

EXPLORING *The* CHAFFEY TRAIL

YEARS 3 & 4

YEAR 3 • **COMMUNITY AND CELEBRATIONS**

YEAR 4 • **AUSTRALIA BEFORE 1800**

Explore thechaffeytrail.com.au



The Olden Days

History in pictures

A Unit of Work for VELS Level 3 (Grades 3 & 4)

Acknowledgements

- Trumble, T. (et. al.) (1985) *Mildura and Sunraysia*. Mildura and Sunraysia Research Publications Pty. Ltd., Blackburn.
- ACARA: Australian Curriculum, Assessment and Reporting Authority. Australian Curriculum: History. Located at <http://www.australiancurriculum.edu.au/History/Curriculum/F-10>. Accessed July 2011.
- Extract from National Trust Teacher Notes Como / Rippon Lea – Courtesy of the National Trust of Australia (Victoria). Used with permission
- Revised by Lynda Robertson, July 2011.



VELS and National Curriculum Learning Focus Links

Level 3 VELS

Physical, Personal and Social Learning

Discipline-based Learning

- Humanities
 - Humanities Knowledge and understanding
 - Describe and sequence key events in Australian history, including key commemorations
 - Describe how aspects of places in their local area have changed over time
 - Describe the human and physical characteristics of their local area and other parts of Victoria
 - Describe how people use and affect different environments in Victoria
 - Humanities reasoning and interpretation
 - Use a range of historical evidence, including oral history, artefacts, narratives and pictures, to retell events and describe historical characters
 - Develop simple timelines to show events in sequence
 - Explain some of the differences between different types of historical evidence, and frame questions to further explore historical events
 - Draw simple maps and plans of familiar environments observing basic mapping conventions
- English

Interdisciplinary Learning

- Communication
 - Listening, viewing and responding
 - Presenting
- Thinking Processes
 - Reasoning, processing and inquiry
 - Creativity
 - Reflection, evaluation and metacognition

Australian Curriculum: History (Grade 3)

Key Inquiry Questions

- Community and Remembrance
- Who lived here first and how do we know?
- How has our community changed? What features have been lost and what features have been retained?
- What is the nature of the contribution made by different groups and individuals in the community?
- How and why do people choose to remember significant events of the past?

Historical Skills

- Chronology, terms and concepts
- Historical questions and research
- Analysis and use of sources
- Perspectives and interpretations
- Explanation and communication

Historical Knowledge and Understanding

- The importance of Country and Place to Aboriginal and/or Torres Strait Islander peoples who belong to a local area. (This is intended to be a local area study with a focus on one Language group; however, if information or sources are not readily available, another representative area may be studied) (ACHHKo6o)
- ONE important example of change and ONE important example of continuity over time in the local community, region or state/territory; for example, in relation to the areas of transport, work, education, natural and built environments, entertainment, daily life (ACHHKo61)
- The role that people of diverse backgrounds have played in the development and character of the local community (ACHHKo62)

Australian Curriculum: History (Grade 4)

Key Inquiry Questions

First Contacts

- Why did the great journeys of exploration occur?
- What was life like for Aboriginal and/or Torres Strait Islander Peoples before the arrival of the Europeans?
- Why did the Europeans settle in Australia?
- What was the nature and consequence of contact between Aboriginal and/or Torres Strait Islander Peoples and early traders, explorers and settlers?

Historical Skills

- Chronology, terms and concepts
- Historical questions and research
- Analysis and use of sources
- Perspectives and interpretations
- Explanation and communication

Historical Knowledge and Understanding

- The diversity and longevity of Australia's first peoples and the ways Aboriginal and/or Torres Strait Islander peoples are connected to Country and Place (land, sea, waterways and skies) and the implications for their daily lives. (ACHHKo77)
- The nature of contact between Aboriginal people and/or Torres Strait Islanders and others, for example, the Macassans and the Europeans, and the effects of these interactions on, for example families and the environment (ACHHKo8o)

Pre-Excursion Activities

Lesson 1

1. Mildura before European settlement

As a class, brainstorm a list of words describing the natural features of Mildura. Consider the river, elevation, vegetation and climate. Discuss what Mildura may have looked like before anybody lived here.

2. Aboriginal Mildura

Explain that Aboriginal remains at Mungo National Park have been dated back 40,000 years – Mungo is just 110km from Buronga. Generations of Aboriginal people have lived along the Murray River which had a good supply of shellfish, yabbies, yams and tubers. There were also mammals and birdlife.

Some of the tribes included:

- Danggali in SA
- Barkindji to the north
- Maraura near Lake Victoria
- Kureinji
- Latji Latji in the Mildura area
- Wati Wati
- Tati Tati near Euston

Each tribe had their own developed culture and language. Discuss with students what Mildura may have looked like before European settlers arrived and compare it to your list from Activity 1.

3. Mildura's natural landscape

Have students draw or paint a picture of Mildura's natural landscape where they try to imagine what the district was like before European settlers came (ie. Before buildings, roads, irrigation and electricity).

Lesson 2

4. Growing up

Ask students what they think growing up would have been like for their parents. Have them consider what school would have been like, what they would have done for fun in their leisure time and their duties at home. Contrast this with what they feel growing up would have been like in their grandparents' time. Consider writing their ideas on the board, or having students work in small groups before having this class discussion.

5. Growing up in 1890

Explain to students that they will be looking at what it was like for children growing up in the 1890s in Mildura. Compare the dates to when their parents and grandparents were growing up – explain that students will be looking at what life was like for children even longer ago, and that this was around the time when Europeans began settling in the Mildura area. You may like to share a little more background history if you wish.

6. The Oswald Album

Distribute the “Mildura 1890” sheet to students (see Student Activity No. 1). Have students work in groups of four (each taking their own notes) to use the Oswald photographs (see Student Activity No. 2) to make guesses about what life was like for Mildura’s children in 1890. You may also like to explain a little about who Oswald was – a young professional photographer who came to Mildura from London. Ensure that they look for things which are “missing” – eg. Electricity poles, cars. Discuss students’ findings as a whole class.

7. Changing Mildura – An Aboriginal perspective

Show students a picture of Mary Woollong from 1934 (Student Activity No. 3). Explain that the picture was taken on the day that Mildura was officially declared a “city.”

- Discuss the changes that Mary may have observed since Europeans began settling the area in the 1890s (refer back to the photographs from the previous activity).
- Discuss how she is dressed, and her facial expressions.
- Mary was said to be the “last of the Murray tribes” of the Sunraysia area. In what ways had her lifestyle changed (consider method of dress, food, lifestyle, family and cultural influences).

