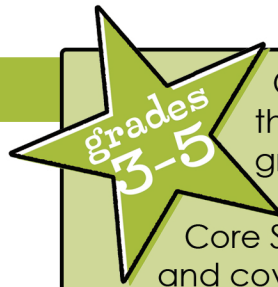




NATURALLY MATHEMATICAL



Nature is full of mathematical mysteries! Campers will uncover some of the most intriguing in this week of math-inspired investigations. They will discover gorgeous fractals, the fascinating Fibonacci Sequence and other examples of math in nature as they explore nearby woods and parks. You can't help but be inspired by the fantastical ways these patterns occur in nature. We will use their wonder and creativity to make gorgeous art and jewelry, reminding them that the world is full of infinite amazement!



Our camps for third to fifth graders align with the Common Core State Standards and cover topics and skills introduced and covered in 3rd, 4th, and preview material covered in 5th grade. These camps also give campers opportunities to explore complex mathematical concepts not often included in elementary math curriculum.

Common Core Standards:

- CCSS.MATH.PRACTICE.MP1 Make sense of problems and persevere in solving them.
- CCSS.MATH.PRACTICE.MP2 Reason abstractly and quantitatively.
- CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.
- CCSS.MATH.PRACTICE.MP4 Model with mathematics.
- CCSS.MATH.PRACTICE.MP5 Use appropriate tools strategically.
- CCSS.MATH.PRACTICE.MP6 Attend to precision.
- CCSS.MATH.PRACTICE.MP7 Look for and make use of structure.
- CCSS.MATH.PRACTICE.MP8 Look for and express regularity in repeated reasoning.

Math Skills in Naturally Mathematical:

- Comparing distances
- Comparing fractions
- Conversion problems
- Data Collection and analysis
- Deductive thinking problems
- Equivalent fractions
- Exploring Pi
- Factors and multiples
- Fibonacci Sequences and number patterns
- Fractals
- Generating and analyzing patterns (algebraic thinking)
- Infinity
- Measuring circles, using a compass to draw circles
- Multiplication of multi-digit numbers
- Negative Numbers & solving addition & subtraction problems with integers
- Pascal's Triangle
- Place value into the millions
- Probability
- Radial, rotational and mirror symmetry
- Ratio, proportion and scale
- Square numbers
- Strategic Problem Solving
- Visual Spatial Problem Solving
- Work with equations involving addition, subtraction, multiplication and division
- Write & evaluate numerical expressions in which letters stand for numbers
- Campers will also do science activities with botany (flower dissection, identifying parts of the flower), light (making a cyanotype) and biology (DNA)