Learning Series

Corridor lamp



This is a building-block programming robotics kit. The kit

kit is equipped with various sensors such as sound sensitivity, color, touch, photoelectric, lantern, ultrasonic, camera and a wealth of building blocks. Students can use their imagination to build a variety of building block robots, and use graphical programming programming software to program the robot and experience the joy of hands-on creation.

Learning Target

01

Knowledge goal

LED, lantern module.

02

Ability goal

Understand what is a light-emitting diode, use the lantern module switch light.

03

Emotional attitudes and values

The invention of the lamp enables humans to have daytime life at night. Children should have the idea of invention and creation and contribute to humanity.

Learning Target

01

Learning focus

The use of the lantern module.

02

Learning difficulties

The principle of illumination and the understanding of the module.

Contents

01 Course Introduction

02 Teaching New Knowledge

03 Task Practice

04 Test Effect

Course Introduction



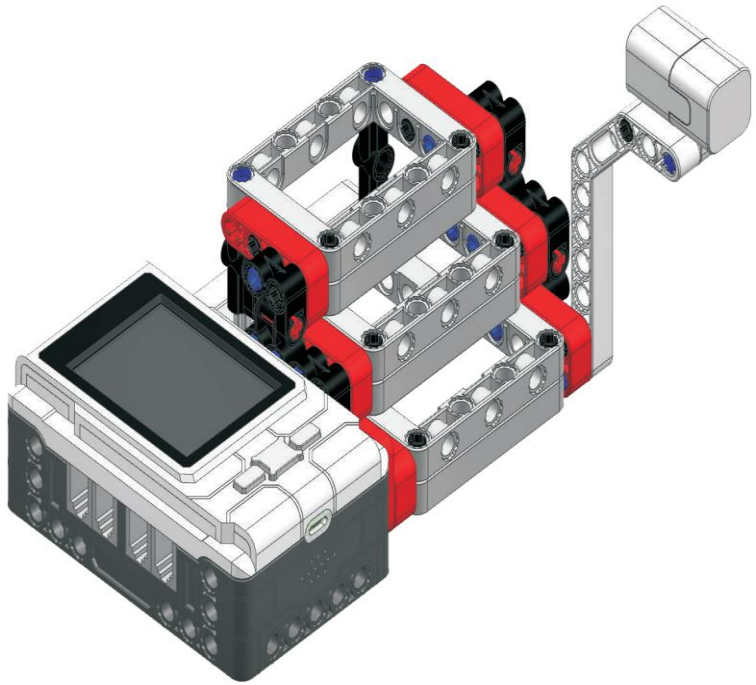
Course Introduction



Let's look at a picture of a led light. Thinking who invented the lamp?

The lamp was invented by Edison. After more than 1,000 experiments, it found a material that can withstand high temperatures of 1000 ℃ and emit light. The invention of the lamp has improved the living environment of human beings at night, enabling humans to work at night, increase productivity, and use the night time.

Course Introduction



Corridor lamp

Meet the corridor light robot

Light Emitting Diode (LED) is a semiconductor component. It is often used as an indicator light, display LED board, etc. at the beginning; it is also used as illumination with the appearance of white LEDs.