8. Changing Mildura

Reinforce to students the idea that Mildura, and cities in general, are always changing. Ask students to interview an older family member (parent or grandparent) who can describe how Mildura has changed since they were a child. Brainstorm a list of questions with students. Some possible questions may include:

1. Whereabouts in Mildura was your family home?
2. What did Mildura look like when you were young?
3. How has Mildura changed (eg. Buildings, streets, industry)?
4. What were the best and worst things about Mildura when you were growing up?

Students will need to record their answers as a basis for discussion in the next lesson.

Lesson 3

9. Changing Mildura (review)

Using students interviews as a basis, discuss how Mildura has changed since their parents' and grandparents' time. Make a list of suggestions on the board.

10. Langtree Ave 1890 and 2011

Show students the panoramic photograph of Langtree Ave from 1890 (available from the Mildura Historical Society). Ask them if they can identify any of the buildings in the street. You will need to point out the key features (see Teacher Resource No. 1 for a list of these). See if students can identify which buildings have remained and which ones have changed (eg. New restaurants). Then give students sections of the "Eighth Street picture" from today (see Student Activity No. 4) and have them work in pairs to put it in order! Discuss the key changes – eg. Roads, types of shops and food, cars, electricity.

11. The Chaffey family and Rio Vista

Show students a picture of the Rio Vista and explain a little about the family who lived there – William Benjamin with his second wife, Hattie, their four children (one of whom was killed in WW1) and his three children from his first marriage (his first wife died in 1889). Then show students plans of the house (see Student Activity No. 5). As a class, discuss:

- The different types of rooms in the house
- The location of doors and windows
- The number of bathrooms and bedrooms
- What members of the family may have done in different rooms of the house

12. My house

Have students draw and label a floor plan of their home to compare to the plans of Rio Vista. Consider displaying these in the classroom. Discuss the key differences – eg. Number of bedrooms – do people still have such large families?

Lesson 4

13. Different homes

Re-visit the floor plan of the Rio Vista house. Have students compare the Chaffey family home to the floor plan they have drawn of their own home. Consider having students work in pairs and devise a list of key differences between the Rio Vista and the modern homes they have drawn. Additional information is available from Rio Vista if desired.

14. Mystery objects

Give students copies of the National Trust's "Mystery Objects" worksheet (see Student Activity No. 6) and see if they can work out what each object is. Explain that each object was part of daily life in the 1890s. Discuss their ideas and explain each object using the teacher's notes (Teacher Resource No. 2).

15. A famous olden days story

Read "The Tale of Peter Rabbit." Explain that it was written in 1902. Discuss the elements of the story and why it still appeals to children today. You may choose to do a more in-depth study of Beatrix Potter's tales if you wish.

16. Prepare for your field trip to the Millewa Pioneer Village at Meringur

Explain to students that they will be visiting the Millewa Pioneer Village at Meringur, where they will spend the day as a "child" in the 1890s. Discuss the kinds of buildings and objects they think they may encounter.

Excursion Activities

Your excursion to the Millewa Pioneer Village at Meringur can be facilitated by contacting the Chaffey Trail Project Officer: Telephone Julie (03) 050 188311 Email: chaffey.trail@mildura.vic.gov.au or Mildura & District Historical Society Email: mildurahistorical@gmail.com Society.

Upon arrival, students will dress in Victorian clothing. Throughout the day they will participate in the following activities:

1. Candle Dipping
2. Butter Churning
3. Natural Dyeing and Weaving
4. Old Fashioned Games
 - Long Rope Skipping
 - Maypole Dancing
 - Hopscotch
5. Old Fashioned Tools Workshop
6. An olden days school lesson

Further details of these activities is available at <http://teacher.scholastic.com/lessonrepro/lessonplans/oldendays.htm> or http://www.leics.gov.uk/victorian_games_and_toys.pdf. (See Teacher Resource 2).

An "olden days" lunch is also part of the excursion - take lots of photos of students in action!

Volunteers from the Mildura & District Historical Society, the Millewa Pioneer Village and Rio Vista, pending availability may be available to assist small groups. Email: mildurahistorical@gmail.com

Post-excursion Activities

17. Synthesis tasks

Have students complete a venn-diagram of the similarities and differences between life in the olden days and life today.

Discuss the reliability of the Millewa Pioneer Village at Meringur as a source of information. Do they believe it is accurate? Why, or why not?

Class narrative – “Our Day in the Olden Days”

Divide the field trip into sections and have students work in pairs to select two photographs and devise a narrative to explain what is happening in each. Compile the narratives and pictures in a class Photostory creation or booklet of “Our day in the olden days.”

Individual or group student project – “Time Capsule”

Have students use Photostory or PowerPoint to devise their own digital narrative of what life is like in Mildura today. They must imagine that it will be “found” by people in the future as a kind of “time capsule.” It needs to demonstrate what Mildura is like, and what life is like for them. Consider having a collection photos of Mildura which they can use to supplement ones they take themselves. What are the important things people of the future will need to know about Mildura?

Student Activity No. 1

Mildura 1890

| Information | Source of Evidence |
|--|--------------------|
| 1. How did children travel? | |
| 2. What kind of clothing did they wear? | |
| 3. What might children have done for fun? | |
| 4. What kind of jobs and chores might they have had? | |
| 5. What might school have been like? | |
| 6. What were houses and buildings like? | |

Student Activity No. 2

Oswald photographs

copies are available for photocopying, courtesy Mildura & District Historical Society

- 16a – boating
- 21b – residence, horse and cart
- 23a – school
- 24a – washing
- 30a – paddlesteamer
- 38a – post office, children in front
- 39a – boarding house, children in pic
- 41b – chemist, children in front
- 52b – family outside cottage
- 57b – tent dwelling
- 58b – homestead, children in front

Other images that show what life was like for children in the Chaffey era?

