# **NH Curriculum Framework for Mathematics**

#### **Number and Operations**

M:N&O:1 – Demonstrates understanding of rational numbers. Related PLT PreK-8 Activities

- 37: Reduce, Reuse, Recycle
  - 84: The Global Climate
- M:N&O:2 Demonstrates understanding of the relative magnitude of numbers. Related PLT PreK-8 Activities
  - 28: Air Plants
  - 48: Field, Forest, and Stream
  - 66: Germinating Giants
- M:N&O:3 Demonstrates understanding of mathematical operations.
  - Related PLT PreK-8 Activities
    - None
- M:N&O:4 Accurately solves problems. Related PLT PreK-8 Activities
  - 12: Invasive Species
  - 37: Reduce, Reuse, Recycle
  - 38: Every Drop Counts
  - 50: 400-Acre Wood
  - 53: On the Move
  - 66: Germinating Giants
  - 67: How Big Is Your Tree?
  - 73: Waste Watchers
  - 84: The Global Climate
  - 85: In the Driver's Seat
- M:N&O:5 Demonstrates understanding of monetary value.
  - Related PLT PreK-8 Activities
    - None
- M:N&O:6 Uses a variety of mental computation strategies to solve problems and determine the reasonableness of answers.
  - Related PLT PreK-8 Activities
    - None
- M:N&O:7 Makes estimates.
  - Related PLT PreK-8 Activities
    - 38: Every Drop Counts
      - 67: How Big Is Your Tree?
      - 85: In the Driver's Seat

M:N&O:8 – Applies properties of numbers and field properties to solve problems and simplify computations.

Related PLT PreK-8 Activities

• None

### **Geometry and Measurement**

M:G&M:1 – Uses properties or attributes to identify, describe, classify, or distinguish among polygons and circles.

Related PLT PreK-8 Activities

• 1: The Shape of Things

M:G&M:2 – Applies theorems or relationships to solve problems.

Related PLT PreK-8 Activities

• None

M:G&M:3 – Uses properties or attributes to identify, compare, or describe three-dimensional shapes.

Related PLT PreK-8 Activities

None

M:G&M:4 – Demonstrates understanding and applies concepts of congruency. Related PLT PreK-8 Activities

• None

M:G&M:5 – Demonstrates understanding and applies concepts of similarity. <u>Related PLT PreK-8 Activities</u>

• None

M:G&M:6 – Demonstrates understanding of one, two, and three-dimensional measurements, including length/height, radius, diameter, circumference, perimeter, area, surface area, volume, and the use of trigonometric formulas to find these measures.

- 21: Adopt a Tree
- 27: Every Tree for Itself
- 65: Bursting Buds
- 66: Germinating Giants
- 67: How Big Is Your Tree?
- 77: Trees in Trouble

A Handbook Linking Project Learning Tree's PreK-8 Activity Guide to New Hampshire's Curriculum Framework for Mathematics

M:G&M:7 – Demonstrates understanding of measurable attributes, measures and uses units of measure appropriately and consistently, and makes accurate conversions when solving problems.

Related PLT PreK-8 Activities

- 4: Sounds Around
- 38: Every Drop Counts
- 41: How Plants Grow
- 47: Are Vacant Lots Vacant?
- 48: Field, Forest, and Stream
- 67: How Big Is Your Tree?
- 70: Soil Stories
- 77: Trees in Trouble

M:G&M:8 – Determines elapsed and accrued time.

Related PLT PreK-8 Activities

• None

M:G&M:9 – Demonstrates understanding of spatial relationships and solves problems using location and position.

Related PLT PreK-8 Activities

- 4: Sounds Around
- 47: Are Vacant Lots Vacant?
- 50: 400-Acre Wood
- 84: The Global Climate
- M:G&M:10 Demonstrates conceptual understanding of spatial reasoning and visualization. <u>Related PLT PreK-8 Activities</u>
  - 80: Nothing Succeeds Like Succession

# **Functions and Algebra**

M:F&A:1 – Identifies, generalizes, and extends to specific cases a variety of patterns and/or sequences.

