

**Kindergarten Curriculum Proposal**

TeachEngineering invites you to propose an original, hands-on **Kindergarten** activity that aligns to specific engineering-focused NGSS Performance Expectations. Please completely fill out the following template outlining your proposed curriculum. Authors of thorough and well-thought-out proposals will receive a $25 Amazon gift card, regardless if their proposal is chosen to move forward to publication.

|  |
| --- |
| **Part 1: Contact Information** |
| First Name: Click or tap here to enter text. |
| Last Name: Click or tap here to enter text. |
| Email Address: Click or tap here to enter text. |
| What is your current role/position/job? Click or tap here to enter text. |
|  |
| **Part 2: Curriculum Standards** |
| First, choose the **performance expectation(s)** that your curriculum will align to. Then choose **at least two** connection standards (**MATH**and/or **LITERACY**), listed directly below your chosen **performance expectation(s)**, thatyour curriculum will address. |
|  **Performance Expectations Forces and Interactions: Pushes and Pulls** |
| [ ]  **Plan and conduct an investigation to compare the effects of different strengths or directions of pushes and pulls on the motion of an object.** |
| [ ]  **MATH** Reason abstractly and quantitatively. |
| [ ]  **MATH** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. |
| [ ]  **MATH** Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference. |
| [ ]  **LITERACY** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). |
|  |
| [ ]  **Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.** |
| [ ]  **LITERACY** With prompting and support, ask and answer questions about key details in a text. |
| [ ]  **LITERACY** Ask and answer questions in order to seek help, get information, or clarify something that is not understood. |
|  |
|  |
|  **Performance Expectations Interdependent Relationships in Ecosystems: Animals, Plants & Their Environment** |
| [ ]  **Use observations to describe patterns of what plants and animals (including humans) need to survive.** |
| [ ]  **MATH** Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference. |
| [ ]  **LITERACY** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). |
|  |
| [ ]  **Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.** |
| [ ]  **LITERACY** 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. |
| [ ]  **LITERACY** With prompting and support, ask and answer questions about key details in a text.  |
| [ ]  **LITERACY** Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book. |
|  |
| [ ]  **Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.**  |
| [ ]  **MATH** Reason abstractly and quantitatively.  |
| [ ]  **MATH** Model with mathematics.  |
| [ ]  **MATH** Counting and cardinality.  |
| [ ]  **LITERACY** Add drawings or other visual displays to descriptions as desired to provide additional detail.  |
|  |
| [ ]  **Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.** |
| [ ]  **LITERACY** 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. |
| [ ]  **LITERACY** Ask and answer questions in order to seek help, get information, or clarify something that is not understood.  |
|  |
|  |
| **Performance Expectations Weather and Climate** |
| [ ]  **Make observations to determine the effect of sunlight on Earth’s surface.**  |
| [ ]  **MATH** Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference.  |
| [ ]  **LITERACY** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).  |
|  |
| [ ]  **Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.**  |
| [ ]  **MATH** Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference.  |
| [ ]  **LITERACY** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). |
|  |
| [ ]  **Use and share observations of local weather conditions to describe patterns over time.**  |
| [ ]  **MATH** Reason abstractly and quantitatively.  |
| [ ]  **MATH** Model with mathematics.  |
| [ ]  **MATH** Know number names and the count sequence.  |
| [ ]  **MATH** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. |
| [ ]  **MATH** Classify objects into given categories; count the number of objects in each category and sort the categories by count.  |
| [ ]  **LITERACY** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).  |
|  |
| [ ]  **Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.**  |
| [ ]  **MATH** Model with mathematics.  |
| [ ]  **MATH** Counting and cardinality.  |
| [ ]  **LITERACY** With prompting and support, ask and answer questions about key details in a text.  |
|  |
| **Part 3: Curriculum Details** |
| **What is the title of your proposed curriculum? (This can be a working title.)** |
|  |
| **Please give a brief summary (one paragraph max; 500 characters) of your hands-on activity.**  |
|  |
|  |
| **Please provide a brief (two paragraph max; 1000 characters) outline of the procedure of the hands-on activity (e.g., how will the students perform the hands-on activity)?** |
|  |
| **If your proposal is accepted, how soon can you write AND classroom test the proposed curriculum?** |
| [ ]  My curriculum is written AND has been classroom tested. I can submit now. |
|  |

|  |
| --- |
| [ ]  I can write the curriculum AND classroom test it by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |