact. Some threats to the flood plains and rivers of Kakadu has been caused by the introduction of feral plants like the minosa pigra which invades of wetlands, the South American floating fern called salvinia, and para grass which spreads rapidly, replacing natural ecosystems. The introduction of nonnative animals is also a serious threat to the unique environment of Kakadu. Water buffalo were introduced into the Northern Territory from Asia in the early 1800s. The European settlers used them as domestic livestock. The buffalo were well suited to the climate of Kakadu and their numbers increased rapidly. Their impact on the environment was disastrous. They trampled and ate the vegetation and destroyed the river banks

which surrounded the flood plain. A campaign of eradication has been successful in clearing Kakadu of buffaloes. Other introduced species are now posing a more serious threat. Brumbies, or wild horses and cane toads, feral pigs, cattle, donkeys and cats all cause environmental damage, and some have no natural predators in Australia. They compete with indigenous animals for food, destroy their habitat and vegetation, causing soil erosion in such a delicate ecosystem.

Kakadu has become a major tourist destination with its designation as a World Heritage site and with more global emphasis on ecotourism. Without careful management, the rapidly growing number of tourists may endanger the very sights and experiences that attract them to this diverse area of Australia. Four-wheel-drive vehicles are of great concern. They cut deep ruts in the water-logged soils, destroy vegetation and increase soil erosion. This affects water quality in the wetlands and river systems. Aboriginal rock art paintings can also be damaged by tourists. Tourists are causing paintings to deteriorate. Visitors damage the art by disturbing the dust that coats the painted surfaces. Some rock art paintings, which are thousands of years old, has been defaced by graffiti. Despite these issues, the development of tourism in Kakadu has been well managed, and the partnership between Aboriginal and non-Aboriginal Australians has been very successful.

Resources and References:

Websites:

- information on uranium mining in Kakadu (www.anawa.org.au/nt/ranger.htm) (www.deh.gov.au/ssd/uranium-mining/arr-mines/ranger.html)
- Australian Bureau of Meteorology (BOM)--information on weather and climate (www.bom.gov.au)
- National Geographic October 2006 issue online--information on Kakadu National Park (www3.nationalgeographic.com/ngm/kakaducam/)

Books:

- Kakadu Australia* by Steve Parish
- Australia Land of Contrast* by various authors and photographers, published by Nucolorvue Productions Pty Ltd
- The State of Australia's Birds 2005* by Penny Olsen, Michael Weston, Chris Tzaros and Andrew Silcocks

Brochures:

- Kakadu National Park*
- The Geology of Kakadu*

Booklets:

- Kakadu National Park Information Booklet* by Fulbright Australian-American Commission and Odyssey Travel

Lecturers:

--Ted Edwards, *Odyssey Travel Guide* accompanying us throughout our Australian adventure

--Martin Ludgate, *Guide in Uluru and Kakadu National Parks*

Others:

--Steve Parish *Discover and Learn: Amazing Facts about Australia*--Giant Wall Map

Virginia Geography Standards:

WG 1b: The student will use maps, globes, photographs, and pictures in order to develop and refine his or her mental maps of world regions.

WG 2a: The student will analyze how selected physical and ecological processes shape the earth's surface by identifying regional climatic patterns and weather phenomena and their effect on people and places.

WG 4: The student will locate and analyze physical, economic, and cultural characteristics of world regions.

WG 6: The student will analyze past and present trends in human migration and cultural interaction as they are influenced by social, economic, political, and environmental factors.

WG 12a: The student will apply geography to interpret the past, understand the present, and plan for the future by using geographic knowledge, skills, and perspectives to analyze problems and make decisions.

Objectives:

--Explain why Kakadu National Park is such an important part of Australia's natural and cultural heritage.

--Describe what is unique about the climate of Kakadu.

--Analyze the impact seasonal variations in climate have on the environment of Kakadu National Park.

--Explain the issues which are potential threats to Kakadu and analyze what might be done to avoid or solve these issues.

Materials:

- Photographs or slides of various locations throughout Kakadu, including Aboriginal rock art, the flood plains, escarpments, and endemic animal and plant species
- overhead screen
- my "treasure trunk"
- Steve Parish Discover and Learn: Amazing Facts about Australia--Giant Wall Map
- Paper and pencils for students
- Large sheets of paper and markers

Strategies:

Using a map of Australia, locate Kakadu National Park. Note its absolute location in terms of latitude and longitude. In which climate region is Kakadu National Park based on its distance from the equator and the Tropic of Capricorn?

