STEM Categories	Topics for 4th-8th Graders
Life Science	--
|	Plant and animal cell structures
|	Life cycles of insects and other animals
|	Food webs and ecosystems
|	Human body systems (digestive, circulatory, respiratory)
|	Basic genetics and heredity
|	Microorganisms
Physical Science	--
|	States of matter
|	Mixtures and solutions
|	Simple chemical reactions
|	Forces and motion (gravity, friction, inertia)
|	Energy transfer (heat, light, sound)
|	Electricity and circuits
Earth and Space Science	--
|	Weather patterns and forecasting
|	Rock cycle and types of rocks
|	Earth's systems (water cycle, plate tectonics)
|	Solar system and planets
|	Stars and constellations
Coding basics	--
|	Block-based coding platforms (Scratch, Blockly)
|	Simple algorithms and loops
|	Digital literacy and online safety
Robotics	--
|	Simple robot construction using kits
|	Basic programming for robot movements
Engineering Design Process	--
|	Identifying a problem
|	Brainstorming solutions
|	Building prototypes
|	Testing and refining designs
Structural Engineering	--
|	Building bridges and towers with various materials
|	Exploring concepts like tension and compression
Mechanical Engineering	--
|	Designing and building simple machines (lever, pulley, wheel and axle)
Data analysis	--
|	Collecting and organizing data
|	Creating graphs and charts
|	Interpreting data trends
Measurement and units	--
|	Metric system
|	Converting between units
Geometry	--
|	Basic shapes and their properties
|	Perimeter and area calculations