1: The Shape of Things

- M:G&M:1 Uses properties or attributes to identify, describe, classify, or distinguish among polygons and circles.
- M:CCR:3 Students will recognize, explore, and develop mathematical connections. (See Appendix for grade-level specifics.)

2: Get in Touch with Trees

NONE

3: Peppermint Beetle

NONE

4: Sounds Around

- 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.
- M:G&M:9 Demonstrates understanding of spatial relationships and solves problems using location and position.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.

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

5: Poet-Tree

6: Picture This!

- 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.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- **M:CCR:1** Students will communicate their understanding of mathematics. (See Appendix for grade-level specifics.)

7: Habitat Pen Pals

NONE

8: The Forest of S.T. Shrew

NONE

9: Planet Diversity

NONE

10: Charting Diversity

NONE

11: Can It Be Real?

NONE

12: Invasive Species

M:N&O:4 – Accurately solves problems.

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

13: We All Need Trees

NONE

14: Renewable or Not?

NONE

15: A Few of My Favorite Things

NONE

16: Pass the Plants, Please

- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- M:CCR:2 Students will create and use representations to communicate mathematical ideas and to solve problems. (*See Appendix for grade-level specifics.*)

17: People of the Forest

NONE

18: Tale of the Sun

NONE

19: Viewpoints on the Line

NONE

20: Environmental Exchange Box

21: Adopt a Tree

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.

22: Trees as Habitats

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

23: The Fallen Log

NONE

24: Nature's Recyclers

NONE

25: Birds and Worms

- M:F&A:1 Identifies, generalizes, and extends to specific cases a variety of patterns and/or sequences.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.

26: Dynamic Duos

NONE

27: Every Tree for Itself

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

28: Air Plants

M:N&O:2 – Demonstrates understanding of the relative magnitude of numbers.

29: Rain Reasons

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.

30: Three Cheers for Trees

NONE

31: Plant a Tree

NONE

32: A Forest of Many Uses

M:PRP:2 – Students will use mathematical reasoning and proof. (*See Appendix for grade-level specifics.*)

33: Forest Consequences

NONE

34: Who Works In This Forest?

NONE

35: Loving It Too Much

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

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

36: Pollution Search

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

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

37: Reduce, Reuse, Recycle

- M:N&O:1 Demonstrates understanding of rational numbers.
- M:N&O:4 Accurately solves problems.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- M:CCR:2 Students will create and use representations to communicate mathematical ideas and to solve problems. (*See Appendix for grade-level specifics.*)

38: Every Drop Counts

- M:N&O:4 Accurately solves problems.
- M:N&O:7 Makes estimates.
- 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.
- 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.
- M:PRP:1 Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content. (See Appendix for grade-level specifics.)
- **M:CCR:1** Students will communicate their understanding of mathematics. (See Appendix for grade-level specifics.)

39: Energy Sleuths

NONE

40: Then and Now

NONE

41: How Plants Grow

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

42: Sunlight and Shades of Green

NONE

43: Have Seeds, Will Travel

NONE

44: Water Wonders

NONE

45: Web of Life

NONE

46: School Yard Safari

47: Are Vacant Lots Vacant?

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

48: Field, Forest, and Stream

- M:N&O:2 Demonstrates understanding of the relative magnitude of numbers.
- 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.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- M:CCR:2 Students will create and use representations to communicate mathematical ideas and to solve problems. (See Appendix for grade-level specifics.)

49: Tropical Treehouse

NONE

50: 400-Acre Wood

- M:N&O:4 Accurately solves problems.
- **M:G&M:9** Demonstrates understanding of spatial relationships and solves problems using location and position.
- M:PRP:1 Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content. (See Appendix for grade-level specifics.)
- M:CCR:2 Students will create and use representations to communicate mathematical ideas and to solve problems. (*See Appendix for grade-level specifics.*)
- **M:CCR:3** Students will recognize, explore, and develop mathematical connections. (*See Appendix for grade-level specifics*).

