

<p>Michigan Project Learning Tree PreK-8 Guide</p> <p>Michigan Grade Level Content Expectations – Science</p> <p>X = Addresses/Supports</p>	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
<p>S.RS.M.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 and within society.</p>																		
<p>S.RS.05.11 Evaluate the strengths and weaknesses of claims, arguments, and data.</p>														X				
<p>S.RS.05.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p>			X											X				
<p>S.RS.05.16 Design solutions to problems using technology.</p>																		
<p>S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.</p>				X								X	X	X	X		X	
<p>L.EV.M.1 Species Adaptation and Survival- Species with certain traits are more likely than others to survive and have offspring in particular environments. When an environment changes, the advantage or disadvantage of the species' characteristics can change. Extinction of a species occurs when the environment changes and the characteristics of a species are insufficient to allow survival.</p>																		
<p>L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment.</p>			X					X		X	X	X						
<p>L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.</p>			X			X	X	X		X	X	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 5																		
S.IP.M.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.05.11 Generate scientific questions based on observations, investigations, and research.		X	X	X	X	X	X	X	X	X		X	X	X		X	X	X
S.IP.05.12 Design and conduct scientific investigations.						X												
S.IP.05.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens) appropriate to scientific investigations.										X								
S.IP.05.15 Construct charts and graphs from data and observations.		X	X	X	X	X	X											X
S.IP.05.16 Identify patterns in data.						X	X											
S.IA.M.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.																		
S.IA.05.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.		X																
S.IA.05.13 Communicate and defend findings of observations and investigations using evidence.		X	X	X	X	X	X											X
S.RS.M.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 and within society.																		
S.RS.05.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.							X											
S.RS.05.16 Design solutions to problems using technology.																		
S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.				X	X				X	X		X	X		X			X

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L.EV.M.1 Species Adaptation and Survival- Species with certain traits are more likely than others to survive and have offspring in particular environments. When an environment changes, the advantage or disadvantage of the species’ characteristics can change. Extinction of a species occurs when the environment changes and the characteristics of a species are insufficient to allow survival.																		
L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment.		X				X	X	X						X				
L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.		X	X			X	X	X				X	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 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
GRADE 5																		
S.IP.M.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.05.11 Generate scientific questions based on observations, investigations, and research.	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
S.IP.05.12 Design and conduct scientific investigations.					X	X						X						

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S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.	X	X		X				X	X		X	X						X
S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.																	X	
L.EV.M.1 Species Adaptation and Survival- Species with certain traits are more likely than others to survive and have offspring in particular environments. When an environment changes, the advantage or disadvantage of the species' characteristics can change. Extinction of a species occurs when the environment changes and the characteristics of a species are insufficient to allow survival.																		
L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment.										X		X	X					
L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.										X		X	X					

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GRADE 5																		
S.IP.M.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.																		
S.IP.05.11 Generate scientific questions based on observations, investigations, and research.	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		
S.IP.05.12 Design and conduct scientific investigations.																X		
S.IP.05.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens) appropriate to scientific investigations.											X	X	X					
S.IP.05.14 Use metric measurement devices in an investigation.											X	X	X					
S.IP.05.15 Construct charts and graphs from data and observations.				X			X				X		X			X		
S.IP.05.16 Identify patterns in data.																X		
S.IA.M.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.																		
S.IA.05.11 Analyze information from data tables and graphs to answer scientific questions.													X			X		
S.IA.05.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.			X	X														
S.IA.05.13 Communicate and defend findings of observations and investigations using evidence.	X	X	X	X								X	X			X		
S.IA.05.14 Draw conclusions from sets of data from multiple trials of a scientific investigation.																X		
S.IA.05.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data.		X		X												X		

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S.RS.05.13 Identify the need for evidence in making scientific decisions.					X													
S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.								X	X	X	X		X	X		X	X	
L.EV.M.1 Species Adaptation and Survival- Species with certain traits are more likely than others to survive and have offspring in particular environments. When an environment changes, the advantage or disadvantage of the species’ characteristics can change. Extinction of a species occurs when the environment changes and the characteristics of a species are insufficient to allow survival.																		
L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment.																X		
L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.																X		

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GRADE 5						
S.IP.M.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.						
S.IP.05.11 Generate scientific questions based on observations, investigations, and research.		X	X		X	X
S.IA.M.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.						
S.IA.05.13 Communicate and defend findings of observations and investigations using evidence.						X
S.RS.M.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 and within society.						
S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.		X				