

When the state of New Mexico celebrated its 100th birthday in 2012, the New Mexico History Museum put together all kinds of programs to celebrate. Taking a cue from the bookbinders in the Palace Press, we had some visitors come together and plan their future, while remembering the past.

Lesson Plan:

Marking Time: An Adventure in Calendar Making

Essential questions: Our calendar is made up of days, weeks, months and years. The day is the rotational period of the Earth; the week is a period linked to the Biblical story of creation; the month is linked to the changing phases of the Moon and the year is linked to the Earth's period of revolution around the Sun. Can you think of some other calendars around the world? What do we use calendars for? Do you use a calendar to plan events? Do you have a calendar for recording special days, like a diary? Why are calendars so popular?

Audience: adaptable for all ages of museum visitors

Time required: anywhere from 10 minutes for simple assembly to an hour for more elaborate project

Brief description: Have participants think of how they might represent different times of the year with different pictures and words. Through the work of creating a calendar, participants will have a better sense of the passage of time, will discover materials and techniques used in creating the artwork, and will have an opportunity to contemplate events that might happen in the coming year and think about holiday celebrations and other anniversaries we mark on calendars. Using recycled materials, reproduced images, paint, glue and embellishments, participants will be invited to craft their own personal calendar which has meaning for them. We will be using the technique of simple *saddle-stitching*, which joins a set of nested folios into a single piece.

Key Concepts

Measuring time past, present, future Holidays

Patterns Astronomy week, month, year, weekend

Anniversary

Glossary:

A *leaf* typically has two pages of text and/or images, front and back, in a finished book. In everyday speech it is common to refer to "turning the pages of a book", although it would be more accurate to say "turning the leaves of a book"; this is the origin of the phrase "to turn over a new leaf" i.e. to start on a fresh blank page.

A **bifolium** is a single sheet folded in half to make two leaves.

A **section**, sometimes called a *gathering*, or, especially if unprinted, a **quire**, is a group of bifolia nested together as a single unit. In a completed book each quire is sewn through its fold.

A *quire* with six bifolia is called a *sextern* or *sexternion*, producing twelve leaves.

Materials:

Glue glitter glue pre-printed calendar template Ribbon, cord yarn paper punch (2 hole punch)

Wire card stock, or recycled cardboard colored pencils, markers, crayons, paints
Paintbrushes water (for cleaning brushes) other decorative items- beads, feathers, et al

Sample calendars to look at colored scrap paper, fabric

Lesson Description:

INTRODUCTION: People everywhere use calendars to mark and measure time, such as scheduling appointments, remembering birthdays, and anticipating upcoming special events (spring break, a baseball game, a dentist appointment).

PROMPT: Ask students to think of things they expect to see on a calendar. What are the dates they need or want to remember? Holidays? Guide group discussion and make a list.

PROMPT: How could you make a calendar more scientific? (phases of the moon, tides, marking seasonal and solstice changes)

PROMPT: Although young children have difficulty judging the length of time between events, they can understand a sequence of events. Young children generally have a strong sense of narrative and the way a story progresses. If young children are participating, ask them about before and after, now and later. What comes first- Valentine's Day or Independence Day?

PROMPT: Take a look at some examples of calendars (desk calendars, decorative wall calendars, appointment books). What do these have in common? In what ways are they different? Which would be most *useful*? Why?

LESSON:

- 1.Set up classroom or workspace with papers, brushes, water, glue, , ribbon, decorative scraps of paper, buttons, glitter, fabric, etc.
- 2. Ask students to think about what they imagine for the year in the future.
- 3. Have each participant choose a piece of cardstock and 6 pre-printed calendar blanks. Using the paper punch, make holes through the entire bundle. The six pages will then be stitched together with a simple saddle stitch, using yard or cord. No adhesive or staples are necessary.
- 4. Have participants sort through the paper images to glue onto their calendar in collage fashion or use markers to begin creating those images and objects they described. Encourage participants to experiment with different media.
- 5. Everyone's work will be very different from one another, and you may have the opportunity to share and discuss your work as each person finishes.

CONCLUSION: When all have finished, invite participants to share their art with the rest of the group. PROMPT: What different ways did people decorate their calendars? Do people remember things differently?

Further exploration:

What is the origin of the names of the months? The days?
Discuss the Chinese calendar. Are there other calendars you know of?
What are the signs of the zodiac, and how does astrology correlate with different times of year?
Why did so many people think the Mayan calendar predicted the end of the world?
How did Native American tribes name the different moons? How does that help them mark time?
Resources for Marking Time: Making Calendars

http://www.rmg.co.uk/explore/astronomy-and-time/time-facts/the-calendar

The Royal Observatory, home of Greenwich Mean Time and the Prime Meridian line, is one of the most important historic scientific sites in the world. It was founded by Charles II in 1675 and is, by international decree, the official starting point for each new day, year and millennium. They have wonderful links on astronomy and the history of timekeeping.

http://www.webexhibits.org/calendars/index.html

a remarkable virtual exhibit on the web: "Calendars Through the Ages"

http://zomobo.net/play.php?id=aWHkY5jOoqM

a short video tutorial on using the saddle stitch for making booklets

http://www.timeanddate.com/ on what date will you be a billion minutes old? How old will you be when you are 10,000 days old? What happened the day you were born? Find out the answer to these and many other questions with this amazing calculator.

Cohn, Myra Calendar, Holiday House, 2007. Beautiful book for younger children

Greenfield, Jane, ABC of Bookbinding. New Castle, DE: Oak Knoll Press. 2002

The History of Making Books. New York: Scholastic, Inc., 1996.

Well illustrated interactive book with sections on Ancient writing, Asian Ingenuity, Arabic Treasures, Parchment, Illuminated Manuscripts, Paper, Printing, Bookbinding, and more.

Jones, Linda <u>Kids Around the World Celebrate!</u> The Best Feasts and Festivals from Many Lands. Jossey-Bass, 1999. *Learn about special events around the world, and experiment in the kitchen, too. Recipes included.*

Sendak, Maurice Chicken Soup with Rice: A Book of Months Harper Collins, 1991. A perennial favorite.

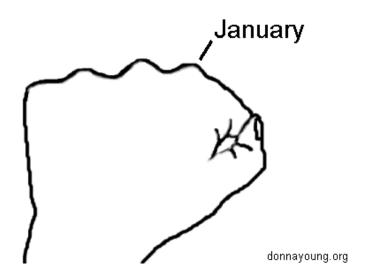
Swain, Gwenyth, <u>Bookworks: Making Books by Hand</u>, Minneapolis: CarolRhoda Books, 1995. *A book for kids with a good historical introduction and clear directions for making several forms of book, as well as paper making, marbling, and printmaking techniques.*

Tudor, Tasha. <u>Around the Year</u>. Aladdin 2004, reprint of 1957 edition. *New England based, this classic picture book illustrates different activities for each season.*

Related activities

Mnemonic devices for remembering how long the months are:

Make a fist and starting with the first knuckle on your hand say the months of the year.
 Include the valleys between the knuckles. The valley months have 30 days or less and the knuckle (hill) months have 31 days. When you get to the last knuckle, return to the first knuckle and continue. See the animation below.



2. Learn this rhyme:

THIRTY DAYS HATH SEPTEMBER
Thirty days hath September,
April, June, and November;
All the rest have thirty-one,
Excepting February alone.
And that has twenty-eight days clear,
And twenty-nine in each leap year.