THE CHAFFEY TRAIL
Mildura ~ Australia's First Irrigation Colony

16a



OSWALD COLLECTION

MILDURA AND DISTRICT HISTORICAL SOCIETY

MURRAY RIVER

THE CHAFFEY TRAIL

Mildura ~ Australia's First Irrigation Colony

21b



MILDURA AND DISTRICT HISTORICAL SOCIETY
AUGUST 1889

OSWALD COLLECTION
MR. BRYCE'S RESIDENCE

23a



MILDURA AND DISTRICT HISTORICAL SOCIETY

JUNE 1890

OSWALD COLLECTION

MILDURA STATE SCHOOL

24a



MILDURA AND DISTRICT HISTORICAL SOCIETY

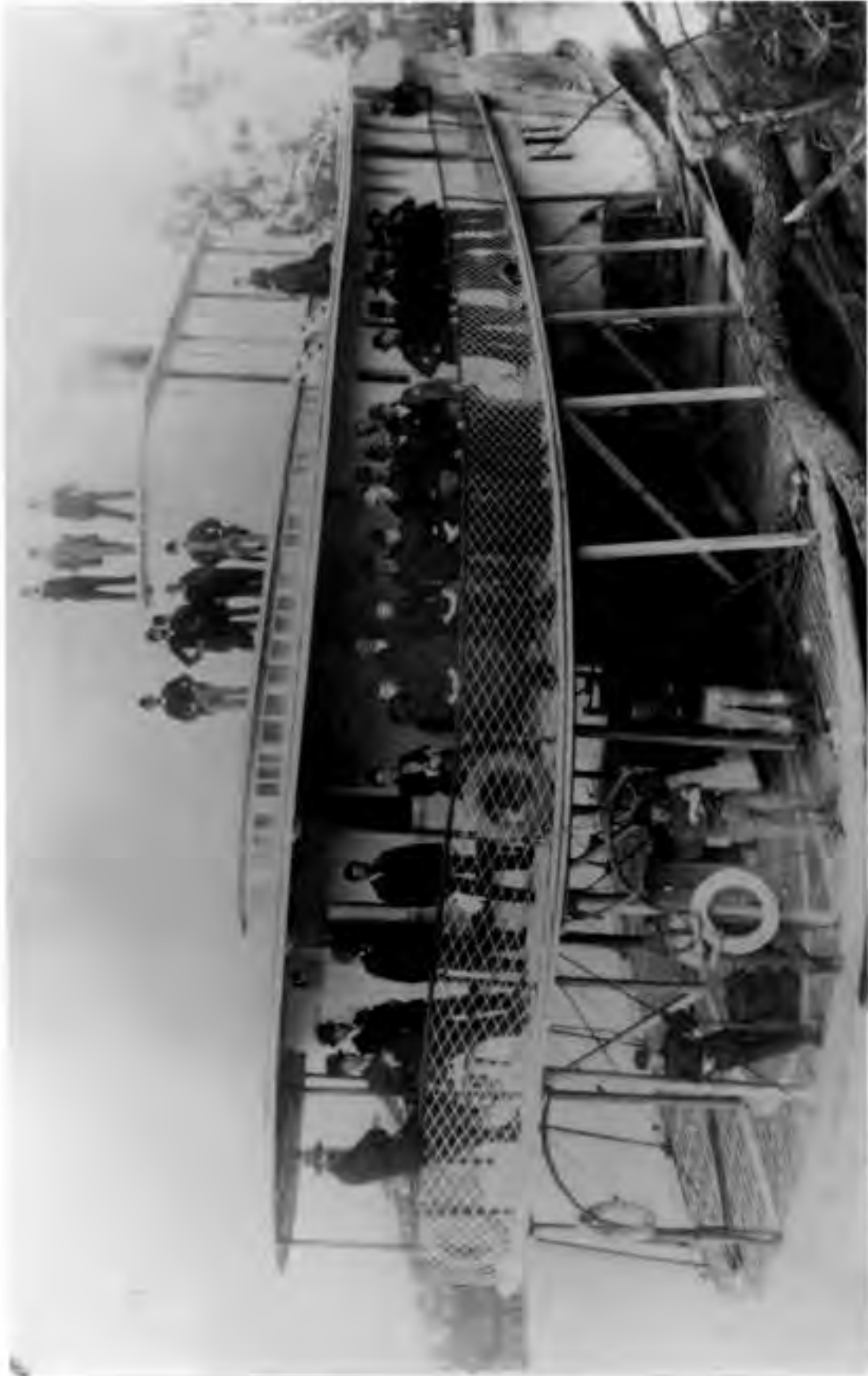
OSWALD COLLECTION

VIEW SOUTH FROM REAR OF COFFEE PALACE

THE CHAFFEY TRAIL

Mildura ~ Australia's First Irrigation Colony

30a



MILDURA AND DISTRICT HISTORICAL SOCIETY

JUNE 1890

OSWALD COLLECTION

PADDESTeamer ELLEN

38a



OSWALD COLLECTION

MILDURA POST OFFICE

MILDURA AND DISTRICT HISTORICAL SOCIETY

JUNE 1890

39a



OSWALD COLLECTION
MISS MURRAY'S BOARDING HOUSE DEC. 1890
MILDURA AND DISTRICT HISTORICAL SOCIETY

THE CHAFFEY TRAIL
Mildura ~ Australia's First Irrigation Colony

41b



OSWALD COLLECTION

MILDURA AND DISTRICT HISTORICAL SOCIETY

DR ABRAMOWSKI'S SURGERY

52b



MILDURA AND DISTRICT HISTORICAL SOCIETY
JULY 1890

OSWALD COLLECTION
WALWORTH'S (RISBY'S)

