

## **Children's Services Lego® Club**

### **Indiana Academic Standards, Math & Science**

#### **Kindergarten to Fifth Grade**

The program will begin with a brief introduction to engineering principles followed by unguided building by the children. Once a child completes a project he/she will provide a short description of the object and explain how it was built. The program will touch on or reinforce some of the standards listed below.

### **Math**

**K.3.2** Identify, copy, and make simple patterns with numbers and shapes.

**1.2.1** Show the meaning of addition (putting together, increasing) using objects.

**1.2.2** Show the meaning of subtraction (taking away, comparing, finding the difference) using objects.

**1.5** Students learn how to measure length, as well as how to compare, order, and describe other kinds of measurement.

**2.4** Students identify and describe the attributes of common shapes in the plane and of common objects in space.

**3.5** Students choose and use appropriate units and measurement tools for length.

**4.4** Students show an understanding of plane and solid geometric objects and use this knowledge to show relationships and solve problems.

**5.7** Students make decisions about how to approach problems and communicate their ideas.

### **Science**

**K.3.1** Describe objects in terms of the materials they are made of.

**K.5.1** Use shapes to describe different objects.

**K.6** Students begin to understand how things are similar and how they are different. They look for ways to distinguish between different objects by observation.

**1.2.6** Describe and compare objects in terms of number, shape, texture, size, weight, color, and motion.

**2.1.3** Describe, both in writing and verbally, objects as accurately as possible and compare observations with those of other people.

**2.1.6** Use tools to investigate, observe, measure, design, and build things.

**3.6.1** Investigate how and describe that when parts are put together, they can do things that they could not do by themselves.

**4.1.6** Explain that even a good design may fail even though steps are taken ahead of time to reduce the likelihood of failure.

**4.6** Students work with an increasing variety of systems and begin to modify parts in systems and begin to modify parts in systems and models and notice the changes that result. They question why change occurs.