**MARYVILLE** UNIVERSITY

Standards For Door 32
Grade Band Elementary

| NGSS | Next Generation Science Standards |
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| K-2-ETS1-1 | Ask questions, make observations, and gather information about a situation people want to change to define a simple problem. |
| 3-5-ETS1-1 | Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. |
| 3-5-ETS1-2 | Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints. |
| 3-5-ETS1-3 | Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. |

| Science | Missouri Learning Standards |
|---------|-----------------------------|
| SCI.3.ETS1.A.1 | Define a simple design problem that can be solved through the development of an object, tool, process, or system. |
| SCI.4.ETS1.B.1 | Generate and compare multiple solutions to a problem using models. |
| SCI.5.PS3.D.1 | Use models to describe that energy in animals' food was once energy from the sun. (if energy is introduced via motor/power concepts) |
| **Reading** | **English Language Arts (Reading & Writing)** |
| R.3.3.A/ R.4.1.A | Develop and apply skills to the reading process. Use text evidence to support inferences. |
| R.3.2.A/ R.4.2.A | Analyze literary text for story elements,theme, and point of view. |
| **Writing** | |
| W.3.1/ W.4.1 | Write opinion pieces with reasons supported by facts and details. |
| W.3.3/ W.4.3 | Write narratives to develop real or imagined experiences using descriptive details and clear event sequences. |
| **Measurement and Data** | **Mathematics** |

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| 3.MD.4/ 4.MD.4 | Generate measurement data and represent it in graphs. |
| 4.MD.5 | Understand concepts of angle and measure angles (relevant for door mechanics and angles). |
| **Geometry and Spatial Reasoning** | |
| 3.G.1/ 4.G.1 | Recognize and draw shapes having specified attributes, understand concepts of area/perimeter which support physical construction, |
| **Mathematical Practice Standards** | **Modeling & Problem Solving** |
| MP1 | Make sense of problems and persevere in solving them. |
| MP4 | Model with mathematics. |
| MP5 | Use appropriate tools strategically. |
| **Computer Science** | **Missouri K-5 Draft Standards** |
| DA.K-5.1 | Collect and represent data in various ways. |
| AP.K-5.2 | Develop programs with sequences and simple loops to solve problems. |
| AP.K-5.3 | Decompose (break down) problems into smaller, manageable parts. |
| IC.K-5.1 | Communicate how computing can affect personal and global impact. |