THE CHAFFEY TRAIL

Mildura ~ Australia's First Irrigation Colony

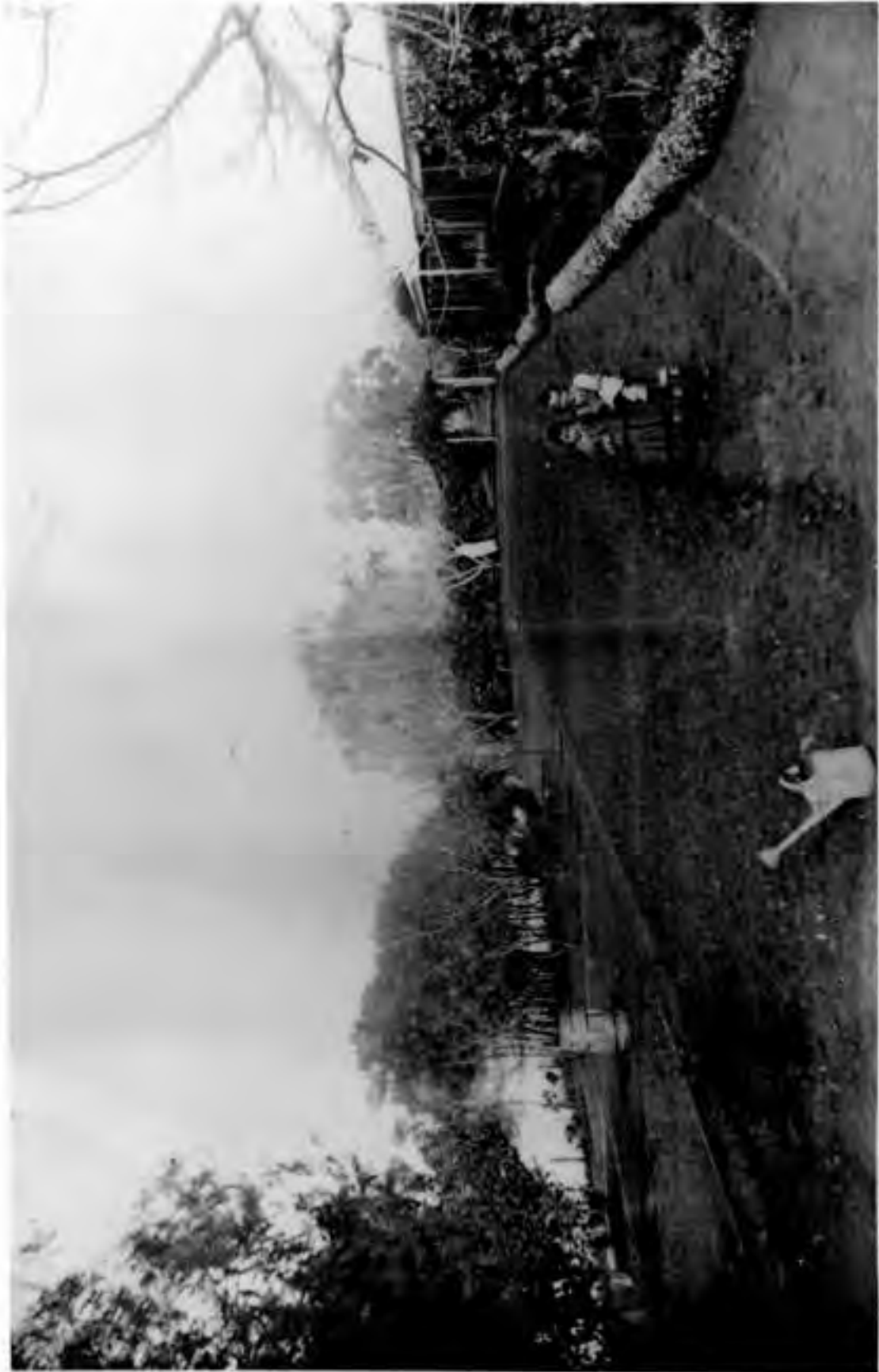
57b



MILDURA AND DISTRICT HISTORICAL SOCIETY

OSWALD COLLECTION

58b



MILDURA AND DISTRICT HISTORICAL SOCIETY

JUNE 1890

OSWALD COLLECTION

MILDURA HOMESTEAD

Student activity No.3

Mary Woorlong

Picture taken by L.G. Chandler available in Trumble, T. (et. al.) (1985) *Mildura and Sunraysia*. Mildura and Sunraysia Research Publications Pty. Ltd., Blackburn.



Student activity No. 4

Langtree Avenue Today

Photographs of present day buildings and shops for students to put in order and construct a modern day panorama.



THE CHAFFEY TRAIL

Mildura ~ Australia's First Irrigation Colony



THE CHAFFEY TRAIL

Mildura ~ Australia's First Irrigation Colony



THE CHAFFEY TRAIL

Mildura ~ Australia's First Irrigation Colony



Teacher Resource No. 1

Panoramic view of Mildura early 1900's – teacher's notes

Photo taken from Deakin Avenue, looking down Eighth Street, towards Langtree Avenue. What's different?



