Grade 6 Science

Curricular Competencies

		Questioning & Predicting				Planning & Conduting						Processing & Analyzing Data & Info					Evaluating						Applying & Innovating				Communicating	
Big Ideas	*Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment. *Everyday materials are often homogeneous solutions and heterogeneous mixtures. *Newton's three laws of motion describe the relationship between force and motion. *The solar system is part of the Milky Way, which is one of billions of galaxies.	Demonstrate a sustained curiosity about a scientific topic or problem of personal interest	Make observations in familiar or unfamiliar contexts	Identify questions to answer or problems to solve through scientific inquiry	Make predictions about the findings of their inquiry	Explore and pose questions that lead to investigations	With support, plan appropriate investigations to answer their questions or solve problems they have identified	Decide which variable should be changed and measured for a fair test	Choose appropriate data to collect to answer their questions	Observe, measure, and record data, using appropriate tools, including digital technologies	Use equipment and materials safely, identifying potential risks	Experience and interpret the local environment	Construct and use a variety of methods, including tables, graphs, and digital technologies, as appropriate, to represent patterns or relationships in data	Identify patterns and connections in data	Compare data with predictions and develop explanations for results	Demonstrate an openness to new ideas and consideration of alternatives	Evaluate whether their investigations were fair tests	Identify possible sources of error	Suggest improvements to their investigation methods	Identify some of the assumptions and given information in secondary sources	Demonstrate an understanding and appreciation of evidence	Identify some of the social, ethical, and environmental implications of the findings from their own and others' investigations	Contribute to care for self, others, and community through personal or collaborative approaches	Co-operatively design projects	Transfer and apply learning to new situations	Generate and introduce new or refined ideas when problem solving	Communicate ideas, explanations, and processes in a variety of ways	Express and reflect on personal, shared, or others' experiences of place
Content	basic structures and functions of body systems:musculoskeletal, reproductive, horomonal, nervous																											
	heterogeneous mixtures																											
	mixtures - separated using a difference in component properties																											
	Newton's three laws of motion																											
	effects of balanced and unbalanced forces in daily physical activities																											
	force of gravity																											
	the overall scale, structure, and age of the universe																											
	the position, motion, andcomponents of our solar systemin our galaxy																											
	extreme environments exist on Earth and in the solar system																											