SEPTEMBER & OCTOBER  
Ecohike in Hitchcock Woods

DECEMBER & JANUARY  
*Habitat Earth OR Who Discovered America?  
Marvelous Minerals  
Merry Measuring  
Planet Earth Rocks

FEBRUARY & MARCH  
*Habitat Earth OR Who Discovered America?  
Multiplication Madness  
Staying Alive!

APRIL & MAY  
Ecohike in Hitchcock Woods

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HABITAT EARTH  
MONTHS OFFERED: DECEMBER, JANUARY, FEBRUARY & MARCH

Dive below the ocean’s surface and travel beneath the forest floor to explore how living organisms are interconnected to support life forms both large and small. From the tiniest microbe to the tallest tree, Habitat Earth utilizes stunning images to show students how the biological world is carefully intersected with human and ecological networks. Standards: 3.L.5A.1, 3.L.5A.2, 3.L.5B.1, 3.L.5B.2

WHO DISCOVERED AMERICA?  
MONTHS OFFERED: DECEMBER, JANUARY, FEBRUARY & MARCH

Students will explore celestial navigation techniques, such as using kamals (used by Arabic and North African sailors) and quadrants to measure the altitude angle of the North Star to determine latitude. We will learn how compasses and celestial events, such as a lunar eclipse, can be used to determine how far east of west one has traveled on Earth. We will uncover details related to Columbus’ voyage to North America and about other peoples who discovered America even before Columbus. Standards: Social Studies SS3H2.a, SS3H2.b

MARVELOUS MINERALS  
MONTHS OFFERED: DECEMBER & JANUARY

Working together in small groups, students handle mineral specimens such as malachite, amethyst, mica, pyrite and copper. They learn to identify common minerals on the basis of their properties using a field guide and minerals identification key. Standards: S3E1.a, S3E1.b, S3E1.c

MERRY MEASURING  
MONTHS OFFERED: DECEMBER & JANUARY

Students use Earth materials to investigate volume and mass. They will engage in problem solving activities such as estimating, measuring and ordering the masses of different minerals. We will explore the difference between mass and weight as well as learn how and why their weight changes if we leave Earth. Standards: S3E1.b Mathematics MGSE3.MD.2

MULTIPLICATION MADNESS  
MONTHS OFFERED: FEBRUARY & MARCH

Join us in our computer lab to dive into all things multiplication. This program introduces and extends students’ multiplication skills through building arrays, easy to use strategies and multiplication games. Finally, students will test their new multiplication knowledge on the computer with flash cards with a techno twist! Standards: Mathematics MGSE3.OA.1, MGSE3.OA.7
OUTDOOR EXTENDED HOUR PROGRAM

ECOHIKE IN HITCHCOCK WOODS  **Months offered: SEPTEMBER, OCTOBER, APRIL & MAY**
This is a two-hour, two-mile guided hike through Hitchcock Woods. Native plants will be identified, evidence of animal life will be examined, and forest communities will be compared. Standards: S3L1.a, S3L1.b, S3L1.c

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DISCOVERY PROGRAMS

**PLANET EARTH ROCKS**  **Months offered: DECEMBER & JANUARY**
Students will explore excellent specimens of igneous, sedimentary and metamorphic rocks. They will compare physical properties relating properties to formation processes as well as observe and classify fossils, sediments and products of earth resources. Standards: S3E1.a, S3E1.b, S3E1.c, S3E2.a, S3E2.b

**STAYING ALIVE!**  **Months offered: FEBURARY & MARCH**
What adaptations help animals to stay alive in their habitat? Students will answer this question as we observe live animals including an owl, alligator, turtle, frog and salamander and learn all about animal adaptations by participating in hands-on stations. Standards: SL3L1.b