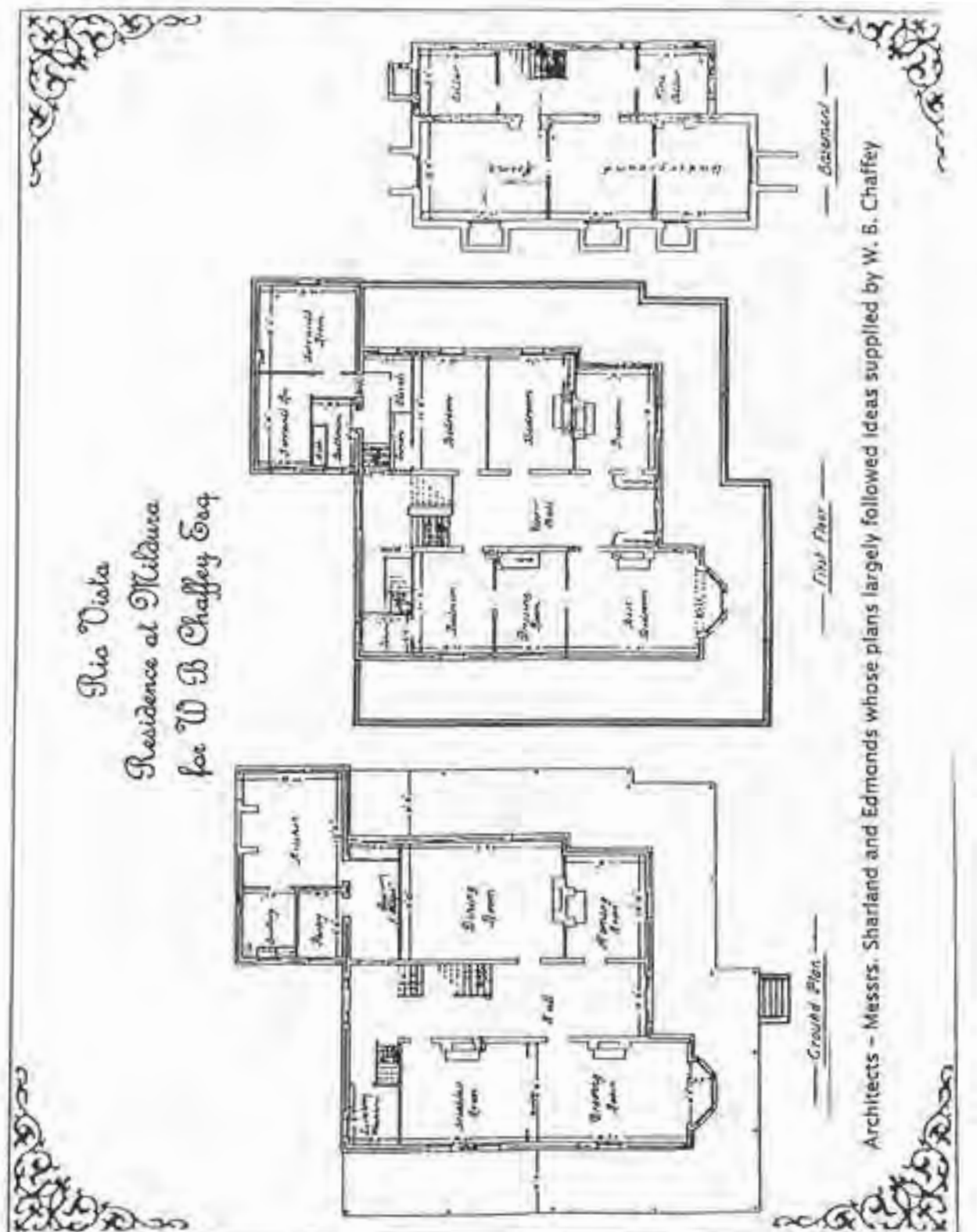
c.1940



22 July 2011

Student activity No. 5

Floorplan of Rio Vista



Student activity No. 6

Mystery Objects (courtesy of the National Trust)

Mystery Object! (Part 1)

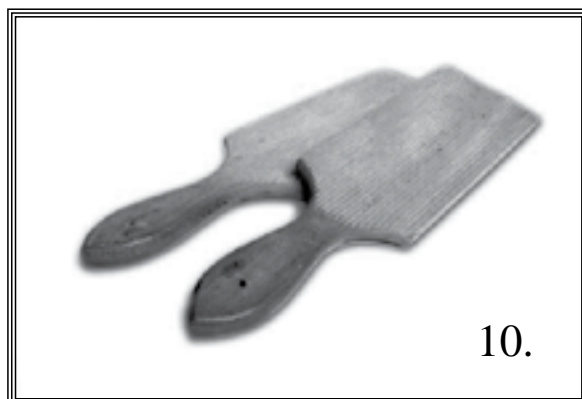
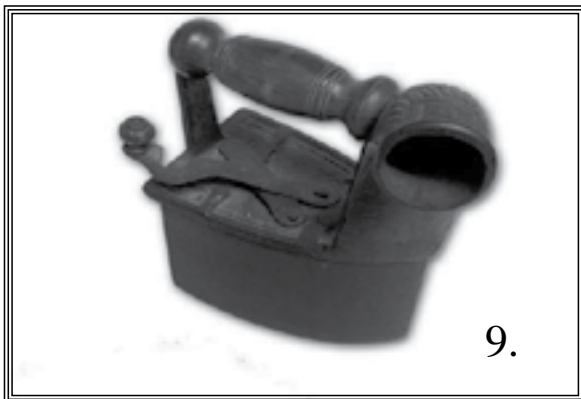
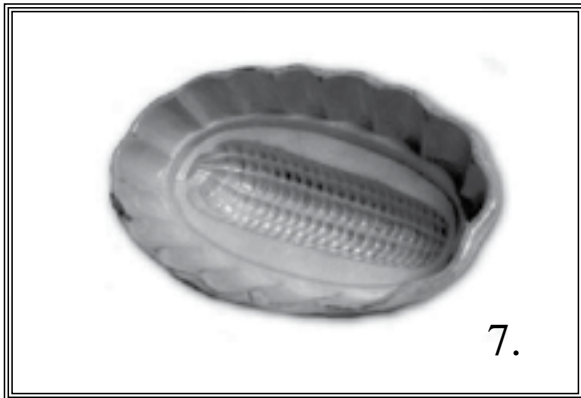
Can you guess as to what these things are?
What did people use them for?



THIS PAGE COURTESY OF

NATIONAL TRUST
Como Historic House & Garden
Primary Teachers' Notes

Mystery Object! (Part 2)



Teacher Resource No. 2

National Trust descriptions of mystery objects

Mystery Object! - Notes

1. Butter Churn

This wooden box has handle that turns a special wooden stirrer which turns cream into butter. Fresh cream was poured into the box and after turning the handle for a long time out came a big lump of yellow butter.

2. Ink well

Students used pens to write at school. They dipped the end of the pen into a small bottle like this and the ink would fill a special nib.

3. Carpet Beater

You couldn't clean a carpet with a vacuum cleaner in the 19th Century because few homes had electricity until much later. But you could beat your rugs with this cane rug beater!

4. Cobblers shoemaker

In the 19th Century people spent more effort and time repairing things, Shoes and clothes were very expensive. This device let you put new nails into your shoes and boots.

5. Hot Water Bottle

Rubber hot water bottles were not invented 100 years ago. So people warmed their bedsheets by filling these bottles with hot water and putting them in their beds.

6. Pumice Stone

Dish washing liquid and laundry detergent are new inventions. People in the past came up with clever ways of washing their clothes and dishes and pots and pans. This stone can be rubbed on clothes to remove stains and on pots to clean grease.

7. Jelly Mould

Made of china this jelly mould leaves a pretty picture of a corn cob in jelly. People in the past often had to prepare foods in special ways because they did not have refrigerators.

8. Muffin Tin

Not everything is so different in the past. These muffin tins look like the tin you might have at home in your kitchen. But it is made of iron and is very heavy. In the past they had to make things from different materials.

9. Charcoal Iron

What a job doing the iron one hundred years ago. You had to fill the iron with hot coals from a fire to heat the iron up. The chimney let the smoke out. And you really hoped that none of the soot from the iron landed on your clean clothes.

10. Butter pats

After you churned the butter you removed it from the butter churn using these special wooden paddles. By hitting the butter with the paddles you could make the butter into blocks.

11. Coal

This is a lump of coal. It looks pretty ordinary but coal was very important. People used it to make fires, to power steam engines, to heat their homes and even to do the ironing.

12. Blue

This is a small block of blue. People used this in their clothes washing water to make their clothes bright and white.

Rules for Children 1847

OF BEHAVIOUR AT SCHOOL

1. Behave to your teachers with humility and to your schoolfellows with respect.
2. Do not run into the school, but advance decently to the door.
3. When you enter, take off your hat, make your bow or curtsey, and walk straight to your seat.
4. Never talk in the school – for it interrupts yourself and others.
5. If you have anything to say to the master, wait till he is at leisure and then speak with modesty and plainness.
6. Observe nothing at school but your book – and never neglect that.
7. Never quarrel in school – for it shows idleness and a bad temper.
8. When the Master speaks to you, rise up to hear him and look him in the face when he speaks with modesty and attention.
9. Begin not to answer before he has done speaking, then now respectfully and answer him with humility.
10. When the school hours are over, go out as you cam in : quietly, softly and decently.
11. When you are out of school, go home without noise or delay; do not run or loiter, but do this as all things else, with discretion.
12. Do not speak at home or abroad of what has been done at school, but make yourself perfect in your task.

