## BD Course Guide (2025)

## Course Description: Grade 1 Science

Science instruction is designed to allow students to develop an understanding of content. However, the instruction is using inquiry to develop universal skills. Science instruction has students problem solving, sharing ideas, modeling their thinking, and using evidence to support their ideas.

Adopted Course Primary Resource	Supplementary Resources	
Mystery Science	Inspire Read Aloud (McGraw-Hill)	

Performance Expectations				
Physical Science	1-PS4-1	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.		
	1-PS4-2	Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.		
	1-PS4-3	Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.		
	1-PS4-4	Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.		
Life Science	1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.		
	1-LS1-2	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.		
	1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.		
Earth & Space Science	1-ESS1-1	Use observations of the sun, moon, and stars to describe patterns that can be predicted.		
	1-ESS1-2	Make observations at different times of year to relate the amount of daylight to the time of year.		
Engineering, Technology, and the Application of Science	K-2-ETS1-1	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.		
	K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.		
	K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.		

Units of Study (Sequenced)	Standards		Lesson Question(s)	Pacing (Session = 30 Minutes)
Plant Superpowers	1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	<ul> <li>What will a baby plant look like when it grows up?</li> <li>Why don't trees blow down in the wind?</li> <li>What do sunflowers do when you're not looking?</li> </ul>	11 Sessions
	1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.		
	K-2-ETS1-1	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.		
	K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.		
	K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.		
Animal Superpowers	1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	<ul> <li>How can you help a lost baby find its parents?</li> <li>Why do birds have beaks?</li> <li>Why do baby ducks follow their mother?</li> <li>Why are polar bears white?</li> <li>Why do family members look alike?</li> </ul>	20 Sessions
	1-LS1-2	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.		
	1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.		
		Term 1 Ends		
Moon & Stars	1-ESS1-1	Use observations of the sun, moon, and stars to describe patterns that can be predicted.	<ul> <li>When can you see the full moon?</li> <li>Why do the stars come out at night?</li> <li>How can stars help you if you</li> </ul>	12 Sessions

			get lost?	
		Term 2/Semester 1 Ends		
Lights & Sounds	1-PS4-1	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	<ul> <li>How do they make silly sounds in cartoons?</li> <li>Where do sounds come from?</li> <li>What if there were no windows?</li> <li>Can you see in the dark?</li> <li>How could you send a secret message to someone far away?</li> <li>How do boats find their way in the fog?</li> </ul>	22 Sessions
	1-PS4-2	Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.		
	1-PS4-3	Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.		
	1-PS4-4	Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.		
	K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.		
		Term 3 Ends		
Sun & Shadows	1-ESS1-1	Use observations of the sun, moon, and stars to describe patterns that can be predicted.	<ul> <li>Could a statute's shadow move?</li> <li>What does your shadow do when you're not looking?</li> </ul>	15 Sessions
	1-ESS1-2	Make observations at different times of year to relate the amount of daylight to the time of year.	<ul> <li>How can the sun help you if you're lost?</li> <li>Why do you have to go to bed early in the summer?</li> </ul>	
		Term 4/Semester 2 Ends		