



# GUIDELINES

BOULDER COUNTY ENVIRONMENTAL EDUCATION GUIDELINES  
DEVELOPED BY THE BOULDER COUNTY E MOVEMENT

# 1ST GRADE

## 1st Grade Learning Objectives

*We want to nurture our students' curiosity and active exploration while fostering respect for the natural world and each other. We facilitate their basic understanding of how the natural world works and their relationship to it. We want our students to know that they have influence on the environment and community by the way they choose to care for themselves, others, and places.*



# 1st Grade Environmental Education Guidelines

Progression of place: The appropriate scale is classroom community and home, school or schoolyard settings.

## NATURAL CONCEPT

*The natural world is made up of living and non-living things that can be described and categorized.*

## SOCIAL CONCEPT

*Sequences of events and places or locations can be documented and described.*

## The Guidelines

### Head

#### ACADEMIC SKILLS AND KNOWLEDGE

- An organism has physical characteristics that help it survive.
- Patterns in the natural world can be observed. (2-ESS2-2), (2-ESS2-3)
- All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)
- Things can be sorted into categories of living, once-living (dead), and nonliving.
- Living things need food and water. They breathe, reproduce, grow and move on their own. Nonliving things do not.
- Some events have cycles, whereas other events have a clear beginning and end.
- Seasonal patterns of sunrise and sunset can be observed, described, and predicted. (1-ESS1-2)



## The Guidelines *(continued)*



### Heart

SOCIAL-EMOTIONAL LEARNING, AFFECTIVE NEEDS, SENSITIVITY, ATTITUDES AND SELF-EFFICACY

- Nurture care and respect for living things and natural areas.
- Foster a love of the natural world by modeling curiosity, appreciation, and wonder. Allow for and encourage imagination and creativity, questions, and stories.
- Provide unstructured time outdoors for play and imagination or time to sit/walk (goal: make this part of your routine with consistency and increased frequency).
- Practice skills in active listening in whole group settings and during one-on-one interactions.
- Work together productively and collaboratively in small and whole groups for common goals and celebration of accomplishments.
- Model your thinking about how you feel when you go outside with your students (For example, "Today, when we were outside, I noticed... I felt... I thought about...").
- Learn to rely on ourselves and on each other.
- Model and identify empathy and humility, especially in the resolution of problems.
- Learn how to disagree.



### Hands

ACTION AND SERVICE

- Provide time for cooperative and social play in natural settings.
- Support students in defining a simple problem based on evidence (For example, a classroom plant is not thriving. Why not?).
- Take action to make a positive impact or solve a problem in the classroom.
- Keep the playground free from trash and litter by throwing away trash.
- Support a classmate—promote acts of kindness.



### Feet

CONNECTION TO PLACE

- Foster awareness of local wildlife easily observed in schoolyards (birds, squirrels, insects) and identify as wildlife.
- Develop understanding of our natural and cultural communities and how they extend to the school community.
- Organize field trips that get students outside the classroom to see something from a new perspective.
- Provide for multiple encounters with an expanded place over time.
- Focus on the immediate surroundings (family, home, school) to the natural world beyond that scope.
- Begin to expand from the schoolyard into a local natural area (greenbelt, stream, field or partner field trip).



## Recommended Activities

Activities listed are intended to provide inspiration for how to connect to a local natural area, or plan a field trip with a partner organization.

- Engage in unstructured, outdoor play or exploration in a natural area (schoolyard or park) - make this a regular part of your daily schedule (different from recess on built playground).
- Plan and carry out simple investigations using simple tools and accurate measurements. MA10-GR.1-S.4-GLE.2
- Identify shapes and patterns in the shape of leaves from different trees, shrubs, plants, and grasses around the school. MA10-GR.1-S.4-GLE.1
- Make a field guide of common schoolyard wildlife and grasses/shrubs/trees. RWC09-GR.1-S.4-GLE1&2
- Study changes through the seasons (i.e. weather, plants, etc.) with photographs and drawings. SS09-GR.1-S.1-GLE.1
- Describe, sort, and categorize waste items for recycling, composting, etc. SC09-GR.1-S.3-GLE.1
- Conduct a school or class waste audit. SC09-GR.1-S.3-GLE.1
- Care for plants and/or animals in the classroom (ongoing). SC09-GR.1-S.2-GLE.2
- Participate in a Citizen Science program.
- Provide opportunities to transfer skills learned in one context to new lessons or investigations (ex. use of tools like the hand lens - practice use indoors, then take outside to practice outdoors and investigate).



# E Guidelines Adoption Form

## ECE-5th Grade

### INTENTIONS AT THIS GRADE LEVEL:

Each teacher, grade-level team or department adopting these guidelines should complete the following with their intended activities for the year. Your actual activities may shift or expand as the year progresses. These activities may be field-based or classroom-based as appropriate. The recommended activities and resources may be used to complete this intended plan.

We will spend \_\_\_\_\_ minutes outside each week.

We will visit the following natural outdoor space(s):

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As a result of adopting these guidelines, one thing we intend to change about our practice is:

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Initial thoughts about opportunities to integrate heart, hands, feet and head (see recommended activities at the end of your grade level chapter). Please list one or more thoughts in each space.

