



## Challenger Learning Center of Northwest Indiana Engineering Ed-Ventures Standards Alignment

### **INDIANA STATE STANDARDS – 2023 (linked with NGSS)**

#### **Grades 3-5 – Engineering Design**

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 of the problem.

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.

#### **Grades 3-5 – Computer Science**

3-5.PA.1: Collaborate with peers to implement problem-solving steps to create a variety of programming solutions.

3-5.PA.2: Design programs that incorporate sequences, events, loops, and conditionals.

#### **Grade 3 – Science**

3-PS2-2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.

#### **Grade 4 – Science**

4-PS3-4 Apply scientific ideas to design, test, and refine a device that converts energy from one form to another..

## **ILLINOIS STATE STANDARDS – 2023 (linked with NGSS)**

### **Grades 3-5 – Engineering Design**

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 of the problem.

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.

### **Grades 3-5 – Computer Science**

3-5.AP.10 Create programs that include sequences, events, loops, and conditionals.

### **Grade 3 – Science**

3-PS2-2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.

### **Grade 4 – Science**

4-PS3-4 Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.