(Yyse's Young Gentleman & Ladies Guide, 1846)

Rules for School Teachers 1850s.

RULES FOR TEACHERS

1. TEACHERS EACH DAY WILL FILL LAMPS, CLEAN CHIMNEYS.
2. EACH TEACHER WILL BRING A BUCKET OF WATER AND A SCUTTLE OF COAL FOR THE DAY'S SESSION.
3. MAKE YOU PENS CAREFULLY. YOU MAY WHITTLE NIBS TO THE INDIVIDUAL TASTE OF THE PUPILS.
4. MEN TEACHERS MAY TAKE ONE EVENING EACH WEEK FOR COURTING PURPOSES, OR TWO EVENINGS A WEEK IF THEY GO TO CHURCH REGULARLY.
5. AFTER TEN HOURS IN SCHOOL, THE TEACHERS MAY SPEND THE REMAINING TIME READING THE BIBLE OR OTHER GOOD BOOKS.
6. WOMEN TEACHERS WHO MARRY OR ENGAGE IN UNSEEMLY CONDUCT WILL BE DISMISSED.
7. EVERY TEACHER SHOULD LAY ASIDE FROM EACH PAY A GOODLY SUM OF HIS EARNINGS FOR HIS BENEFIT DURING HIS DECLINING YEARS SO THAT HE WILL NOT BECOME A BURDEN ON SOCIETY.
8. ANY TEACHER WHO SMOKES, USES LIQUOR IN ANY FORM, FREQUENTS POOL OR PUBLIC HALLS, OR GETS SHAVED IN A BARBER SHOP WILL GIVE GOOD REASON TO SUSPECT HIS WORTH, INTENTION, INTEGRITY AND HONESTY.
9. THE TEACHER WHO PERFORMS HIS LABOUR FAITHFULLY AND WITHOUT FAULT FOR FIVE YEARS WILL BE GIVEN AN INCREASE OF TWO SHILLINGS AND FIVE PENCE PER WEEK IN HIS PAY, PROVIDING THE BOARD OF EDUCATION APPROVES.

Teacher Resource No. 2

all classroom activity associated with History Unit 11: (What was it like for children living in Victorian Britain?)

| LEARNING OBJECTIVES CHILDREN LEARN | ACTIVITY | LEARNING OUTCOMES CHILDREN | POINTS TO NOTE |
|--|--|---|--|
| <ul style="list-style-type: none"> How to behave as a Victorian schoolchild. | The group is seated in the hall room and the session is explained to that they know what is expected of them. An agreement is sought for everyone to act in role and not try to spoil the session. | <ul style="list-style-type: none"> Are able to conduct themselves properly in the context of the classroom. | We do treat the activity seriously and stay in role, but we don't overact and pretend that Victorian teachers were more beastly than they really were. |
| <ul style="list-style-type: none"> About cleanliness and proper conduct. | The group lined up outside the schoolroom to have their hands and handkerchiefs inspected. | <ul style="list-style-type: none"> Get into role before they enter the classroom. | If it is raining, we don't do this activity. |
| <ul style="list-style-type: none"> How to use slate and chalk. | Children do turns on the slates and hold them up for inspection by the teacher. | <ul style="list-style-type: none"> Get used to acting as a group, not as individuals. | Younger children write letters and numbers rather than sums. |
| <ul style="list-style-type: none"> How children learned music of their lessons. | Children chant their tables, backwards alphabet and religious facts hung on the walls. | <ul style="list-style-type: none"> Their lessons and start to learn "The Kings & Queens Of England". | Our aim is to get children to understand how hard and repetitive lessons normally are. |
| <ul style="list-style-type: none"> How to do call. | Children practice call in rows, out in the courtyard. | <ul style="list-style-type: none"> How to do call and that even a fun activity is done in an uncomplaining way. | We often miss this activity out if time or weather do not permit it. |
| <ul style="list-style-type: none"> How to write properly with pen and ink. | Children learn how to write properly with pen and ink. They practice forming complete letters. | <ul style="list-style-type: none"> How hard it must have been for children to write neatly and how much technology has improved writing. | There is other material on the worksheet, which can be done back in school. |
| <ul style="list-style-type: none"> About the religious nature of Victorian schools. | Children sing a hymn and repeat two prayers, at various stages while in the classroom. | <ul style="list-style-type: none"> About the importance of religion in English schools. | Our religious material is very general and mentions only "Lord". We can leave it out if necessary, but pretty much as the session is history rather than religion. |

This resource of work is based on a lesson plan provided by the Department for Education, 2000-2001.

The Olden Days

Adapted from "Science World," November 5, 1993.

by Wendy Buchberg and Sandy Rouleau

Life was very different in the "olden days." Most children had a full complement of chores and other responsibilities and quite a lot was expected of the youngsters in a family. Your students will be interested in trying their hand at some of the "chores" described in this project. Interestingly, candle dipping and butter churning were considered "drudge" work by most children in the olden days. Ask your students if they would like these chores to be part of their regular routine!

As your class participates in this project, keep in mind that primary age children are still forming a concept of time. You may wish to use less precise references to times past -- such as the "olden days" or "long ago before your parents, your grandparents, and you great-grandparents were born." The goal of this project is to provide experiences that will a) serve as a foundation for what students will learn about history in later grades and b) inspire an appreciation for the uniqueness of the past as well as the present.

To guide you in tailoring your olden days unit to the particular history of your community or region, contact the following places in your locality for field trips, class visitors, and artifacts to borrow:

- Local historical society
- Antique shop
- Nature center
- Farm
- Vintage book shop
- Craft shop or local artisans' guild
- Farrier
- Living history museum

We have also found many books and videos that are helpful in bringing this unit to life and providing additional details. As you plan your unit, consider whether you want to enjoy these hands-on activities over the course of a week or concentrated into an olden days festival such as a "Homestead Day." Your decision will probably depend on the availability of space and adult volunteers, but you'll find these activities give you lots of flexibility to tailor the unit to your own situation.

