Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	1. The Shape of Things	2. Get In Touch with Trees	3. Peppermint Beetle	4. Sounds Around	5. Poet-Tree	6. Picture This!	7. Habitat Pen Pals	8. The Forest of S.T. Shrew	9. Planet Diversity	10. Charting Diversity	11. Can It Be Real?	12. Invasive Species	13. We All Need Trees	14. Renewable or Not?	15. A Few of My Favorite Things	16. Pass the Plants, Please	17. People of the Forest	18. Tale of the Sun
GRADE 1																		
S.IP.E.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.	X	X	X	X		X										X		X
S.IP.01.12 Generate questions based on observations.	X	X	X	X		X										X		X
S.IP.01.13 Plan and conduct simple investigations.													X					
S.IP.01.14 Manipulate simple tools (for example: hand lens, pencils, rulers, thermometers, rain gauges, balances, non-standard objects for measurement) that aid observation and data collection.	X			X														
S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.				X														
S.IP.01.16 Construct simple charts from data and observations.				X												X		
S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.																		
S.IA.01.12 Share ideas about science through purposeful conversation.	X	X	X	X		X		X					X			X		X
S.IA.01.13 Communicate and present findings of observations.	X	X	X	X		X		X					X			X		
S.IA.01.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).	X	X		X												X		X
S.RS.E.1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history.																		

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	1. The Shape of Things	2. Get In Touch with Trees	3. Peppermint Beetle	4. Sounds Around	5. Poet-Tree	6. Picture This!	7. Habitat Pen Pals	8. The Forest of S.T. Shrew	9. Planet Diversity	10. Charting Diversity	11. Can It Be Real?	12. Invasive Species	13. We All Need Trees	14. Renewable or Not?	15. A Few of My Favorite Things	16. Pass the Plants, Please	17. People of the Forest	18. Tale of the Sun
S.RS.01.12 Recognize that science investigations are done more than one time.				X														
P.PM.E.1 Physical Properties- All objects and substances have physical properties that can be measured.																		
P.PM.01.11 Demonstrate the ability to sort objects according to observable attributes such as color, shape, size, sinking or floating.	X					X												
L.OL.E.1 Life Requirements- Organisms have basic needs. Animals and plants need air, water, and food. Plants also require light. Plants and animals use food as a source of energy and as a source of building material for growth and repair.																		
L.OL.01.13 Identify the needs of animals.							X											
E.ES.E.1 Solar Energy- The sun warms the land, air and water and helps plants grow.																		
E.ES.01.11 Identify the sun as the most important source of heat which warms the land, air, and water of the Earth.																		X
E.ES.01.12 Demonstrate the importance of sunlight and warmth in plant growth.																		X

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	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
GRADE 1																		
S.IP.E.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.			X	X		X	X		X			X	X	X				X
S.IP.01.12 Generate questions based on observations.			X	X		X	X		X			X	X	X				X
S.IP.01.13 Plan and conduct simple investigations.						X												
S.IP.01.14 Manipulate simple tools (for example: hand lens, pencils, rulers, thermometers, rain gauges, balances, non-standard objects for measurement) that aid observation and data collection.				X														
S.IP.01.16 Construct simple charts from data and observations.			X	X		X	X											
S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.																		
S.IA.01.12 Share ideas about science through purposeful conversation.		X	X	X		X	X		X			X	X	X				X
S.IA.01.13 Communicate and present findings of observations.		X	X	X		X	X											
S.IA.01.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).		X	X	X		X							X					
S.RS.E.1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history.																		
S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.							X		X									
S.RS.01.12 Recognize that science investigations are done			X			X	X		X									

more than one time.

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	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
P.PM.E.1 Physical Properties- All objects and substances have physical properties that can be measured.																		
P.PM.01.11 Demonstrate the ability to sort objects according to observable attributes such as color, shape, size, sinking or floating.				X														X
L.OL.E.1 Life Requirements- Organisms have basic needs. Animals and plants need air, water, and food. Plants also require light. Plants and animals use food as a source of energy and as a source of building material for growth and repair.																		
L.OL.01.13 Identify the needs of animals.						X												
E.ES.E.1 Solar Energy- The sun warms the land, air and water and helps plants grow.																		
E.ES.01.12 Demonstrate the importance of sunlight and warmth in plant growth.				X					X									
E.SE.E.1 Earth Materials- Earth materials that occur in nature include rocks, minerals, soils, water, and the gases of the atmosphere. Some Earth materials have properties which sustain plant and animal life.																		
E.SE.01.12 Describe how Earth materials contribute to the growth of plant and animal life.			X															

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	37. Reduce, Reuse, Recycle	38. Every Drop Counts	39. Energy Sleuths	40. Then and Now	41. How Plants Grow	42. Sunlight and Shades for	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
GRADE 1																		
S.IP.E.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.			X		X		X			X	X	X						X
S.IP.01.12 Generate questions based on observations.			X		X		X			X	X	X						X
S.IP.01.13 Plan and conduct simple investigations.					X													
S.IP.01.14 Manipulate simple tools (for example: hand lens, pencils, rulers, thermometers, rain gauges, balances, non-standard objects for measurement) that aid observation and data collection.					X					X	X							
S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.					X													
S.IP.01.16 Construct simple charts from data and observations.			X		X		X											
S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.																		
S.IA.01.12 Share ideas about science through purposeful conversation.			X		X		X			X	X	X	X		X		X	X
S.IA.01.13 Communicate and present findings of observations.					X					X	X	X	X					X
S.IA.01.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).			X		X		X			X	X	X	X					X
S.RS.E.1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history.																		

