



Discovery Tour Packet Sixth Grade Teacher's Guide

Welcome to Lauritzen Gardens!

We are providing this guide to assist you and your students in learning about nature and the various gardens within our 100-acre property. This guide includes suggested stops and activities in addition to general garden information.

Please note that you will likely not be able to visit all areas of the Garden during your visit.



Scan or click here
<https://www.youtube.com/watch?v=UlwypYakqx4> for a brief introduction to Lauritzen Gardens.

GARDEN LOCATIONS

- | | | | |
|----|---|----|---|
| 1 | Dr. C. C. and Mabel L. Criss Memorial Foundation Parking Garden | 12 | Model Railroad Garden |
| 2 | Arrival Garden | 13 | Robert H. Storz Family Rose Garden |
| 3 | Marjorie K. Daugherty Conservatory | 14 | Children's Garden |
| 4 | Woodland Trail | 15 | Herb Garden |
| 5 | Festival Garden | 16 | Founders' Garden |
| 6 | Woodland Waterfall | 17 | Sunni Castle Gate and Mt. Fuji Replica |
| 7 | Hitchcock-Koontze Victorian Garden | 18 | David and Pamela Gross Family Spring Flowering Walk |
| 8 | English Perennial Border | 19 | Song of the Lark Meadow |
| 9 | Tree Peony Garden | 20 | Garden of Memories |
| 10 | Garden in the Glen | 21 | Kenefick Park |
| 11 | Arboretum and Oberman Bird Sanctuary | | |

Lauritzen Gardens offers a 100-acre site, 20 garden spaces and a visitor and education center that includes a gift shop, horticulture library, classrooms, 5,000-square-foot floral display hall and rental facilities.

GARDEN ETIQUETTE

For the enjoyment of others and the protection of the gardens, we thank you for following these simple guidelines:

- View and smell the flowers, fruits, leaves and seeds, but please leave them for others to enjoy.
- Marvel at the trees, walls, sculptures and fountains, but please do not climb on them.
- Only food purchased from Lauritzen Gardens' cafe may be eaten in the designated areas. Food is not allowed to be eaten on the garden grounds.
- With the exception of service dogs, animals are prohibited.
- Lauritzen Gardens is not a park. No jogging or running. Recreational items such as frisbees, kites, bicycles, sleds, skateboards, scooters and roller blades are not allowed in the visitor and education center or anywhere within the garden.
- Smoking is not permitted in any building.



KEY

- P PARKING
- C CAFE (OPEN 10 A.M. TO 2 P.M. DAILY)
- R RESTROOMS
- R+ RESTROOMS (SEASONAL)
- F DRINKING FOUNTAIN
- ROADS

CONTACT US
 (402) 346-4002

DONATIONS AND TRIBUTES | EXT. 224
EDUCATION | EXT. 253 OR 212
GENERAL INFORMATION | EXT. 201
MEMBERSHIP | EXT. 214
RENTAL FACILITIES | EXT. 261
VOLUNTEERING | EXT. 263

www.lauritzengardens.org

You will enter the main Gardens through the Visitor and Education Center. It is recommended that you make brief stops at points that interest your group, but proceed to one of the highlighted gardens for your first activity.

If you are visiting with multiple groups, please consider beginning your tour farther out in the Gardens to avoid congestion.

Discovery tours do not include visiting the Conservatory, the Woodland Trail or the Visitor and Education Center

Nebraska State Standards covered in this packet:

SC.6.12.4.A Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.

SC.6.13.5.A Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

Iowa State Standards covered in this packet:

MS-ESS3-1

Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.

Suggested Garden Locations and Items of Interest

Woodland Waterfall (#6)

- ❖ Notice the animal burrows in the Loess Hill soil to the left of the pathway just prior to the waterfall
- ❖ Take the opportunity to identify the effects of erosion above the waterfall and across the road and down the hill



Victorian Garden (#7)

- ❖ Formal garden designed with lots of textures and shapes
- ❖ Middle rectangular beds are planted with annuals (plants that live only one year)
- ❖ Perimeter beds are perennial plants (plants that return year after year)
- ❖ Statues and architectural elements in this garden were salvaged from historical buildings in Omaha and Council Bluffs and demonstrate how we 're-use' and 'recycle' in our garden



Rock Cycle Word Search in Student Handout

The Victorian Garden is a great place to see examples of limestone. Many of the architectural elements in the garden are made from limestone as well as the benches on either side of the reflecting pool. Look closely at the tops of these benches to discover many fossils embedded in the rock.

