

#### **LEGO® CHALLENGES**

Tuesdays, January 25-April 26 (no class Feb 22, Apr 5; 12 weeks) 12:30pm-1:45pm Ages 6-10

Kids LOVE sharing their LEGO® creations, so each week we challenge the kids with a new building theme, and they have the opportunity to show off their Master Builder skills. All lab costs are included in registration fee.

Instructor: Diana Rodriguez, BEd Location: Science Center (suite 5) Course fee: \$220 OR \$20/lab

10% sibling discount

Register for full semester or individual labs.

#### LAB SCHEDULE:

100 LEGO® Brick Tower - Tuesday, January 25

Students are challenged to design and create a brick tower using exactly 100 LEGO® pieces.

### LEGO® Catapult - Tuesday, February 1

Kids study force and motion as they design LEGO® catapults that launch projectiles to hit targets.

### LEGO® Boats - Tuesday, February 8

We use LEGO® to design and build boats that float, then test to see how much cargo they can hold.

### LEGO® Robot - Tuesday, February 15

Students are challenged to build a robot prototype that has movable arms and legs.

### Secret LEGO® Code - Tuesday, March 1

Kids learn about ciphers, create their own LEGO® code system and trade secret messages with each other.

# **LEGO® Game Design** - Tuesday, March 8

We brainstorm to design games using only LEGO®, create game rules, build game pieces, then play our games.



#### LEGO® Marble Run - Tuesday, March 15

This week, students are challenged to design and build a complex marble maze and test each other's creations.

# LEGO® Zip Line - Tuesday, March 22

We use gravity and physics to build a LEGO® zip line to see how slope affects the speed of our contraption

#### **LEGO® Minecraft Build** - Tuesday, March 29

Kids get inspired by Minecraft to build a block landscape and complete Minecraft building challenges.

# LEGO® Space Satellite - Tuesday, April 12

Students learn about Cubesat mini-space satellites, determine what they would like to study in space and design their own LEGO® Cubesat to collect data.

#### LEGO® Vehicle for Two - Tuesday, April 19

This week, kids are challenged to design a vehicle that can travel a minimum distance carrying two passengers.

### LEGO® Amusement Park - Tuesday, April 26

We use physics and LEGO® to create rides and design our own amusement park.

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