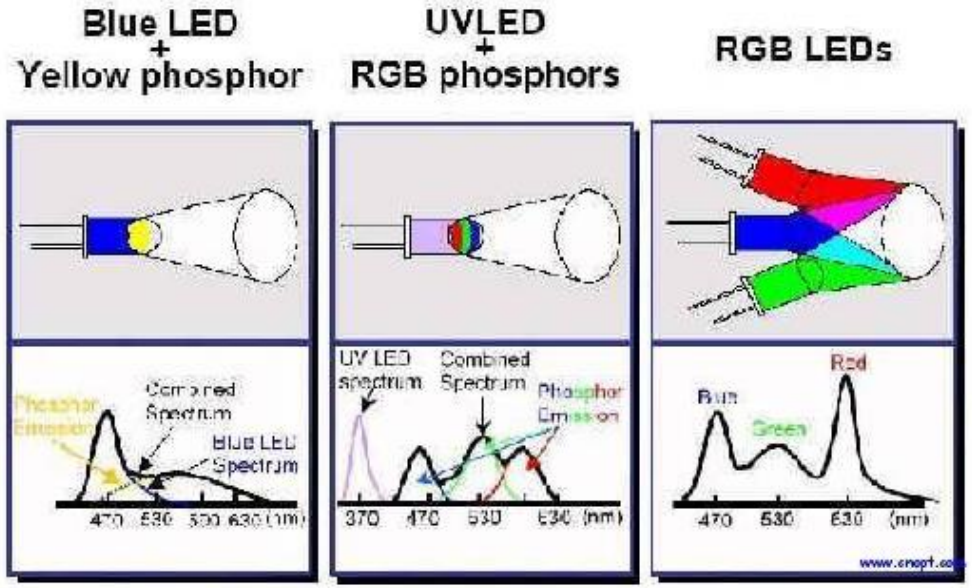
This class will build a led light, its name is the corridor light robot. Can emit different colors of light (red, yellow, green, etc. 7 colors)

Teaching New Knowledge



Teaching New Knowledge

The RGB lamp is a common image of the three primary colors, in addition, there are blue LED with yellow phosphor, and ultraviolet LED with RGB phosphor.



Teaching New Knowledge

The application of led lights in life:

1. led light bar





2. led lights

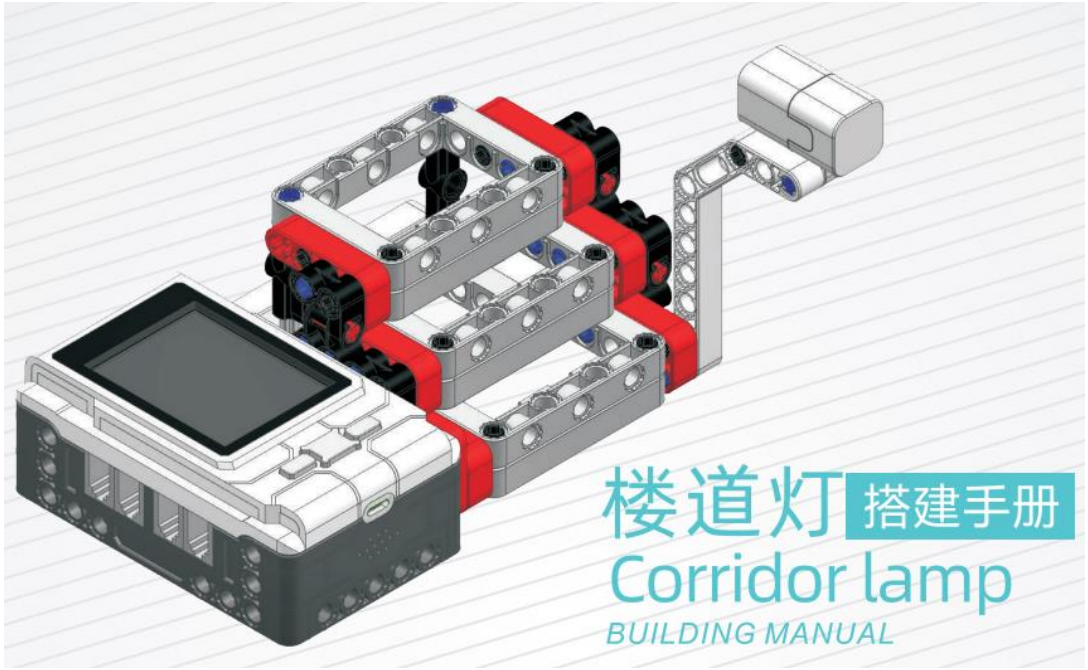


3. led lighting

Task Practice



Task Practice



Assembly requirements

1. stable structure
2. focus is right
3. shape match

Checkin
g Effect



Test Effect



Review the learning content and deepen your impression.

Question 1

What is the other name of the lantern?

Question 2

How does the led lamp work?

Question 3

The module used by the led light?

Test Effect



Homework

1. Turn on the light for 5 seconds and turn off the light.
2. Turn on the light for 1 second and turn off the light for 1 second.

Thank you for watching!

BE STEM READY