Show several items from the "treasure trunk" of items collected in the Kakadu area.

Show students the Giant Wall Map by Steve Parish Discover and Learn: Amazing Facts about Australia. Share some of the facts which pertain to today's lesson, for example:

--"Kakadu National Park, east of Darwin, is a World Heritage area, listed for outstanding cultural and natural values."

Students will be shown a variety of photographs made into a digital slide presentation taken during our exploration of Kakadu National Park and we will discuss each photo. Teachers who have not had such an opportunity yet may wish to download photos from the internet or use photos which may be available in the student textbooks. A good variety of photos illustrating the diversity of Kakadu National Park could include the following:

- Melaleuca wetlands
- bird sanctuaries including photos of the Yellow Waters area native species such as jabiru, black-necked ibis, egrets, Australian darter, pied heron, magpie geese, sacred ibis, pied cormorant, forest king fisher, and white bellied sea eagles.
- crocodiles indigenous to Kakadu
- nonnative animals and plants introduced to Kakadu such as minosa pigra, salvinia, para grass, water buffalo, and cane toads
- rock formations at Ubirr
- sandstone escarpments near Arnhem lands
- flood plains

- brush fires
- eucalyptus trees
- spear grass
- large termite mounds
- the South Alligator River
- tidal flats
- billabongs
- Aboriginal rock art paintings located in the Nourlangie area
- evidence of the detrimental effects of tourists

During the discussions based on the photos, include explanations of what is meant by the terms escarpment, wetlands, flood plain, tidal flats and mangrove swamps.

Working in 5 small groups, students will discuss what they now know about Kakadu. The areas on which students should focus their discussions include:

- explain the importance of Kakadu National Park in Australia's natural heritage
- explain the importance of Kakadu National Park in Australia's cultural heritage
- describe what is unique about the climate of Kakadu
- analyze the impact seasonal variations in climate have on the environment of Kakadu National Park
- explain the issues which are potential threats to Kakadu and analyze what might be done to avoid or solve these issues

Each of the 5 groups will record the main points raised in their discussions on a large sheet of paper using markers. Each of the 5 groups will then be called on to share their ideas with the rest of the class, with each group discussing their findings on only one of the five topics, so that all topics are addressed during the class discussion. Other students may add their ideas to the findings of the group presenting to enhance the discussion.

Evaluation:

Questions for students to answer individually for a class grade in *Geography*:

1. Explain why Kakadu National Park is such an important part of Australia's natural heritage.
2. Explain why Kakadu National Park is such an important part of Australia's cultural heritage.
3. How did this national park receive the name "Kakadu"?
4. What types of information are depicted in the Aboriginal rock art paintings?
5. Describe the location of Kakadu National Park.

6. What is unique about Kakadu's climate.
7. Describe the impact seasonal variations in climate have on the environment of Kakadu National Park.
8. Explain the issues which are potential threats to Kakadu and analyze what might be done to avoid or solve these issues.

Interdisciplinary Connections:

Art

Using small rocks, paint, and carving tools, students will create rock art similar to that seen in Kakadu National Park. Paintings should attempt to illustrate the purpose and scenery found in the authentic rock art of Kakadu.

Language Arts

Students will study the climate graphs constructed in math classes and use information studied in geography classes to write a short report describing the climate of Kakadu National Park.

Students will also examine photographs of the rock art at Kakadu, such as the Painting of Barramundi, and the Anbangbang Gallery at Nourlangie. Write an Aboriginal story describing the story you think is being conveyed in one particular artwork.

Computer

Using the Australian Bureau of Meteorology (BOM) website, (www.bom.gov.au) gather statistics on seasonal temperatures and precipitation. Make a table to note the temperature and precipitation by month for use in constructing the climate graphs.

Math

Using the statistics collected in computer classes, construct a climate graph showing the average monthly temperature and precipitation of Kakadu National Park. Select an appropriate scale for temperature and precipitation. Using graph paper, place the precipitation on the right side of the graph and temperature on the left side of the graph. List the months beginning with January along the base of the graph from right to left. Plot the precipitation statistics per month, then draw solid columns from the base to the point depicting the number of inches or centimeters. Plot the average temperature in Fahrenheit or Celsius for each month. Join these twelve points to form a smooth line running from left to right across the

graph. Title your graph "Climate Graph of Kakadu National Park", include the latitude and longitude coordinates. Climate graphs will be displayed at the Australian Cultural Fair.

