



5th Grade

Cycling of Matter in Ecosystems

Classroom Teacher Information

Programs are subject to change based on weather, temperature, road conditions, public health and safety concerns.

Synopsis:

This active investigative program leads students to an understanding of how organisms are connected to ecosystems through the cycling of matter including the role of decomposers and decomposition.

Students will:

- Make and verbally communicate about observations in an ecosystem
- Collaboratively create a diagram that models how matter cycles through an ecosystem
- Understand that food is the fuel organisms need to survive, grow, and reproduce
- Record how organisms use matter to build bodies and energy to do things
- Safely collect, observe, and accurately draw living organisms in the ecosystem

Length of Program: 2.5 hours

Location: Stokes Nature Center

Season Offered: Fall or Spring

Program Fee: \$6 per student

Logistics:

- The school bus should drop you off at the Stokes Nature Center trailhead of the River Trail in Logan Canyon (on the south shoulder of the highway) where you will be met by your Naturalist Educators.
- Please have a plan for dividing your group in half, each smaller group should include a teacher or staff from your school.
- Program will end at the Stokes Nature Center and you will walk with your students back down the trail (plan 7-10 minutes from the end of the program to walk back to the trailhead).
- Students should wear comfortable clothing that may get dirty.
- We will be outside for the entirety of this program, dressing in layers is advised.
- Closed toe shoes are appropriate. Please, **no flip flops**.
- All students and teachers should have a face covering available at all times.
- Students should wear visible name tags (packing tape over a name tag keeps them from falling off).
- Please bring one adult per five students.
- The Nature Center will be open for students to use the bathroom if necessary. They will need to be supervised by an adult from your school when doing so.
- Water fountains are not available at the Nature Center, students are welcome to bring a full water bottle.

Curriculum Connections

SEEd Standards 5.3.1, 5.3.2, 5.3.3

| SEEd Practices | Crosscutting Concepts | Disciplinary Core Ideas |
|-----------------------------|--|-------------------------|
| Developing and using models | Energy and Matter Systems and System Models | Ecosystems |

Additional Utah Core Curriculum Connections

| Subject | Standard |
|-----------------------------|---|
| Mathematics | 5.MP.1-5 |
| English Language Arts | Speaking & Listening Std. 1 and Std 6 Language Stds. 1,2,4,6 |
| PE | Strands 3,4,5 |
| SEL | Self-Awareness, Self-Management, Social-Awareness, Relationship Skills, Responsible Decision-Making |



5th Grade Snowshoeing & Avalanche Education Classroom Teacher Information

Programs are subject to change based on weather, temperature, road conditions, public health and safety concerns.

Synopsis:

Students will have the opportunity to enjoy snowshoeing with their classmates while learning about interactions between Earth's systems that cause avalanches in Utah's mountains.

Objectives-Students will:

- Describe conditions necessary for an avalanche to occur
- Explain what slope means
- Identify steep and less steep areas of the landscape
- Connect their understanding of landslides to avalanches
- Recreate safely

Length of Program: 2 hours

Location: Murray Farm Trail or Green Canyon (depending on conditions)

Season Offered: Winter

Program Fee: \$9 per student (includes snowshoe rental)

Logistics:

- Please plan time to load the bus at your school and drive to the field site.
- Confirm the location of your field experience with the driver before leaving your school.
- Please arrive at the site 5 minutes before your program starts. Programs will begin and end on time.
- Students should wear comfortable clothing that may get dirty and/or wet.
- We will be outside for the entirety of this program, dressing in layers is advised.
- In order for the snowshoes to fit correctly, students should wear snow boots. Please, **no gym shoes.**
- We have a limited number of boots, coats, and gloves to loan your students if they need them. Please request these a few days in advance of your program.
- Students should wear visible name tags (packing tape over a name tag keeps them from falling off).
- Please bring one adult per five students (there is no charge for teachers or chaperones).

See curriculum connections on the next page.

Curriculum Connections

SEEd Standards 5.1

| Science and Engineering Practices | Crosscutting Concepts | Disciplinary Core Ideas |
|-----------------------------------|-----------------------|-------------------------|
| Analyze and interpret data | Patterns | Earth's Systems |

Additional Utah Core Curriculum Connections

| Subject | Standard | Objective |
|-----------------------------|--------------|--|
| English Language Arts | SL 5.1 | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i> , building on others' ideas and expressing their own clearly. |
| | | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. |
| | SL 5.2 | Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. |
| | Language 5.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. |
| | 5.3 | Use knowledge of language and its conventions when writing, speaking, reading, or listening. |
| PE | Strand 5.3 | Students will understand the components necessary to maintain a healthy level of fitness to support physical activity. |
| | Strand 5.4 | Students will develop cooperative skills and positive personal behavior through communication and respect for self and others. |
| | Strand 5.5 | Students will appraise the personal value of physical activity as a tool for wellness, challenges, and interacting with appropriate social skills with friends and family. |
| SEL | K-12 | This program supports students' growth in all 5 CASEL core competencies: Self Awareness, Social Awareness, Responsible Decision Making, Self Management, Relationship Skills. |