

## **Blueprint Engineering Class Pack**

Engage your Secondary learners in foundational engineering, robotics, and design processes with the Blueprint Engineering Class Pack. Blueprint is perfect for beginners learning about powered and unpowered simple machines, yet scalable to the needs of advanced learners engaging in more complex topics such as control systems and digital electronics. Each individual kit offers students a toolbox of 355 mechanical parts and 17 electrical bits, a Quick Start Guide, and engineering challenges to introduce students to prototyping.



# **KEY FEATURES & BENEFITS**



# **Easy Prototyping**

The mechanical parts and electrical bits are easy to assemble and disassemble for rapid prototyping due to their practical size and visual and technical simplicity.



#### Hands-On Problem Solving

Students quickly design, build, and test mechanical and electrical engineering concepts in a single class period.



#### Lessons & Unit Plans Included

Includes 100+ hours of in-depth, standardsaligned lessons and unit plans (including over 30 guided builds) and 1 Educator Guides.



# **Relevant Learning**

Flexible and standards-aligned lessons and unit plans help teach students about simple and compound machines and calculating mechanical advantage



## **Engineering & Beyond**

Students explore cross-curricular concepts in robotics, engineering, and design while learning critical thinking, problem-solving, and collaboration skills.



#### **Build in CAD**

Support CAD curriculums with Blueprint Engineering parts in SolidWorks, OnShape, and STEP files.





## **Control Systems**

Explore basic controls with Blueprint Bits. Adding power, motors, and sensors to the Blueprint system allows students to take their builds further and introduce basic control.



## Machines in our Food Systems

Food supply is a pivotal part of our society and there are a lot of machines that make this system run. Learn about and build some of the machines that keep our food supply running.

#### **BLUEPRINT ENGINEERING CLASS PACK**

#### **Blueprint Enginnering Class Pack (5 Kits)**

- · Supports 10 learners
- 5 Blueprint Engineering Kits + Storage
- 1 Blueprint Engineering Class Pack Accessory Kits:
  - 1 Blueprint Build Class Pack Accessory Kits (Large Storage Bin)
  - 1 Blueprint Engineering Educator Guide
  - 1 Additional Power Bits
  - 1 Multi-chargers (Charges 6 Power Bits at once)

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