

Birthday Phenology Game: A-Getting-to-Know-You Game

Activity Overview

Students will gain awareness of local phenology and each other by playing a game connecting their birthdays with local phenology and seasonal phenomenon.

Objectives

Students will:

- Be aware of local phenology and seasonal phenomena
- Understand the importance of phenology to our understanding of our place
- Learn something about each other
- Be curious about local phenology
- Be inspired to become observant when outdoors

Subjects Covered

Science

Grades

3 through 8 (Can be modified for grades K-2 and 9-12)

Activity Time

20-30 minutes (This activity is best kept short to sustain interest. This might mean returning to the game several times, until everyone is included.)

Season

All (especially useful at the beginning of the school year, as a team-building activity.)

Materials

Large wheels of the year*

State Standards

Science:

Ask questions, plan investigations, make observations, predictions (C.4.2)

Use data to answer questions (C.4.5)

Identify data and sources to answer questions (C.8.2)

Use inferences and observations (C.8.4)

Describe weather & seasonal changes (E.4.5)

Explain earth's cycles using observation (E.8.8)

Source

Georgia Gómez-Ibáñez,
Cambridge Elementary School, WI

Background

Phenology is the observation and study of natural events and cycles in a place, timed in relation to seasonal and climate changes. Phenological knowledge grows from careful observations, made over many years. Modern climatologists recognize phenology as one important tool in the study of recent climate change, but phenological awareness is as old as the earliest humans. Our ancestors survived by observing carefully the world around them, relying on the resulting experience to know when to gather, hunt, plant and harvest.

Phenological awareness is also simply an enjoyable part of celebrating the seasons as they flow around the circle of the year, taking delight in both the ever-newness and reliability found in the natural world, from the anticipatory “Oh listen, I hear the chorus frog concert! Soon we’ll be looking for the Rue Anemones!” to the comfortingly dependable sequence of seasons. Sparked in childhood, this pleasure can greatly enhance one’s enjoyment of life and one’s sense of place.

This game is one way to spark an interest in what’s going on outdoors. Even if some children are oblivious to the natural world, most children have strong feelings about their birthdays! Recalling what was happening outdoors at the time of their birthday will require a thoughtful memory-journey, and just perhaps they will connect the celebratory birthday feeling with an event in the natural world. (Note: students will need to be prompted to think of something happening outdoors in the natural world. Otherwise they will choose holidays, or activities, such as sledding, swimming, etc. Younger students (grades K-2) would need to play the game using seasons rather than months.)

Note: Local phenologies differ! The new student from another county or state may hold a different set of phenology facts in mind! This need not be a problem; it can spark a good discussion about why phenologies will vary from place to place. For example, latitude, altitude, and/or nearness to large temperature-moderating bodies of water can all affect local phenology.

Activity Description

The teacher should be the first player, so that the students understand how to play this game. For example the teacher says: “My birthday happens when the white flowers are blooming on the wild black raspberries; in what month is my birthday?” And the guessing begins.

Birthday Phenology Game: A-Getting-to-Know-You Game (cont.)

Extensions

- Extensions for grade 6-12 could include using Web sites to do research. For older students, access Web sites such as Project Budburst (<http://www.budburst.org>), Journey North (<http://www.journaynorth.org>), and Earth Alive! (<http://www.naturenet.com/EarthAlive>). A team building activity could include asking each student to find a phenology fact for a classmate's birthday.
- A whole classroom extension activity could be to put the birthdays (and phenology facts) on a wheel of the year. Personal size (11" x 17") wheel of the year or classroom size (24" or 32") wheels would be needed for this activity. Do some of the phenology facts intersect in interesting ways? Do some phenology facts depend on each other? What other phenology facts might the class want to learn, inspired by the birthday phenology facts? A wheel of the year needs an informative center. A good center for this wheel is an outdoor class photo, or something else agreed upon as a unifying theme.

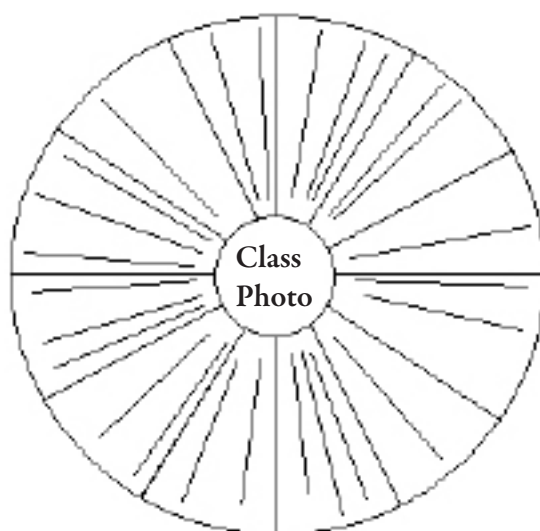


Fig. 1: Wheel of the Year marked with months for Classroom Birthday Phenology. Class Photo in center.

- Extensions for grades 4-12 could be for each student to choose a plant or animal whose life cycle intersects with the student's birthday, and create a wheel of the year for that plant or animal. The center of that wheel would be the plant or animal, and its activities or cycles would be depicted around the year.
- Extensions for grades 4-12 could be to create a classroom birthday-phenology book. Each student would contribute a page with a drawing to illustrate a poem or brief researched essay about the phenology fact connected with their birthday. This book would be organized by date. A good cover illustration might be a wheel of the year embellished with the birthdays and phenology facts.

Birthday Phenology Game: A-Getting-to-Know-You Game (cont.)

Additional Resources

- Bruchac, J., and Landon, J. (1992) *Thirteen Moons on Turtle's Back*. New York, NY. Philomel.
- Buchholz, J. (2001) *Wild Wisconsin Notebook*. Boulder, CO. Prairie Oak Press
- Hale, J. (1997). *Snowfleas to Sunflowers: Notes From The Natural World*. Madison, WI. Friends of the Arboretum.
- Hamerstrom, F. (1975). *Walk When the Moon Is Full*. Crossing
- Holden, E. (2006) *The Country Diary of an Edwardian Lady*. UK. Top That! Publishing PLC
- Leopold, A. (1949). *A Sand County Almanac*. New York, NY. Oxford University Press.
- Locker, T. (1995). *Sky Tree*. USA: New York, NY. HarperCollinsPublishers

Web Sites

- Forbes, A. “*Wheels of Time and Place: A Set of Circular Journals and Instructions.*” www.partnersinplace.com.
- The “Phenology Calendar” produced by The Friends of Pheasant Branch is especially helpful for those located in Southern Wisconsin, see www.pheasantbranch.org.

* Wheels are available at www.partnersinplace.com