51: Make Your Own Paper

NONE

52: A Look At Aluminum

NONE

53: On the Move

M:N&O:4 – Accurately solves problems.

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

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

54: I'd Like to Visit a Place Where...

NONE

55: Planning the Ideal Community

NONE

56: We Can Work It Out

NONE

57: Democracy in Action

NONE

58: There Ought to Be A Law

NONE

59: Power of Print

60: Publicize It!

NONE

61: The Closer You Look

NONE

62: To Be A Tree

NONE

63: Tree Factory

NONE

64: Looking at Leaves

NONE

65: Bursting Buds

- 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 trigonometric formulas to find these measures.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.

66: Germinating Giants

- M:N&O:2 Demonstrates understanding of the relative magnitude of numbers.
- M:N&O:4 Accurately solves problems.
- 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 trigonometric formulas to find these measures.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- **M:PRP:1** Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content. (*See Appendix for grade-level specifics.*)

67: How Big Is Your Tree?

- M:N&O:4 Accurately solves problems.
- M:N&O:7 Makes estimates.
- 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 trigonometric formulas to find these measures.
- 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.
- **M:PRP:1** Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content. (*See Appendix for grade-level specifics.*)
- M:CCR:3 Students will recognize, explore, and develop mathematical connections. (See Appendix for grade-level specifics.)

68: Name That Tree

69: Forest for the Trees

NONE

70: Soil Stories

- 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.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- **M:PRP:2** Students will use mathematical reasoning and proof. (*See Appendix for grade-level specifics.*)

71: Watch on Wetlands

NONE

72: Air We Breathe

NONE

73: Waste Watchers

M:N&O:4 – Accurately solves problems.

- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- **M:PRP:1** Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content. (*See Appendix for grade-level specifics.*)

74: People, Places, Things

NONE

75: Tipi Talk

76: Tree Cookies

NONE

77: Trees in Trouble

- 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 trigonometric formulas to find these measures.
- 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.
- 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.
- M:PRP:2 Students will use mathematical reasoning and proof. (See Appendix for grade-level specifics.)

78: Signs of Fall

NONE

79: Tree Lifecycle

NONE

80: Nothing Succeeds Like Succession

- **M:G&M:10** Demonstrates conceptual understanding of spatial reasoning and visualization.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.

81: Living with Fire

82: Resource-Go-Round

NONE

83: A Peek at Packaging

NONE

84: The Global Climate

- M:N&O:1 Demonstrates conceptual understanding of rational numbers.
- M:N&O:4 Accurately solves problems.
- M:G&M:9 Demonstrates understanding of spatial relationships and solves problems using location and position.
- M:DSP:2 Analyzes patterns, trends, or distributions in data in a variety of contexts.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- M:CCR:2 Students will create and use representations to communicate mathematical ideas and solve problems. (See Appendix for grade-level specifics.)
- M:CCR:3 Students will recognize, explore, and develop mathematical connections. (See Appendix for grade-level specifics.)

85: In the Driver's Seat

- M:N&O:4 Accurately solves problems.
- M:N&O:7 Makes estimates.
- M:DSP:3 Organizes and displays data; identifies or describes elements of representations that best display a given set of data or situation.
- M:PRP:1 Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content. (See Appendix for grade-level specifics.)
- M:CCR:3 Students will recognize, explore, and develop mathematical connections. (See Appendix for grade-level specifics.)

86: Our Changing World

NONE

87: Earth Manners

NONE

88: Life on the Edge

NONE

89: Trees for Many Reasons

NONE

90: Native Ways

NONE

91: In the Good Old Days

NONE

92: A Look at Lifestyles

NONE

93: Paper Civilizations

NONE

94: By the Rivers of Babylon

NONE

95: Did You Notice?

NONE

96: Improve Your Place

NONE

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