- Candle Dipping
- Butter Churning
- Old-Fashioned Tools
- School Days
- Additional Resources

Candle Dipping

Life without electricity, especially the electric light at night we all take for granted, is difficult for young children to fathom. One of the biggest family jobs in the olden days, especially before oil lamps became popular, was to make candles. In the past, candle wax was derived from beeswax or boiling animal fat into tallow, and it was a greasy, messy job disliked by most children. However, by using a few simple modern materials and exercising some caution, your class can have the experience of making their own beautiful candles. Candle-dipping is not only an art; it has interesting science applications your students can discuss, such as the effect of hot and cold temperatures on the wax, and the fact that a substance can change from solid to liquid.

This process is easiest and quickest if you have access to a stove where you can heat water in some deep pots.

Safety Note: set up your dipping area far from the stove. We also recommend having one or two parent volunteers on hand for this activity to monitor for safety, since the wax does get hot.

Materials:

- Paraffin blocks, such as those used for canning (8-10 blocks per class) Beeswax can also be used, but it is a more expensive alternative.
- 8 tall, thin metal cans without paper labels; tennis ball cans are the perfect size
- broken crayon fragments, with labels peeled off, sorted by color groups (have each child bring in a supply from home)
- cotton string for wicks, cut into 18" lengths (or you may purchase wicks from a craft store)
- very cold tap water
- wooden stirring sticks (available at paint stores) or an old wooden spoon
- newspaper to protect your tabletop
- old potholders
- small labels or masking tape to identify each child's candle
- one or two deep pots of boiling water, and a stove

Safety Note: The paraffin is Never melted directly over the heat source! Always create a "double boiler" effect as described below.

Break up one block of paraffin in each of six cans. Add a generous amount of crayon pieces, a different color family in each can. Set the cans upright in a deep kettle (or kettles) of boiling water, so that the level of the water is halfway up the side of the cans. Stir and break up paraffin and crayon wax until it is entirely melted and the color in each can pleases you.

Fill the remaining two cans with very cold water.

Two children at a time can dip candles -- each child gets a wick and works with three wax cans and one water can. Leaving about six inches untouched by wax to hold on to, dip the string first into wax, then immediately into cold water...then into another color of wax...then back into cold water...repeating the process for about five minutes. After

the first few dips, you may need to carefully straighten out the wick if it curls in the hot wax. Each layer of wax on the wick is hardened by the cold water and allows the next layer of wax to adhere. Gradually, the candle begins to thicken and take shape. It's fascinating to watch the different layers of colors build up. When it is about 12 inches long and 3/4 inch in diameter at the bottom, let the candle sit in the cold water for about 30-60 seconds to let it get firm. Attach a name label to the wick, and set aside for further hardening. Talk about why the candle is thicker at the bottom and thinner, or "tapered" at the top hence the other name for candles -- "tapers."

You or an adult volunteer will need to add and melt more paraffin and crayon pieces as the level in the cans decreases. You will also need to replenish the ice cold water every 10 minutes or so, as students take their turns at dipping.

It's fun to have background music playing while doing this activity, and have students march around the table, alternating dipping in wax and water. Students may be interested to learn that in authentic candle dipping, double-length wicks were used, held in the middle, so that two candles at a time could be dipped on one wick. Many double wicks were suspended from a dowel and a dozen candles could be made at one time! They were hung to dry by the exposed bit of wick between the two candles and snipped apart later. You may be able to find fine handmade candles today that are made this way. However, we think your students will be amazed at the beautiful results of their own first efforts at candle making! Remind students as they take their candles home, that they should only be lit and used under an adult's supervision.

Butter Churning

Before people were cholesterol- and fat-conscious, butter was a common condiment on every table. Today's children have no idea of where many foods come from, and it's fun to watch their amazement as something as basic as butter forms right before their eyes.

If it is possible to locate an authentic butter churn, that would be the ideal way to show the children how long and hard adults and children had to work to make butter in the olden days. Some people disliked the job of churning so much that they invented a DOG-driven churn! (See *Historic Tools and Gadgets*, by Bobbie Kalman. Crabtree, 1992, pp. 5 and 7.) Just follow the description in Chapter Two of *Little House in the Big Woods*, by Laura Ingalls Wilder for use with either a standing churn or a tabletop jar-mounted model.

For a less complicated process that still shows part of the complexity of making butter, you can churn the cream in baby food jars. If you are able to start collecting the jars early enough, then each child will be able to have his or her own jar of butter to churn and sample in school and then take home to share with the family. Labeling the jars with each child's name before starting the project will eliminate confusion when the process is finished. An alternative procedure is to make one or two larger batches in clean plastic peanut butter jars and let everyone take turns churning the big jars.

The process itself is really quite simple. Purchase, or have families donate, containers of heavy cream (not light or half-and-half...it must be heavy!), enough to fill each jar 2/3 full. Keep the cream refrigerated until you are ready to begin. Fasten each jar lid securely. Then have the children begin to shake the jar up and down vigorously. While shaking, or churning, we like to sit in a circle and talk about where the cream came from, and how in the olden days cream would rise to the top of a bottle of milk.

To pass the time while churning, children often used to recite this traditional chant:

Come, butter, come!

Come, butter, come!

(Peter) standing at the gate

Waiting for a butter cake.....

Come, butter, come!

In our classes, we go around the circle, giving each child a turn to substitute his or her name in the chant. After about 10 minutes of shaking, the children will notice a change -- no more sounds of sloshing cream inside the jar! At this point, what they have made is whipped cream! Encourage them to keep shaking...in just another minute or two, a round ball, surrounded by liquid, will begin to form inside the jar. This round ball is the butter, and the liquid is buttermilk. This is an excellent opportunity to "talk science" -- about how a substance can change its properties from a liquid to a semi-solid, and finally to a solid plus a liquid.

Children should then drain off the water into a cup -- some adventurous children may enjoy drinking the rich buttermilk. A special treat right after making the butter is to spread it while still soft on saltine crackers or bread and enjoy some of the freshly churned butter. When done, cap the jars, label with each child's name, refrigerate, and send home at the end of the day.

If you find you have more cream than you need for each child's butter jar, use the extra to fill a larger jar 2/3 full, and proceed as above, but stop the process when you reach the whipped cream stage. Serve with fresh berries and a bit of sugar.

Natural Dyeing and Weaving

Most clothing was made at home in the olden days, and many pioneer families had to spin their own yarns and make their own cloth. Color was extremely important to these people as a way of brightening what otherwise might be a dreary existence. Of course, they looked to nature as a source for the colors they wanted.