Page 1 of the Student handout provides a brief description of the rock cycle with a corresponding word search to reinforce the different types of rock.

Lauren Stevens
Rock Cycle Word Search

Humans use rocks for many different things – in particular, roofing and building materials. Is it possible to run out of rocks? Although we should always use natural resources carefully, it's not likely that we'll run out of rocks anytime soon.

Rocks go through a continuous cycle of change. Igneous rocks are made when lava or magma hardens into rock. When the rock is exposed to air, erosion begins. Almost immediately, wind and rain weather the rocks and cause them to erode into sediment. The sediment becomes sedimentary rock. This rock is often buried beneath the Earth's surface, where it may become metamorphic rock. If the metamorphic rock is near magma, it may melt to become igneous rock. The entire process is known as the rock cycle.

D	O	G	L	I	M	E	T	A	M	O	R	P	H	I	C
E	C	A	R	E	G	V	O	R	O	U	S	R	U	O	M
I	V	R	L	J	U	N	G	L	E	S	K	I	M	O	A
A	I	T	O	S	C	A	E	R	O	S	I	O	N	S	G
E	L	C	Y	C	O	R	L	O	T	A	L	E	I	N	M
U	P	O	U	N	K	I	N	G	U	L	R	N	O	A	
P	I	G	T	N	E	M	I	D	E	S	E	S	K	I	I
I	S	E	D	I	M	E	N	T	A	R	Y	F	A	L	T

Bonus Word Finds:

_____ is a liquid rock at or above the Earth's surface.
_____ are particles of eroded rock or plant and animal debris.

References and Notes

To view a video about erosion, scan here:

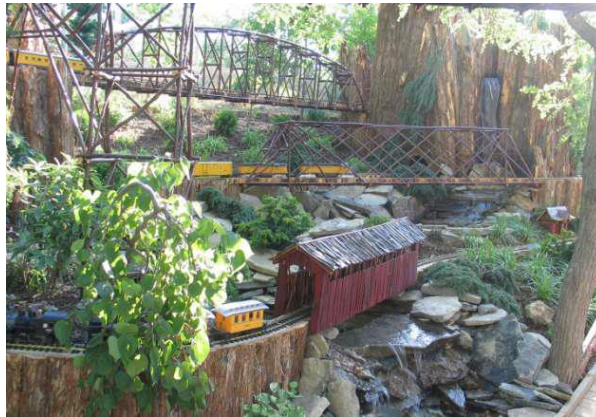


To view a video about the rock cycle scan here:



Model Railroad Garden (#12)

- ❖ Showcases several G-scale model trains
- ❖ Buildings are replicas of historically and culturally significant Omaha buildings
- ❖ Buildings, bridges and trestles are constructed using all natural materials (seedpods, twigs, pinecones, bark, bamboo, etc.)



Model trains and building replicas are on display May – October.

Children's Garden (#14)

- ❖ This garden, when in season, contains many different features for the senses
 - 'Smell' garden features both lemon balm and mint
 - 'Taste' garden contains nasturtium, chocolate mint, chives, stevia, basil (Genovese and lemon) and cherry tomato
 - 'Touch' garden features sensitive plant, lamb's ear, fennel, junkus and daylilies
- ❖ The Children's Garden also features various plants and vegetables typically planted in a home garden. Take the opportunity to explore these different gardens and prompt students to discuss their knowledge of food sources.
- ❖ This is a good opportunity to discuss with students recycling, repurposing and re-using
 - Composting: There are 2 bins where garden waste is placed to breakdown into compost; compost is later used to fertilize plants in the garden
 - Repurposing: The dragon sculpture was created from used farm equipment parts
 - The wood mulch pathways are made from downed or damaged trees that have been chipped

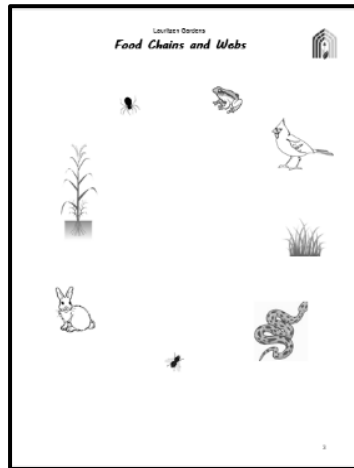
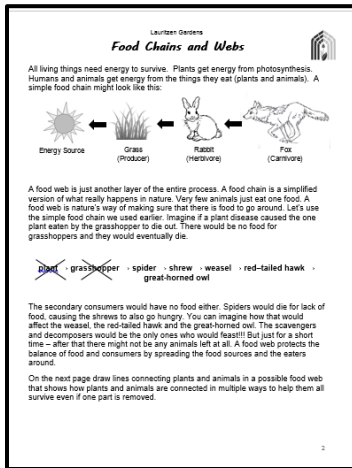