- 25: Birds and Worms
- M:F&A:2 Demonstrates understanding of linear and nonlinear relationships and functions. Related PLT PreK-8 Activities
  - None
- M:F&A:3 Demonstrates understanding of algebraic expressions. Related PLT PreK-8 Activities
  - None
- M:F&A:4 Demonstrates conceptual understanding of equality.
  - Related PLT PreK-8 Activities
    - None

# **Data, Statistics, and Probability**

M:DSP:1 – Interprets a given representation to answer questions related to the data, or to analyze the data to formulate conclusions, make predictions, and/or solve problems.

- Related PLT PreK-8 Activities
  - 6: Picture This!

M:DSP:2 – Analyzes patterns, trends, or distributions in data in a variety of contexts.

Related PLT PreK-8 Activities

- 35: Loving It Too Much
- 84: The Global Climate

M:DSP:3 – Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.

Related PLT PreK-8 Activities

- 4: Sounds Around
- 6: Picture This!
- 16: Pass the Plants, Please
- 22: Trees as Habitats
- 25: Birds and Worms
- 27: Every Tree for Itself
- 35: Loving It Too Much
- 36: Pollution Search
- 37: Reduce, Reuse, Recycle
- 48: Field, Forest, and Stream
- 65: Bursting Buds
- 66: Germinating Giants
- 70: Soil Stories
- 73: Waste Watchers
- 80: Nothing Succeeds like Succession
- 84: The Global Climate
- 85: In the Driver's Seat

#### M:DSP:4 – Uses counting techniques to solve problems. <u>Related PLT PreK-8 Activities</u>

- None
- M:DSP:5 Solves problems to determine the experimental or theoretical probability of an event. <u>Related PLT PreK-8 Activities</u>
  - None

M:DSP:6 – Decides the most effective method to collect the data necessary to answer a question or hypothesis; collects, organizes and appropriately displays the data; analyzes the data to draw conclusions, and when appropriate makes predictions, asks new questions, and makes connections to real-world situations.

Related PLT PreK-8 Activities

- 29: Rain Reasons
- 38: Every Drop Counts
- 41: How Plants Grow
- 77: Trees in Trouble

# **Problem Solving, Reasoning, and Proof**

M:PRP:1 – Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content. (See Appendix for grade-level specifics.)

Related PLT PreK-8 Activities

- 12: Invasive Species
- 38: Every Drop Counts
- 50: 400-Acre Wood
- 53: On the Move
- 66: Germinating Giants
- 67: How Big Is Your Tree?
- 73: Waste Watchers
- 85: In the Driver's Seat
- **M:PRP:2** Students will use mathematical reasoning and proof. (*See Appendix for grade-level specifics.*)

Related PLT PreK-8 Activities

- 32: A Forest of Many Uses
- 70: Soil Stories
- 77: Trees in Trouble

# **Communication, Connections, and Representations**

**M:CCR:1** – Students will communicate their understanding of mathematics. (*See Appendix for grade-level specifics.*)

- 6: Picture This!
- 38: Every Drop Counts

M:CCR:2 – Students will create and use representations to communicate mathematical ideas and to solve problems. (*See Appendix for grade-level specifics.*)

Related PLT PreK-8 Activities

- 4: Sounds Around
- 16: Pass the Plants, Please
- 36: Pollution Search
- 37: Reduce, Reuse, Recycle
- 41: How Plants Grow
- 48: Field, Forest, and Stream
- 50: 400-Acre Wood
- 84: The Global Climate

M:CCR:3 – Students will recognize, explore, and develop mathematical connections. (See Appendix for grade-level specifics.)

- 1: The Shape of Things
- 50: 400-Acre Wood
- 53: On the Move
- 67: How Big Is Your Tree?
- 84: The Global Climate
- 85: In the Driver's Seat