Science

Students will identify the positive and negative consequences of uranium mining by examining the situation with the Ranger and Jabiluka uranium mines in Kakadu. Small groups will make posterboard size charts listing the positive and negative consequences of these uranium mines to display at the Australia Cultural Fair. Visit this website for more detailed information about uranium mining in Kakadu: (www.anawa.org.au/nt/ranger.htm) (www.deh.gov.au/ssd/uranium-mining/arr-mines/ranger.html)

Home Economics

Today's recipe:

Pan Fried Damper:

Ingredients:

- 3 cups of self rising flour
- 2 tablespoons oil
- 1 cup warm water

Directions:

Mix all ingredients and knead for a few minutes. Cover and leave for 30 min. Divide into small balls and pat flat. Fry bread in a frying pan in hot oil until golden. Drain on paper towels before serving.

Research and type Australian recipes for the cookbook.

Band/Chorus

Students will continue to learn and perform Australian songs.

Agriculture

Students will continue to study the flora indigenous to Kakadu.

Technology

Students will continue to work on the wooden Aboriginal handicrafts.

Lesson Six: Future Challenges for Australia

Key Questions:

- What are future geographical issues regarding the environments of Australia?
- What are future challenges with predicted population trends?
- How are groups attempting to address and perhaps rectify these issues?

Background Notes:

Australians are facing a wide range of contemporary issues which will create challenges in the future. Some of these issues include urban growth and decline, waste management, air pollution, land and water management, exotic species, and the impact of population growth.

Australian cities continue to grow in population. This urban sprawl comes at a cost. Some of the richest agricultural land is lost, streams become polluted by storm water runoff and sewage overflows, the habitat of native flora and fauna is destroyed, traffic congestion worsens and air pollution increases, and new landfill sites become difficult to find. Urban sprawl increases costs and reduces efficiency. The cost of providing new urban infrastructure is also very high. The infrastructure in the older, inner-urban areas is often neglected and urban decline, or deterioration, occurs in that area.

As populations grow and standards of living improve, the amount of waste produced increases. The management and disposal of this waste is a complicated and expensive. Solid wastes includes garbage and the wastes produced by factories and the building industry. In Australia, 98 per cent of this waste ends up in landfill sites. Wetlands and old quarries have been sites for the disposal of solid waste. However, wetlands are now considered too important to use for waste disposal and old quarries are in short supply. Alternative sites are difficult to find and often result in community protests. Australians are currently employing recycling methods, reuse and waste reduction in order to decrease waste.

Air pollution is also increasing as the population grows in urban areas. However, compared with many of the world's large urban centers the air quality in Australian cities is good. Technological developments and government controls have dramatically reduced the amount of pollutants being released into the atmosphere by automobiles and industry, although there are still days when air quality is not good, especially in Sydney and Melbourne. Strategies Australians are applying to reduce air pollution include using more public transportation, using energy saving devices including emission controls, and providing financial incentives to use alternative energy resources.

In Australia, there is a growing understanding of the important contributions ecosystems provide with clean water, clean air, healthy soils, and maintaining the continent's unique biodiversity. Until recently, however, land and water management focused on meeting the needs of the population with agricultural production, transportation, urban development, industries, and recreational activities which has caused challenges between the human environment vs. the physical environment. In many areas of Australia, farmers and government agencies and others concerned about the environment are working together to combat land degradation. The National Landcare Program coordinates much of the work that is being done by assisting community-based groups to bring about improvements to land and water resources.

The introduction of exotic species of plants and animals has caused massive disruption to Australia's ecosystems. They compete with native plants and animals for food and space and they are a major cause of land degradation. Once an exotic species is established, it is very difficult to control because it does not have any natural predators. Many introduced species have been taken from their natural habitat for domestication and use as a resource. Animals that escape and become wild are called feral animals. Over 2000 exotic species of plants and animals have been introduced to Australia for various reasons, deliberately or accidentally, and now reproduce in the wild. Fencing, trapping, poisoning and shooting are currently used to control feral animals. Poisoning, plowing and burning are used to control weed infestations.

The projected growth in Australia's population presents several environmental challenges. Because most Australians live near or on the coast due to the vast arid interior, ecological damage to this delicate coastal environment has occurred. The population of Australia is rising due to natural increase and immigration. This increase strains Australia's water resources, thus worsening the effects of the prolonged drought Australia is enduring. Other concerns stemming from the growing population are land usage, waste disposal, and expanding infrastructure.

