

## INTRODUCTION

Boson Science Design Kit, aimed at 8~10 years old kids, combines physical science and engineering design knowledge in one kit. The carefully-designed 7 scientific experiments and 5 engineering projects would let students learn scientific principles in practice by applying BOSON modules into actual applications.

During the engineering project design, students will be asked to use BOSON light, sound, and motion modules to make creative projects like “fridge door-closing reminders”, “solar oven” and so on. In scientific experiments, they will get to know some physical sciences, for instance, use BOSON temperature sensor to explore “how to make your living room comfortable?” so as to understand the principle of energy transfer.



## EP05 Why Is It Summer After Spring, not Winter?

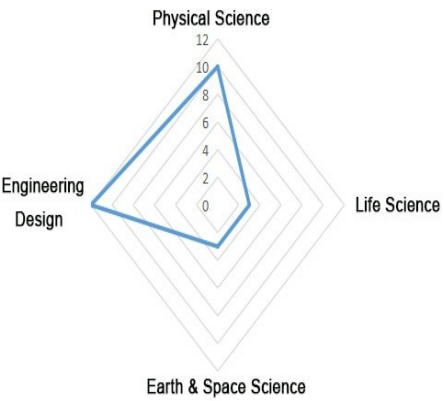


## EP 08 Solar Oven

Refer to NGSS curriculum standard, the course catalog and field distribution are shown below:

Boson Science Design Kit Tutorial		
Making Difficulty		Programming-free
Catalog	Field	Field Distribution Chart
Lesson 1 ( <a href="https://edu.dfrobot.com/makelog-308488.html">https://edu.dfrobot.com/makelog-308488.html</a> ) ( <a href="https://edu.dfrobot.com/makelog-">https://edu.dfrobot.com/makelog-</a>	Physical Science Engineering Design	

<p>308488.html)W          (https://edu.dfrobot.com/makelog-308488.html)hy Are Electrical Wires Covered in Plastic? (https://edu.dfrobot.com/makelog-308488.html)</p>	
<p>Lesson 2 How to Make Your Living Room Comfortable?          (https://edu.dfrobot.com/makelog-308505.html)          (https://edu.dfrobot.com/makelog-308489.html)</p>	
<p>Lesson 3 (https://edu.dfrobot.com/makelog-308514.html)          (https://edu.dfrobot.com/makelog-308514.html)What Is a Car Sunshade?          (https://edu.dfrobot.com/makelog-308514.html)</p>	
<p>L (https://edu.dfrobot.com/makelog-308489.html)esson 4 Why Does the Moon Shine at Night?          (https://edu.dfrobot.com/makelog-308489.html)</p>	
<p>L (https://edu.dfrobot.com/makelog-308547.html)esson 5          (https://edu.dfrobot.com/makelog-308547.html)          (https://edu.dfrobot.com/makelog-308547.html)Why Is It Summer After Spring, not Winter? (https://edu.dfrobot.com/makelog-308547.html)</p>	<p>Earth &amp; Space Science          Engineering Design</p>
<p>L (https://edu.dfrobot.com/makelog-308556.html)esson 6          (https://edu.dfrobot.com/makelog-308556.html)          (https://edu.dfrobot.com/makelog-308556.html)Why Do Very Few Plants Grow in the Desert? (https://edu.dfrobot.com/makelog-308556.html)</p>	<p>Life Science          Engineering Design</p>
<p>L (https://edu.dfrobot.com/makelog-308559.html)esson 7 How Does the Water Cycle Work?          (https://edu.dfrobot.com/makelog-308559.html)</p>	<p>Physical Science          Engineering Design          Earth &amp; Space Science</p>



L ( <a href="https://edu.dfrobot.com/makelog-308562.html">https://edu.dfrobot.com/makelog-308562.html</a> )esson 8 Solar Oven ( <a href="https://edu.dfrobot.com/makelog-308562.html">https://edu.dfrobot.com/makelog-308562.html</a> )	Physical Science Engineering Design
L ( <a href="https://edu.dfrobot.com/makelog-308580.html">https://edu.dfrobot.com/makelog-308580.html</a> )esson 9 Fridge Door-closing Reminder ( <a href="https://edu.dfrobot.com/makelog-308580.html">https://edu.dfrobot.com/makelog-308580.html</a> )	
L ( <a href="https://edu.dfrobot.com/makelog-308583.html">https://edu.dfrobot.com/makelog-308583.html</a> )esson 10 ( <a href="https://edu.dfrobot.com/makelog-308583.html">https://edu.dfrobot.com/makelog-308583.html</a> ) ( <a href="https://edu.dfrobot.com/makelog-308583.html">https://edu.dfrobot.com/makelog-308583.html</a> )Automatic Plants Fill Light ( <a href="https://edu.dfrobot.com/makelog-308583.html">https://edu.dfrobot.com/makelog-308583.html</a> )	Physical Science Life Science Engineering Design
L ( <a href="https://edu.dfrobot.com/makelog-308585.html">https://edu.dfrobot.com/makelog-308585.html</a> )esson 11 Automatic Watering System ( <a href="https://edu.dfrobot.com/makelog-308585.html">https://edu.dfrobot.com/makelog-308585.html</a> )	Life Science Engineering Design
Lesson 12 Anti-Theft Alarm	Physical Science Engineering Design

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## SPECIFICATION

- Package dimension: 60 x 220 x 300 (mm)
- Weight: 990g

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## DOCUMENTS

- EP 01 Why Are Electrical Wires Covered in Plastic? (<https://edu.dfrobot.com/makelog-308488.html>)
- EP 02 Why Does the Moon Shine at Night? (<https://edu.dfrobot.com/makelog-308489.html>)
- EP 03 How to Make Your Living Room Comfortable? (<https://edu.dfrobot.com/makelog-308505.html>)
- EP 04 Does the Car Sun Shield Really Work? (<https://edu.dfrobot.com/makelog-308514.html>)
- EP 05 Why Is Spring Followed by Summer but Not Winter? (<https://edu.dfrobot.com/makelog-308547.html>)
- EP 06 Why Do Very Few Plants Grow in Deserts? (<https://edu.dfrobot.com/makelog-308556.html>)
- EP 07 How Does the Water Cycle Work? (<https://edu.dfrobot.com/makelog-308556.html>)
- EP 08 Solar Oven (<https://edu.dfrobot.com/makelog-308562.html>)

- EP 09 Fridge Door-closing Reminder (<https://edu.dfrobot.com/makelog-308580.html>)
  - EP 10 Automatic Plants Fill Light (<https://edu.dfrobot.com/makelog-308583.html>)
  - EP 11 Automatic Watering (<https://edu.dfrobot.com/makelog-308585.html>)
  - EP 12 Updating
  - Note: We will continue to update the rest of the course.
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## SHIPPING LIST

- Yellow Push Button x1
  - Soil Moisture Sensor x1
  - Light Sensor x1
  - Fan Module x1
  - Temperature Sensor x1
  - Ultra-Bright LED x1
  - Buzzer Module x1
  - Logic Module - NOT x1
  - Logic Module - AND x1
  - Logic Module - OR x1
  - Threshold Module x1
  - Display Module x1
  - Mainboard-1IO x1
  - 3xAAA Battery Holder x1
  - Cable 5cm x5
  - Cable 10cm x10
  - Cable 20cm x5
  - Velcro Pack x1
  - Screws Pack x1
  - Boson Micro USB Cable x1
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