Opportunities to focus on Heart: \_\_\_\_\_

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Opportunities to focus on Hands: \_\_\_\_\_

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Opportunities to focus on Feet: \_\_\_\_\_

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Opportunities to focus on Head: \_\_\_\_\_

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## Continuum of the E Guidelines

### **ECE/Kindergarten**

We nurture our students' curiosity while fostering respect for the natural world and for each other. We help improve their basic understandings of nature and their relationships to it. We teach our students that they can influence their environments and their communities by the way they choose to care for themselves, for others and for natural places.

#### **NATURAL CONCEPTS**

The natural world is made up of living and non-living things that can be described and categorized.

#### **SOCIAL CONCEPTS**

Sequences of events and places or locations can be documented and described.

#### **PROGRESSION OF PLACE**

The appropriate scale is classroom community and home, school or schoolyard settings.

### **1st Grade**

We nurture our students' curiosity while fostering respect for the natural world and for each other. We help improve their basic understandings of nature and their relationships to it. We teach our students that they can influence their environments and their communities by the way they choose to care for themselves, for others and for natural places. Describe and categorize; Cause and effect; Empathy

#### **NATURAL CONCEPTS**

The natural world is made up of living and non-living things that can be described and categorized.

#### **SOCIAL CONCEPTS**

Sequences of events and places or locations can be documented and described.

#### **PROGRESSION OF PLACE**

The appropriate scale is classroom community and home, school or schoolyard settings.

### **2nd Grade**

We nurture our students' curiosity while fostering respect for the natural world and for each other. We help improve their basic understandings of nature and their relationships to it. We teach our students that they can influence their environments and their communities by the way they choose to care for themselves, for others and for natural places. All living things, plants, animals (including humans) meet needs from the environment and humans must make choices about how needs are met.

**NATURAL CONCEPTS**

Living things, including humans, meet their needs from their environments.

**SOCIAL CONCEPTS**

Communities depend upon and make choices about resources.

**PROGRESSION OF PLACE**

The appropriate scale is the school community and its local environment, with a focus on immediate surroundings.

**3rd Grade**

We want our students to be inspired to understand that there is interdependence among animals, humans, and their environments. We want to facilitate opportunities for them to identify how problems sometimes arise when environments change and to work with their peers to solve problems and answer questions.

**NATURAL CONCEPTS**

Cycles and change are important processes in nature—examples include life cycles, the rock cycle, and the water cycle.

**SOCIAL CONCEPTS**

Geographic tools can be used to understand our region's watershed, for example, with mapping.

**PROGRESSION OF PLACE**

The appropriate scale includes the neighborhood, the local community, the watershed, and the regional environment.

**4th Grade**

We want our students to be inspired to understand and have knowledge of their local ecosystems. We want to facilitate opportunities for them to be stewards of their local communities and competent investigating their own questions so that they may practice forming solutions to problems.

**NATURAL CONCEPTS**

There is interaction and interdependence among living and nonliving components of systems.

**SOCIAL CONCEPTS**

There is interaction and interdependence among human and natural systems.

**PROGRESSION OF PLACE**

The appropriate scale includes the neighborhood, the local community, the watershed, and the regional environment.

**5th Grade**

We want our students to be inspired to understand and have knowledge of their local ecosystems. We want to facilitate opportunities for them to be stewards of their local communities and competent investigating their own questions so that they may practice



forming solutions to problems. How needs are met with renewable and nonrenewable resources; Humans manipulate conditions to make them livable, which is dependent on resources and energy

## **NATURAL CONCEPTS**

Earth and sun provide diverse renewable and nonrenewable resources.

## **SOCIAL CONCEPTS**

People choose to move to new regions for different reasons, and their movement has a variety of benefits and consequences.

## **PROGRESSION OF PLACE**

The appropriate scale is the regional community and environment, placed in a national context.

## **Middle School**

We want our students to be inspired and gain a sense of self in their natural and human communities, including their impacts on others in those systems. We want to facilitate opportunities for them to discuss ideas, take in multiple perspectives, back up personal opinions with evidence, and distinguish between opinion and fact.

### **NATURAL CONCEPTS**

Matter cycles within ecosystems and energy flows through them. These processes happen at both a local and a global scale, and humans can impact these processes.

### **SOCIAL CONCEPTS**

Human and physical systems vary and interact, and human systems at different scales (community, region, nation, etc.) are interconnected.

### **PROGRESSION OF PLACE**

The appropriate scale continues to expand from the schoolyard into a local natural area (greenbelt, stream, field or BCEE partner field trip) and into larger contexts (regional, state, national, global), including multiple encounters with an expanded place over time. Students explore the local community to watershed to regional environment within global community.

## **High School**

We want our students to be inspired to be life-long learners, stewards, and enthusiasts of the natural world. We want to prepare them to make informed decisions that consider the economic, social, and environmental impacts of issues using credible evidence.

### **NATURAL CONCEPTS**

Sustainability involves a complex interaction of social, economic, ecological, and political systems.

### **SOCIAL CONCEPTS**

Individual and collective action can have implications for sustainability at both the local and global scale.



# GUIDELINES

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## **PROGRESSION OF PLACE**

The appropriate scale continues to expand from the schoolyard into a local natural area (greenbelt, stream, field or BCEE partner field trip) and into larger contexts (regional, state, national, global), with multiple encounters in an expanded place over time.