Australia leads the world in community-based groups that aim to remedy the environmental degradation that results from human activities. Australians are actively contributing to conserving and preserving their environment.

Resources and References:

Websites:

- Australian Bureau of Statistics (www.abs.gov.au)
- Australia Conservation Foundation (www.acfonline.org.au)
- Landcare Australia (www.landcareonline.com)
- Friends of the Earth Australia (www.foe.org.au)

- Greening Australia (www.greeningaustralia.org.au/GA/NAT)
- Wilderness Society (www.wilderness.org.au)
- Waterwatch Australia (www.waterwatch.org.au)
- Australian Greenhouse Office ([/www.greenhouse.gov.au](http://www.greenhouse.gov.au))
- Coastcare (www.nht.gov.au)

Books:

- The Future Eaters* by Tim Flannery

Brochures:

- Wirraminna Environmental Education Center Burrumbuttock*
- Australian National Botanical Gardens*
- Healesville Sanctuary-Australian Wildlife Health Centre*
- Blue Mountains National Park*
- Kakadu National Park*
- Royal National Park*
- The National Museum of Australia*
- Sydney Harbor National Park*
- Cane Toads in NSW*
- Toronga Zoo*
- The Kuranda/Cairns Skyrail Experience*

Lecturers:

- Nicholas Klomp, Charles Sturt University, Professor of Wildlife Management and Population Dynamics
- Steve Wearing, Associate Professor of Ecotourism, lectured at Taronga Zoo, Sydney
- Ted Edwards, Odyssey Travel Guide accompanying us throughout our Australian adventure
- Mark Darby, Australia Fulbright Commission
- Joanna Monaghan, Australia Fulbright Commission
- Martin Ludgate, Guide in Uluru and Kakadu National Parks
- Alan Greene, Guide in Cairns and the Great Barrier Reef

Others:

- Information and notes from the Gibberagong Environmental Education Center near Sydney
- Information and notes from the land care facility near Holbrook
- Information and notes from the CERES Center (Center for education and Research in Environmental Strategies in Melbourne)
- Steve Parish Discover and Learn: Amazing Facts about Australia--Giant Wall Map

Virginia Geography Standards:

WG 1b: The student will use maps, globes, photographs, and pictures in order to develop and refine his or her mental maps of world regions.

WG 2a: The student will analyze how selected physical and ecological processes shape the earth's surface by identifying regional climatic patterns and weather phenomena and their effect on people and places.

WG 4: The student will locate and analyze physical, economic, and cultural characteristics of world regions.

WG 6: The student will analyze past and present trends in human migration and cultural interaction as they are influenced by social, economic, political, and environmental factors.

WG 11c: The student will analyze the patterns of urban development by describing the unique influence of urban areas and some challenges they face.

WG 12a: The student will apply geographic knowledge to interpret the past, understand the present, and plan for the future by using geographic knowledge, skills, and perspectives to analyze problems and make decisions.

WG 12b: The student will apply geographic knowledge to interpret the past, understand the present, and plan for the future by relating current events to the physical and human characteristics of places and regions.

Objectives:

- Identify future environmental challenges for Australia.
- Describe what activities some environmental awareness groups are promoting to address these issues.

Materials:

- Steve Parish Discover and Learn: Amazing Facts about Australia--Giant Wall Map
- my "treasure trunk"
- Photographs or slides of various environmental challenges faced by Australians
- overhead screen
- brochures, books, booklets
- paper to use for student created brochures
- computers with internet connections

- magazines
- photos
- markers and colored pencils
- pencils and pens
- paper for research

Strategies:

Show several items from the "treasure trunk" of items collected throughout the adventure in Australia.

Show students the Giant Wall Map by Steve Parish Discover and Learn: Amazing Facts about Australia. Share some of the facts which pertain to today's lesson, for example:

"Sydney is the capital of New South Wales, established in 1788 by Captain Arthur Phillip. It stands on one of the world's finest natural harbors, Port Jackson, better known as Sydney Harbor. About one quarter of Australia's population lives in Sydney."

"Lake Eyre, SA, though usually dry, is Australia's largest lake, capable of filling to 30 billion m³ of water. The bed of Lake Eyre is Australia's lowest point, at 15.2 m below sea level."