You may find more information about composting here:

Food Chain and Web Activity

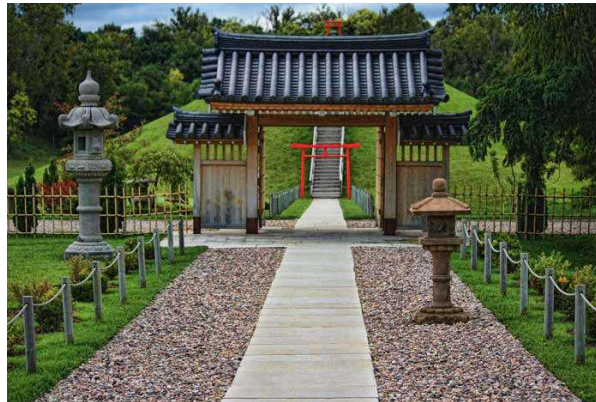
in Student Handout

After discovering the compost bins and discussing the decomposition process, discuss simple food chains utilizing the example on page 2 of the Student Handout. Have students complete their own example of a food web on page 3.



Sunpu Castle Gate and Mt. Fuji Replica (#17)

- ❖ This Japanese Garden has a series of 4 gates representing various levels of spiritual and personal space



Sunpu Castle Gate and Mt. Fuji Replica (#17) (continued)

- Brown gate nearest the road is a kabuki gate signaling “public space”
 - Japanese Sunpu (*sūn-pū*) Castle Gate was a gift from Omaha’s Sister City, Shizuoka (*shi-zū-wō-kā*), Japan, in 2005.
 - Replica of the reconstructed East Gate at Sunpu Castle (built in 1585) in Japan
 - Gate is handmade with carved wooden elements
 - 2500 custom-crafted ceramic roof tiles
 - Red gates are both tori (*tōr-ē*) gates and signify to visitors they are entering a private or sacred space
- ❖ There are 24 stone lanterns, or *ishi-dōrō*, that line the pathway to Mt. Fuji
 - In Japan, stone lanterns were originally used only in Buddhist temples, where they lined and illuminated paths

Cloud Activity in Student Handout

Find an open area near the Sunpu Castle Gate and Mt. Fuji replica where students have unobstructed observation of the sky. Begin this activity by quickly reviewing

For more information about Omaha’s Sister City, Shizuoka, Japan, click here:

<http://www.omahasistercities.com/cities/shizuoka-japan/>

the water cycle and introduce how clouds are formed through the process of evaporation and condensation. Have students read and complete the activity on pages 4 and 5 of the Student Handout.

Lauritzen Designs
What is a Cloud?

Clouds are visible collections of water or ice that float in the air above the earth's surface. Clouds form when water that has evaporated from the earth's surface mixes with tiny dust particles in the atmosphere and condense together. This condensation occurs when warm and cold air meet in the atmosphere.

Clouds have different names depending on where they form in the atmosphere and their characteristics. For example, **cirrus**, which means "rain", is a suffix added to cloud names that describe clouds that could produce rain or other precipitation (cumulonimbus, nimbostratus). **Cirrus**, meaning "curly", describes a high cloud that is usually made up of wispy ice crystals (cirrus, cirrostratus). These clouds are usually high up in the earth's atmosphere and appear thin, wispy and curly. Other name prefixes or suffixes include **alto** (high), **stratus** (heap) and **strato** (layers).

Cloud Bank

Cirrus: Thin, wispy, curly shaped clouds high in the atmosphere

Cumulonimbus: Large, dense, towering clouds that produce rain, thunderstorms and/or hailstorms; may also be called a thundercloud

Cumulus: Puffy clouds that do not produce precipitation and often grow into cumulonimbus clouds

Stratus: Layered horizontal clouds with a flat base, often gray, found at lower elevations

Fog: Ground-hugging clouds

Can you label the clouds on the next page?

Lauritzen Designs
What is a Cloud? (continued)



Thank you for visiting Lauritzen Gardens!

Restroom facilities and drinking fountains are located in the southwest corner of the Visitor and Education Center.