



| <p><b>Michigan Project Learning Tree PreK-8 Guide</b></p> <p><b>Michigan Grade Level Content Expectations – Math</b></p> <p>X = Addresses/Supports</p>   | 19. Viewpoints on the Line | 20. Environmental Exchange Box | 21. Adopt a Tree | 22. Trees as Habitats | 23. The Fallen Log | 24. Nature’s Recyclers | 25. Birds and Worms | 26. Dynamic Duos | 27. Every Tree for Itself | 28. Air Plants | 29. Rain Reasons | 30. Three Cheer for Trees | 31. Plant a Tree | 32. A Forest of Many Uses | 33. Forest Consequences | 34. Who Works in this Forest? | 35. Loving It Too Much | 36. Pollution Search |
|--|----------------------------|--------------------------------|------------------|-----------------------|--------------------|------------------------|---------------------|------------------|---------------------------|----------------|------------------|---------------------------|------------------|---------------------------|-------------------------|-------------------------------|------------------------|----------------------|
| <b>A.RP.07.02</b> Represent directly proportional and linear relationships using verbal descriptions, tables, graphs, and formulas, and translate among these representations.                       |                            |                                |                  |                       |                    |                        |                     |                  |                           |                |                  |                           |                  |                           |                         |                               | X                      |                      |
| <b>Represent and interpret data</b>  |                            |                                |                  |                       |                    |                        |                     |                  |                           |                |                  |                           |                  |                           |                         |                               |                        |                      |
| <b>D.RE.07.01</b> Represent and interpret data using circle graphs, stem and leaf plots, histograms, and box-and-whisker plots, and select appropriate representation to address specific questions. |                            |                                |                  | X                     |                    |                        |                     |                  | X                         |                |                  |                           |                  |                           |                         |                               |                        |                      |

| <p><b>Michigan Project Learning Tree PreK-8 Guide</b></p> <p><b>Michigan Grade Level Content Expectations – Math</b></p> <p>X = Addresses/Supports</p> | 37. Reduce, Reuse, Recycle | 38. Every Drop Counts | 39. Energy Sleuths | 40. Then and Now | 41. How Plants Grow | 42. Sunlight and Shades for Green | 43. Have Seed, Will Travel | 44. Water Wonders | 45. Web of Life | 46. School Yard Safari | 47. Are Vacant Lots Vacant? | 48. Field, forest, and Stream | 49. Tropical Treehouse | 50. 400-Acre Wood | 51. Make Your Own Paper | 52. A Look at Aluminum | 53. On the Move | 54. I’d Like to Visit a Place Where |
|--|----------------------------|-----------------------|--------------------|------------------|---------------------|-----------------------------------|----------------------------|-------------------|-----------------|------------------------|-----------------------------|-------------------------------|------------------------|-------------------|-------------------------|------------------------|-----------------|-------------------------------------|
| <b>Grade 7</b>   |                            |                       |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               |                        |                   |                         |                        |                 |                                     |
| <b>Understand and solve problems involving rates, ratios, and proportions</b>  |                            |                       |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               |                        |                   |                         |                        |                 |                                     |
| <b>N.FL.07.03</b> Calculate rates of change including speed.   |                            | X                     |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               |                        |                   |                         |                        | X               |                                     |
| <b>Compute with rational numbers</b>   |                            |                       |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               |                        |                   |                         |                        |                 |                                     |
| <b>N.FL.07.07</b> Solve problems involving operations with integers.   |                            |                       |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               | X                      |                   |                         |                        | X               |                                     |
| <b>N.FL.07.08</b> Add, subtract, multiply, and divide positive and negative rational numbers fluently.   |                            |                       |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               | X                      |                   |                         |                        | X               |                                     |

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| <b>Represent and interpret data</b>  |                            |                       |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               |                        |                   |                         |                        |                 |                                     |
| <b>D.RE.07.01</b> Represent and interpret data using circle graphs, stem and leaf plots, histograms, and box-and-whisker plots, and select appropriate representation to address specific questions. | X                          |                       |                    |                  |                     |                                   |                            |                   |                 |                        |                             |                               |                        |                   |                         |                        | X               |                                     |

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| <p><b>Michigan Project Learning Tree PreK-8 Guide</b></p> <p><b>Michigan Grade Level Content Expectations - Math</b></p> <p>X = Addresses/Supports</p>  | 55. Planning the Ideal Community | 56. We Can Work It Out | 57. Democracy in Action | 58. There Ought to Be a Law | 59. Power of Print | 60. Publicize It! | 61. The Closer You Look | 62. To Be a Tree | 63. Tree Factory | 64. Looking at Leaves | 65. Bursting Buds | 66. Germinating Giants | 67. How Big Is Your Tree? | 68. Name that Tree | 69. Forest for the Trees | 70. Soil Stories | 71. Watch on Wetlands | 72. Air We Breathe |
| <b>Grade 7</b>  |                                  |                        |                         |                             |                    |                   |                         |                  |                  |                       |                   |                        |                           |                    |                          |                  |                       |                    |
| <b>Understand and solve problems involving rates, ratios, and proportions</b>   |                                  |                        |                         |                             |                    |                   |                         |                  |                  |                       |                   |                        |                           |                    |                          |                  |                       |                    |
| <b>N.FL.07.05</b> Solve proportion problems using such methods as unit rate, scaling, finding equivalent fractions, and solving the proportion equation $a/b = c/d$ ; know how to see patterns about proportional situations in tables. |                                  |                        |                         |                             |                    |                   |                         |                  |                  |                       |                   |                        | X                         |                    |                          |                  |                       |                    |

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| <b>Michigan Project Learning Tree PreK-8 Guide</b><br><br><b>Michigan Grade Level Content Expectations – Math</b><br><br>X = Addresses/Supports | 73. Waste Watchers | 74. People, Places, Things | 75. Tipi Talk | 76. Tree Cookies | 77. Trees in Trouble | 78. Signs of Fall | 79. Tree Lifecycle | 80. Nothing Succeeds Like Succession | 81. Living with Fire | 82. Resource-Go-Round | 83. A Peek at Packaging | 84. The Global Climate | 85. In the Driver’s Seat | 86. Our Changing World | 87. Earth Manners | 88. Life on the Edge | 89. Trees for Many Reasons | 90. Native Ways |
| <b>Grade 7</b>  |                    |                            |               |                  |                      |                   |                    |                                      |                      |                       |                         |                        |                          |                        |                   |                      |                            |                 |
| <b>Understand and solve problems involving rates, ratios, and proportions</b>   |                    |                            |               |                  |                      |                   |                    |                                      |                      |                       |                         |                        |                          |                        |                   |                      |                            |                 |
| <b>N.MR.07.04</b> Convert ratio quantities between different systems of units, such as feet per second to miles per hour.                       |                    |                            |               |                  |                      |                   |                    |                                      |                      |                       |                         |                        | X                        |                        |                   |                      |                            |                 |
| <b>Understand and apply directly proportional relationships and relate to linear relationships</b>  |                    |                            |               |                  |                      |                   |                    |                                      |                      |                       |                         |                        |                          |                        |                   |                      |                            |                 |
| <b>A.PA.07.01</b> Recognize when information given in a table, graph, or formula suggests a directly proportional or linear relationship.       |                    |                            |               |                  |                      |                   |                    |                                      |                      |                       | X                       |                        |                          |                        |                   |                      |                            |                 |

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| <b>Grade 7</b>  |                          |                          |                         |                              |                     |                        |