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	37. Reduce, Reuse, Recycle	38. Every Drop Counts	39. Energy Sleuths	40. Then and Now	41. How Plants Grow	42. Sunlight and Shades for	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
S.RS.01.12 Recognize that science investigations are done more than one time.					X													
L.OL.E.1 Life Requirements- Organisms have basic needs. Animals and plants need air, water, and food. Plants also require light. Plants and animals use food as a source of energy and as a source of building material for growth and repair.																		
L.OL.01.13 Identify the needs of animals.										X		X	X					
E.ES.E.1 Solar Energy- The sun warms the land, air and water and helps plants grow.																		
E.ES.01.11 Identify the sun as the most important source of heat which warms the land, air, and water of the Earth.			X										X					
E.ES.01.12 Demonstrate the importance of sunlight and warmth in plant growth.					X							X	X					
E.SE.E.1 Earth Materials- Earth materials that occur in nature include rocks, minerals, soils, water, and the gases of the atmosphere. Some Earth materials have properties which sustain plant and animal life.																		
E.SE.01.12 Describe how Earth materials contribute to the growth of plant and animal life.					X													

Michigan Project Learning Tree PreK-8 Guide

Michigan Grade Level Content Expectations – Science

X = Addresses/Supports

	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
GRADE 1																		
S.IP.E.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.	X						X		X	X	X		X			X		
S.IP.01.12 Generate questions based on observations.	X						X		X	X	X		X			X		
S.IP.01.13 Plan and conduct simple investigations.																X		
S.IP.01.14 Manipulate simple tools (for example: hand lens, pencils, rulers, thermometers, rain gauges, balances, non-standard objects for measurement) that aid observation and data collection.	X						X				X		X			X		
S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.											X		X					
S.IP.01.16 Construct simple charts from data and observations.							X				X					X		
S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.																		
S.IA.01.12 Share ideas about science through purposeful conversation.	X						X	X	X	X	X		X			X		
S.IA.01.13 Communicate and present findings of observations.										X								
S.IA.01.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).											X							
S.RS.E.1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history.																		

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	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
S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.									X									
E.ES.E.1 Solar Energy- The sun warms the land, air and water and helps plants grow.																		
E.ES.01.12 Demonstrate the importance of sunlight and warmth in plant growth.								X										
E.SE.E.1 Earth Materials- Earth materials that occur in nature include rocks, minerals, soils, water, and the gases of the atmosphere. Some Earth materials have properties which sustain plant and animal life.																		
E.SE.01.12 Describe how Earth materials contribute to the growth of plant and animal life.								X								X		

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** 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
GRADE 1																		
S.IP.E.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.		X		X	X	X	X		X									
S.IP.01.12 Generate questions based on observations.		X		X	X	X	X		X									
S.IP.01.13 Plan and conduct simple investigations.					X													
S.IP.01.14 Manipulate simple tools (for example: hand lens, pencils, rulers, thermometers, rain gauges, balances, non-standard objects for measurement) that aid observation and data collection.					X													
S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.					X													
S.IP.01.16 Construct simple charts from data and observations.					X													
S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.																		
S.IA.01.12 Share ideas about science through purposeful conversation.		X		X	X	X	X		X						X			
S.IA.01.13 Communicate and present findings of observations.					X													
S.RS.E.1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history.																		
S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.									X									

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** 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
S.RS.01.12 Recognize that science investigations are done more than one time.					X													
P.PM.E.1 Physical Properties- All objects and substances have physical properties that can be measured.																		
P.PM.01.11 Demonstrate the ability to sort objects according to observable attributes such as color, shape, size, sinking or floating.		X																
E.ES.E.1 Solar Energy- The sun warms the land, air and water and helps plants grow.																		
E.ES.01.12 Demonstrate the importance of sunlight and warmth in plant growth.				X		X												
E.SE.E.1 Earth Materials- Earth materials that occur in nature include rocks, minerals, soils, water, and the gases of the atmosphere. Some Earth materials have properties which sustain plant and animal life.																		
E.SE.01.12 Describe how Earth materials contribute to the growth of plant and animal life.				X	X	X												

Michigan Project Learning Tree PreK-8 Guide **Michigan Grade Level Content Expectations – Science** X = Addresses/Supports	91. In The Good Old Days	92. A Look at Lifestyles	93. Paper Civilizations	94. By The Rivers of Babylon	95. Did You Notice?	96. Improve Your Place
GRADE 1						
S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.						
S.IA.01.12 Share ideas about science through purposeful conversation.					X	
S.IA.01.13 Communicate and present findings of observations.					X	
S.RS.E.1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history.						
S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.					X	