Students will be shown a variety of photographs made into a digital slide presentation taken during our exploration of various environmental challenges and we will discuss each photo. Teachers who have not had such an opportunity yet may wish to download photos from the internet or use photos which may be available in the student textbooks. A good variety of photos illustrating environmental issues may include:

- the Outback (arid, drought)
- the Murray River (pollution)
- various photos around Sydney Harbor and Melbourne (infrastructure spreading, immigration, population density, traffic congestion, smog, coastal development)
- exotic animal species such as the cane toad, water buffalo, camels, rabbits
- trash cans divided into sections for recycling purposes
- rural areas set aside for ecological purposes, such as the land care facility near Holbrook, and Burrumbuttock Primary School
- Shipwreck coast (coastal erosion)
- Kakadu National Park (humans infringing on wildlife habitat)

- Kuranda Scenic Railway and the Great Barrier Reef (the effects of tourism on the environment)
- Rain Forest Habitat Center and Rain Forest at Mossman Gorge near Cairns (delicate environments threatened by human infringement)

Discuss the effects on Australia's environments shown in each slide.

Divide each class into 8 small groups or pairs, depending on class size. Have each group research one of the following environmental protection agencies:

- Australia Conservation Foundation
- Landcare Australia
- Friends of the Earth Australia
- Greening Australia
- Wilderness Society
- Waterwatch Australia
- Australian Greenhouse Office
- Coastcare

Groups may use the internet, brochures, resource books, etc. to research the following information:

- Explain the goals of this agency.
- When was this agency formed?
- In what area(s) of Australia is this agency active?
- Describe what activities this agency does in order to achieve their goals
- Describe the projects with which this agency is currently involved.
- Explain how this agency is funded.
- How many active members does this agency have?
- How does this agency try to educate the general public in order to accomplish its goals?
- Explain the effects you believe this agency may have in the future on Australia's environment.

Evaluation:

Each group will design a tri-fold brochure for their particular agency which includes the information from their research as well as pictures from photos or magazine clippings or drawings which convey the goals and projects and the agency. These will be displayed at the Australian Cultural Fair.

Interdisciplinary Connections:

Art

Finish any pieces of art which are not yet completed and create displays for the Australian Cultural Fair.

Language Arts

Discuss a cultural challenge facing Australians: the human rights issues regarding Aboriginal Australians. These indigenous peoples have endured many human rights violations, including inferior levels of education, employment opportunities, medical care, housing, and government services. They have also suffered through the "stolen generation", an eighty year period when Aboriginal children were stolen from their families and placed in orphanages or foster homes. Students could perhaps orally compare and contrast the Aborigines to how many Native Americans were treated in the states during the 1800s.

Watch the video, *The Rabbit Proof Fence* (this video can be ordered through most video retailers in the US and online).

Afterwards, students will write a reaction paper describing how they feel about this issue in Australia.

(This lesson may take two 90-minute class periods)

Math

Using the website for the Australian Bureau of Statistics (www.abs.gov.au) or other websites, students will research statistics of Australia's demographics, such as: literacy rate, birth rate, death rate, infant mortality rate, life expectancy, religions practiced by percentages of the population, population density, projected population growth rate, amount of arable land, and gross domestic product. Each computer class will then construct a poster size chart which displays these statistics, including a class summary paragraph which explains any conclusions about future trends or issues in with the population of Australia. These charts will be displayed at the Australian Culture Fair.

Comp Tech

Using the website for the Australia Conservation Foundation (www.acfonline.org.au) and perhaps other websites from the environmental protection agencies in Australia, outline the steps which can be taken to reduce water, energy use, and waste. Construct a small poster using computer graphics and imaging which promotes strategies that Australians can take to reduce waste at home. These will be displayed at the Australian Cultural Fair.

Science

Students will choose one introduced species of flora or fauna to research. Some species from which they may choose may include mission grass, prickly pear, salvinia, para grass, Japanese kelp, water hyacinth, cane toads, rabbits, starlings, water buffalo, camels, cats, and foxes. Research should include:

- the origin of the introduced species
- the date and place of introduction
- the reason it was introduced
- the present distribution of the selected species and its rate of spread
- the environmental and economic impact of the introduced species
- the management strategies being used to control the species

Students should then construct a colorful poster including a drawing, photo, or picture of their plant or animal and the information they learned from their research.

