

# Engineering And Robotics Learned Young

◆ EARLY ◆

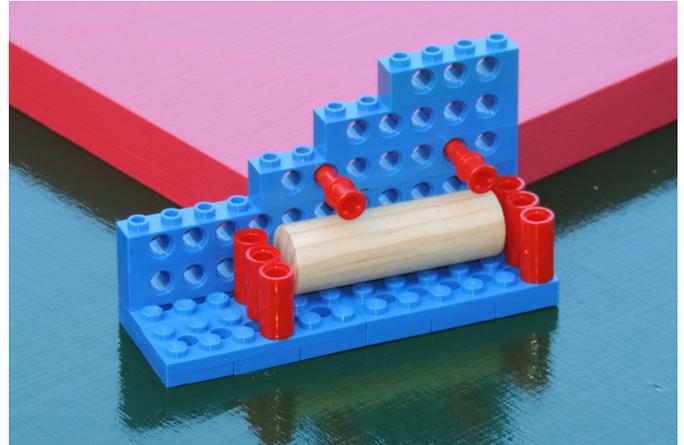
## 2017-2018 Robotics Competition Mission Object Details

The 2017-2018 EARLY Robotics Competition mission objects are twenty eight  $\frac{5}{8}$ " round wood dowels that are 2" long representing **Laws** and twenty eight  $\frac{5}{8}$ " square wood dowels that are 2" long representing **Bills**.

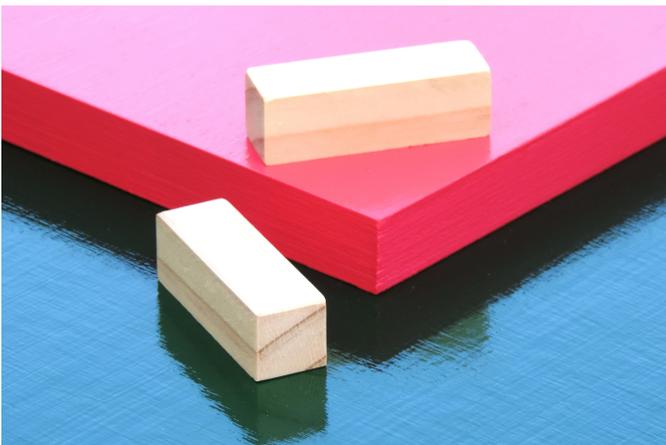
### Laws & Bills



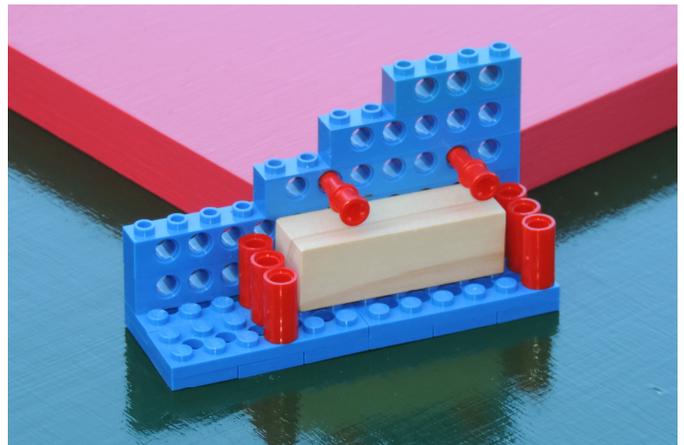
A **Law** is represented by a  $\frac{5}{8}$ " round dowel



A **Law** is  $\frac{5}{8}$ " in diameter and 2" long



A **Bill** is represented by a  $\frac{5}{8}$ " square dowel



A **Bill** is  $\frac{5}{8}$ " square and 2" long



28 round dowels and 28 square dowels are used for the mission



Dowels can be purchased from a variety of hardware, lumber, general, and internet stores

- The mission objects are made from  $\frac{5}{8}$ " round wood dowels and  $\frac{5}{8}$ " square wood dowels that are cut to 2" in length.
- The 2" long round dowel is referred to as a **Law** and the 2" long square dowel is referred to as a **Bill**.
- There are 56 mission objects required for the mission, 28 **Laws** and 28 **Bills**.
- Round and square wood dowels can be purchased from a variety of hardware, lumber, and general stores as well as purchased via the internet. An internet search of "5/8 inch square dowel" or "5/8 inch round dowel" will provide many sources. For the round dowel, the Home Depot's product number is #148163 and Lowe's product number is #19383. For the square dowel, the Home Depot's product number is #477680 and Lowe's product number is #27695.
- The dowels often are available in 36" and 48" lengths so two 36" x  $\frac{5}{8}$ " square dowels and two 36" x  $\frac{5}{8}$ " round dowels will be needed to make the mission objects; the total cost for these is approximately twelve dollars.
- The dowels will need to be cut to 2" lengths. An inexpensive hand miter box saw is a great tool for cutting the dowels — cutting the dowels is a great way to teach students how to use a saw safely. Box miter saws can be purchased for about \$10 — Home Depot's number is #1000032912 and Lowe's product number is #587728.

Please contact [Mission.Control@EARLYrobotics.org](mailto:Mission.Control@EARLYrobotics.org) with any questions or comments.

Thank you for maintaining the spirit of the game!