## Curriculum Grid

### Objective Number

**NGSS Grades K-2**

- 🟢 = Fully covered
- 🟡 = Partially covered

### Disciplinary Core Ideas: Physical Science

1. MS-PS2 Motion and Stability: Forces and Interactions

### Crosscutting Concepts

1. Patterns
2. Cause and effect: Mechanism and explanation
3. Scale, proportion, and quantity
4. Systems and system models
5. Energy and matter: Flows, cycles, and conservation
6. Structure and Function
7. Stability and change

### Science and Engineering Practices

1. Asking questions and Defining Problems
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics, Informational and Computer Technology, and computational thinking
6. Constructing explanations and designing solutions
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

### Activities

- Pinwheel
- Spinning Tops
- Raft
- Car Launcher
- Measuring Car
- Ice Hockey Player
- Sam’s New Dog
- Crossing Crocodile River
- Hot Day
- Scarecrow
- Swing
### Common Core State Standards for Mathematics

**Grades K-2**

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#### Mathematical Practice

- **MP1** Make sense of problems and persevere in solving them.
- **MP2** Reason abstractly and quantitatively.
- **MP3** Construct viable arguments and critique the reasoning of others.
- **MP4** Model with mathematics.
- **MP5** Use appropriate tools strategically.
- **MP6** Attend to precision.
- **MP7** Look for and make use of structure.
- **MP8** Look for and express regularity in repeated reasoning.

#### Measurement & Data

- **K.MD.A** Describe and compare measurable attributes.
- **1.MD.A** Measure lengths indirectly and by iterating length units.
- **1.MD.C** Represent and interpret data.
- **2.MD.A** Measure and estimate lengths in standard units.
- **2.MD.D** Represent and interpret data.

#### Writing Standards

- **W.K.2** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
- **W.1.2** Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
- **W.2.2** Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.

#### Speaking and Listening

- **SL.K.1** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- **SL.K.2** Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- **SL.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- **SL.K.4** Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
- **SL.K.5** Add drawings or other visual displays to descriptions as desired to provide additional detail.
- **SL.K.6** Speak audibly and express thoughts, feelings, and ideas clearly.
- **SL.1.1** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- **SL.1.2** Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
- **SL.1.3** Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
- **SL.1.4** Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
- **SL.1.5** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
- **SL.1.6** Produce complete sentences when appropriate to task and situation. (See grade 1 Language standards 1 and 3 here for specific expectations.)
- **SL.2.1** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
- **SL.2.2** Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- **SL.2.3** Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- **SL.2.4** Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.
- **SL.2.5** Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
- **SL.2.6** Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 2 Language standards 1 and 3 here for specific expectations.)