

## Grade 4 Benchmarks

Activity	Language Arts	Mathematics	Science	Social Studies
<b>Insects and Diseases</b>				
1. <i>Insect Predictions and Survey</i> - To predict insect characteristics and learn what all insects have in common.		31, 32, 34	1, 2	
2. <i>Insect Symmetry</i> - To learn and understand the concept of symmetry.		2, 4, 16, 21, 25, 35, 36, 37	1	
3. <i>The Great Cover-Up!</i> - To learn and understand the concept of camouflage.			1, 2	
4. <i>Designer Bugs</i> - To reinforce concepts learned about insects so far: their characteristics and the concepts of symmetry and camouflage..			1, 2	
5. <i>Insect Riddles</i> - To reinforce basic concepts learned about insects so far, and to experiment with creative writing concepts by creating riddles.	2, 3, 4, 5, 6, 11, 12, 13, 15, 16, 17, 26, 41			
6. <i>Secret Smells Game</i> - To discover how insects communicate using pheromones.			1	
1. <i>All in the Family: Insect Flash Cards</i> - To learn that insects are organized in groups based on their characteristics. To learn the characteristics common to all insects and the characteristics specific to a few groups of insects, called orders.			1, 2, 7	3
2. <i>Ordering Insects</i> - To learn to sort insects based on similarities and differences, and make a basic insect key.		35, 37	1, 2	
3. <i>Metamorphosis Bracelets and Belts</i> - To learn the stages of metamorphosis.			1	
4. <i>Morpho Puppets</i> - To learn the stages of complete metamorphosis, and teach them to a younger group.				
5. <i>JMG Web Activity: Journey North</i> - To gain familiarity with the Internet as a research tool.	13, 15		10	3
1. <i>Suck-A-Bug</i> - To make a simple aspirator and use it to collect and observe small insects.			9	
2. <i>It's a Small World</i> - To create Berlese (Bur-lay-z) funnel and use it to collect and observe insects living in the ground and soil.	13, 15, 20, 39, 44	14, 17, 18, 35, 37	1, 9	
3. <i>Classroom Netting</i> - To make an insect net and use it to collect samples of insects by sweeping.		35, 37	1, 9	
4. <i>By Land or By Sea</i> - To compare and contrast the types of insects living in different habitats.	1, 6, 13, 14, 18, 19, 20, 21, 24, 26, 28, 34, 39	35, 37	1, 7	3, 4
5. <i>Classroom Ant Lion Farm</i> - To make a living collection of one type of insect and observe it closely as it builds its home.	13, 15	35, 37	1	6
1. <i>Chew on This!</i> - To learn the four types of insect mouthparts and how they are specialized.			1	

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2. <i>Schoolyard Survey</i> - To survey the schoolyard for signs of insect damage and to determine the types of insects that caused the damage.		6, 30, 35, 37, 37	1, 3, 10	2, 3, 4
3. <i>Pollinator Puppet Show</i> - To learn the basic process of insect pollination.			1, 2	3
4. <i>The Bartering System</i> - To learn how plants and insects trade services, and to become familiar with the concept of energy exchange.		31, 32, 34	1, 2, 10	2, 3
5. <i>The Lone Bee</i> - To learn about solitary bees and create a bee home for them.				
6. <i>Designer Plants and Insects</i> - To combine previously learned concepts in creating insects and plants that are designed to work together.	1, 2, 4, 11, 13, 15		1, 2, 10	
1. <i>Garden Friends and Foes</i> - To learn the difference between beneficial and pest insects, and to learn a few examples of each type.			1, 2, 7	3, 4
2. <i>Don't Bug Me!</i> - To identify pest insects of various organisms, and to discover the interrelatedness of all living organisms.	6, 13, 14, 17, 18, 20, 21, 24, 26, 28, 34, 39, 44		1, 2	3, 4
3. <i>Who Goes There?</i> - To learn the basics of Integrated Pest Management (IPM), and to create a classroom IPM charting system.			1, 2, 10	3, 4
4. <i>Buyer Beware</i> - To compare and contrast factual versus persuasive writing , and to gain practice reading labels.				
5. <i>Critter Creations</i> - To learn the four types of beneficial insects and why they are considered beneficial.	1, 10, 13, 15			3, 4
1. <i>Exploratory Fungi</i> - To observe the variety of fungal spores present in the air.	1, 2, 3, 4, 10, 11, 12, 18	35, 37	2	
2. <i>Yeast Bread</i> - To learn how one fungus - yeast - is used in cooking and what purpose it serves.		6, 7, 14, 15, 17, 18, 30, 37	2, 10	
3. <i>Lacy Leaves</i> - To observe organic matter (decaying leaves) being decomposed by fungi.			1, 2	
4. <i>Likin' those Lichens</i> - To learn what a lichen is and what a mutually beneficial relationship is.	13, 15		1, 2	3, 4
5. <i>Prescription for Prevention</i> - To learn the components of the disease triangle and the concept of IPM.	6, 7, 10, 11, 13, 14, 16, 17, 18, 19, 20, 21, 24, 26, 28, 29, 31, 34, 39, 45		1, 2	3, 4
6. <i>There's a Fungus Among Us!</i> - To observe and identify fungi that act as pests in the garden.	1, 2, 4, 6, 11, 13, 14, 15, 17, 18, 19, 20, 21, 24, 26, 28, 34, 39		1, 2	3, 4