SPECIFIC STEM CATEGORIES: 2-3 YEARS

The toy supports one or more learning goals in at least two STEM subjects.

RATING CRITERIA

Area	Criteria	Example Toy
Science	**Scientific Practices** • Expressing curiosity by asking questions and solving problems • Creating models to represent their ideas (e.g. mix colors of paint to show the colors of leaves changing on a tree) • Planning and carrying out simple investigations (e.g. compare textures of objects using the sense of touch) • Understanding basic safety, and using nonstandard and standard scientific tools, in experiments (e.g. studying natural items under a magnifying glass) **Organisms** • Observing, investigating, describing, and categorizing living things • Understanding changes that occur in themselves and the environment (e.g. looking at photos of themselves when younger and comparing how they have grown) • Describing and comparing the basic needs of living things **Matter** • Understanding changes that occur in matter (e.g. mix substances such as baking soda and water) • Observing, investigating, describing, and categorizing physical objects; including earth/water/air **Forces** • Exploring and describing simple forces such as wind, gravity, and magnetism **Earth's Systems and Human Activity** • Understanding changes in the weather and seasons • Learning to respect nature and take care of the environment	**SmartMax Start STEM Magnetic Discovery Building Set** A construction toy that uses magnets to stick together, introducing children to the concept that magnets can repel and attract.

RATING CRITERIA

Area	Criteria	Example Toy
Technology	**Digital Tools** • Recognizing that a range of technology is used for different purposes • Selecting and using technology for purposes • Starting to use simple technology such as tablet devices	**TOMY John Deere Build a Johnny Tractor** A working toy tractor that children can build and take apart, introducing them to using tools (i.e. a screwdriver) and how screws work (twisting to go in/out).
Engineering	**General Engineering** • Learning the concept of object permanence (that objects still exist even if they can't see them) • Using levers, buttons, or instructions (e.g. press here) to get a reaction • Showing curiosity about how thing work	**Edushape Curiosity Cubes** A collection of four maze cubes that require children to move a bead between a 'start' and 'end' point, using logical movement.

SPECIFIC STEM CATEGORIES: 2-3 YEARS

RATING CRITERIA

Area	Criteria	Example Toy
Mathematics	**Numbers and Operations** • Connecting numbers to quantities, counting objects up to five • Verbally reciting numbers one to 10, and know the next number up • Recognizing some single digit written numerals • Recognizing that numbers and quantities can be combined or separated to make another number, and identifying this new number, up to 10 • Estimating and comparing quantities using objects using "more", "less", "greater than", "fewer", "equal to", or "same as" **Shapes and Measurements** • Measuring length and capacity using non-standard measurements (e.g. a pencil) and estimations, moving onto using standard measurements • Using vocabulary to describe and compare length, height, weight, capacity, and size • Gaining a sense of time through routine • Recognizing and naming common 2D and 3D shapes • Describing, comparing, and sorting shapes by some attributes (e.g. number of sides) • Combining 2D shapes to create new shapes • Understanding how a shape might look if it changes size, rotation, or position	**Tender Leaf Toys** **Color Me Happy Snake** A shape sorting toy that encourages children to recognize and match shapes, requiring shape rotation.

RATING CRITERIA

Area	Criteria	
Mathematics	**Analysis** • Describing, categorizing, and ordering objects by a single attribute, moving onto using multiple attributes • Recognizing, copying, and extending simple patterns by describing or modelling with objects or actions • Generating questions, making predictions, and gathering data to answer them with support (e.g. discussing whether trees have buds yet and going outside to check) • Organizing, representing and analyzing data with objects, with support (e.g., predict that the class collected more yellow than red leaves on the nature walk before sorting and counting them)	