This hands-on activity lets children discover the natural sources for some of their favorite fabric colors. They can dye 6-inch samples of cotton fabric or thick cotton twine. We suggest you set up the activity by reading *Charlie Needs a Cloak*, by Tomie DePaola, focusing on the different steps involved in creating dyes and making cloth.

About two weeks ahead of time, ask your families to save and send in onion skins. Also put out a call for several bunches of beets (or cans of plain sliced beets); two bags of raw cranberries; several pints of blueberries; and if available in your area, black walnut hulls. Finally, you will need one crock pot for each dye you prepare, some old spoons, a strainer and some tongs.

The day before you plan to use the dyes, put your materials in the pots, add water to fill the pots 1/2 to 2/3 full, and cook on high. Start your pots cooking first thing in the morning, let them cook throughout the school day, and then unplug before you go home. Refrigeration overnight is not necessary -- just cover the pots. All you'll have to do the next morning is plug them back in to allow the dyes to reheat and strain the liquid to remove the food solids. Explain to the children that, although these dyes are made from are food items, we are not preparing or preserving them to be eaten, and nothing should be put in their mouths.

To simplify our project for first graders (and to keep our borrowed pots from discoloring), we did not add any mordant such as alum to the dye solutions to make them permanent. For longer-lasting results, however, you may wish to do so.

Children use the tongs to dip their cotton cloth strips or twine into the solutions. Have a good supply of newspapers laid out to provide a drying area, labeled for each of the dyes used. When the dyed cloth or twine is dry, the students can glue their samples onto stiff paper or cardboard and write the name of each dye next to the samples.

Another dimension to this activity can be accomplished by using plain white woolen yarn cut into 18 inch lengths. Your beautiful dyed yarn can later be used on handmade cardboard looms to create small woven projects. Your librarian can direct you to craft books showing how to make these projects.

We were lucky one year to have a parent who raised sheep on her farm and was an experienced spinner. She volunteered to visit our class to demonstrate wool carding and spinning for our class. We used undyed yarn she spun for our dyeing projects that year. In other years, we have turned to our local craft shops to suggest names of spinners who could share their craft with our classes. Children are fascinated by the spinning wheel, so do try to include this as part of your activities.

Old Fashioned Tools

Life and work were hard in the olden days, but the inventive people of those times always had the goal of trying to make life just a little bit easier. A look at tools and gadgets of the past can tell us a great deal about the quality of life in those days.

In our community in upstate New York, we are very fortunate to be able to tap into the resources of our local nature center, which also has a small homestead. From the homestead collection, we are able to borrow a collection of about 20 unusual tools that were commonly used in the olden days, but which look absolutely foreign to most of us today. In your community, in addition to a nature center, you might consult your local historical society or perhaps an antiques dealer to help you put together a similar collection on loan. In the absence of any of these resources, obtain Bobbie Kalman's beautiful volume *Tools and Gadgets* from the "Historic Communities" Series (Crabtree, 1992) and utilize its excellent illustrations for a pictorial adaptation of this activity.

Arrange the tools in a big circle that allows the children ample room to walk around and look at all of them. Encourage them to pick up the tools with care (when appropriate -- use good judgment for sharp tools) and try to figure out what they are and how they might have been used. When the children have had enough time to investigate the tools, have each child sit near a tool of his or her choice. One at a time, go around the circle, asking the children what they think the tool might be and what it might have been used for. If the children are having a difficult time, give some clues about how the tool was used or ask the group what parts of the tool might remind them of. If no one correctly guesses the true name and purpose of the tool, then share that information with them. This is a very enjoyable guessing game; some of the real uses for these tools are as funny as the children's guesses!

Some of the tools and gadgets we have enjoyed examining with our classes include: rug beaters, ice tongs, milking stools, mortar and pestles, pulleys, popcorn poppers, toe-toasters, clamps, wringers, candle snuffers, leech barrels, bellows, dental tools, shoe scrapers, wash boards, foot warmers and belly warmers....just to name a few!

School Days

Not only were schools structured very differently long ago, but our national attitude toward formal schooling was very different, too. School attendance in the 1800's was largely determined by a family's geographical location, their financial situation, and even their race.

One fascinating contrast for young children is the fact that 19th century children grew into adult responsibilities so quickly that attending school was not always a family's top priority for their offspring. Usually, it was only city children who attended school on a daily basis for most of the year. Farm children in rural areas were needed to assist their parents during all but the winter months, and so could attend school only briefly each year. For many children, such as boys in coal mining towns, their only access to any formalized education was at Sunday School. It was a very rare situation for ANY child to attend school past eighth grade; the privilege of high school or college education was reserved for a wealthy minority, usually males. Today's children are also amazed to learn that many school teachers in the olden days began their careers at about 16 years old!

Bobbie Kalman's Early Schools (Crabtree, 1982) is a "must-have" resource for pictures showing all aspects of school life in the 19th century. Invite students to look carefully and critically at the pictures and see what similarities and differences they find in comparison to today's schools. Encourage them to pay attention to details such as the size of the class, clothing, desks, apparent ages of the students, learning materials in the room, etc. A debate over which was better -- "then" or "now" -- is sure to erupt!

For a delightful and memorable activity, try creating a facsimile of a 19th century one-room schoolhouse for your students. Bobbie Kalman's Early Schools is perfect for ideas to help you set this up realistically.

Here's what we assembled for our one-room schoolhouse:

- facsimiles of McGuffey's Readers
- teacher-made hornbooks created from cardboard, with a string for students to wear around their necks
- individual slates
- a pretend "dunce cap" made from poster board
- a pointer for the chalkboard
- old-fashioned calico dress and cap for the teacher
- a school bell

During our 20-minute "lesson," we arranged our desks in rows; we sat stiff-backed (and were reprimanded for slouching!); and we practiced phonics using the hornbooks, did "sums" on our slates, and read aloud from McGuffey's Reader. To make the experience more realistic and fun, we also administered several mock "punishments" for minor infractions such as fidgeting or not looking at the teacher (having told parents and students in advance that we were going to do this!!) Before long all the children were clamoring to sit in the corner with the dunce cap on!

During the last 10 minutes of the one-room schoolhouse session, we stepped out of character back into the 20th century to help put things in perspective for the children. We felt it was very important to do this immediately following the schoolhouse activity. The students enjoyed comparing and contrasting the old fashioned rote and drill method of learning with our more modern ways. Although they had some trouble articulating the concept, they were quick to spot the very stern and didactically moral tone of the McGuffey's Reader as being totally different from anything they had ever encountered in school books. Of course, the comparison of discipline measures old and new was fun and instructive to talk about as well.