Home Economics

Today's recipe:

Rouseabouts Cake:

Ingredients:

- 2 cups dried mixed fruit
- 1 and one-fourth cups of brown sugar
- 1 cup strong black tea
- 1 egg, lightly beaten
- 4 tablespoons of golden syrup
- 4 cups of self-rising flour
- 1 teaspoon of mixed spice, cinnamon, nutmeg, and cloves

Directions:

Place fruit and brown sugar in a bowl and pour tea over it. Cover and let stand over night (the teacher will need to prepare this step the day before).

Grease cake tin.

Combine egg, golden syrup, flour and spice to the fruit and tea. Mix well. Spoon mixture into prepared tin and place inside oven.

Bake in oven about 1-1 and one-half hours.

Research and type recipes for the cookbook.

Band/Chorus

Students will practices for their performance of Australian songs at the Australia Cultural Fair.

Agriculture

Students will conclude their study of the flora indigenous to Australia and finish their sketches, and prepare the display of sketches and information for the Australian Cultural Fair.

Technology

Students will finish their wooden Aboriginal handicrafts and make labels describing what each is for their display at the Australian Cultural Fair.

CULMINATING FOLLOW-UP ACTIVITY AND FINAL ASSESSMENT

Culminating Activity: The culminating unit activity will be the Australian cultural fair which will include a display of reports, collages, stories, poems, posters, charts, graphs, journals, arts and crafts, photos, maps, etc.; a performance of popular Australian music by the band and chorus classes; samplings of various authentic Australian foods prepared by the students; and copies of the Australian cookbooks including each student's recipe prepared will be available. The Australia Culture Fair, will be held in the evening in the school cafeteria and auditorium and invited will be the faculty, staff, parents, and community.

Activities for each class:

Geography classes: Students will have studied aspects of the diversity of Australia, including physical landscapes, climates, various cultures, history of settlement, the uniqueness of Kakadu National Park, a variety of flora and fauna, and future challenges for the environments of Australia. The graphic organizers, maps, timelines, posters, etc. created by students in Geography classes will be on display.

Art classes: Students will display their "Aboriginal" art work illustrating an activity from daily life or a story read in Language Arts classes; their rock art paintings based on those in Kakadu; and any illustrations done to supplement lessons in other subject areas.

Language Arts classes: Student volunteers will read aloud and display a variety of Australian literature including:

- poems by Banjo Patterson and Henry Lawson
- excerpts from the book *Aussie Country Comedy Australiana* by Neil Hulm
- stories from *Uluru Stories* from the Anangu people, English version by David Bonn
- student created stories using Australian English lingo

Students will also display and perhaps read aloud journal entries and other reports written to supplement lessons learned in other subject areas.

Math classes: Students will display the charts and graphs they constructed such as climate graphs, population pyramids, demographics charts, and endemic species charts which coordinated with topics from other subject areas.

Computer classes: Students used the internet to research information on modern Australia for reports and statistics for charts and graphs for other subject areas, which will be on display.

Science classes: Students will display the charts about uranium mining in Kakadu, reports about the distribution of the Australian population, the posters and brochures on Australia's fauna, the nonindigenous species charts, and the collages illustrating the diverse natural environments of Australia.

Home Economics class: Students will have researched and prepared some traditional Australian dishes to serve at the fair including Pavlova, Lemon Myrtle Cheesecake, Pumpkin Soup, Damper, and Rouseabouts Cake and perhaps other recipes from the cookbook *Australian Bush Cooking* by Cathy Savage and Craig Lewis. All of the recipes prepared will be compiled into a small cookbook which will be published and copies given away at the Australian Cultural Fair.

Band and Chorus classes: Students will perform popular Australian songs such as: *Waltzin' Mathilda, Advance Australia Fair, Botany Bay, Click Go the Shears, The Black Velvet Band, The Dying Stockman, The Overlanders, The Wild Colonial Boy, and The Wild Rover No More.*

Agriculture classes: Students will display their sketches of the indigenous flora species studied throughout this unit.

Technology classes: Students will display and describe the "Aboriginal" handicrafts they made and painted/woodburned depicting handicrafts from the central and western desert areas of Australia such as music sticks, bowls, boomerangs, shields, clubs, chisels, and various carvings of desert animals such as goanna, lizards, snakes, and echidna.

After the fair, the DVD *Faces in the Mob* will be shown in the auditorium for students and guests to watch.

Thank you for your role in helping me fulfill a life long goal of touring Australia and for inspiring me to create opportunities to share such interesting knowledge with my students. The Australian-American Fulbright Commission trip was a fantastic experience I will always cherish! Thank you again for a lifetime of treasured memories!

Sincerely,
Vonda Tabor