

SCIENCE
TEACHING
MATERIALS

How Electric
Current Works

SAFETY

Kick and move
simultaneously

Safe and fast to operate

forward

backward

FLEXIBLE OPERATION

even on a desk

10

Soccer
Robo 2

Use 2 D size batteries (sold separately)

AIM AND
SHOOT!

Patent pending

Time-saving

Reliability

Entertaining

Easy to understand!

ASSIST

You can even do developmental studies!

EXPLANATORY VIDEO

✓ Video showing how to perform the experiment is available

✓ Accessible via QR code in the manual

New space-saving layout

COIL MOTOR

✓ Simple design for an easy hands-on approach

✓ Includes a special motor box

Inclusive of a Winding guide

PRECISE

ACCURATE
EXPERIMENTAL
RESULTS!

NEW
Invention!

Setup that does not
attach metal directly to
electromagnets

✓ You can experiment without
worrying about the
magnetization of metal

Which electromagnet
can suspend more?

From Experiment 2

LEARN
BY PLAYING

COMPREHENSIVE
WEB CONTENT!

Examples of customisation
to make your own robot are available

Printable soccer set available on the website

<https://hakubun-edu.com/soccer-robo-2/>

Left Button

Kick Button

Right Button

Master the remote control!

Forward, backward, turning direction
and kick timing are as you wish

Name

Year

Class

NO PRELIMINARY
PREPARATION
IS REQUIRED!

PRE-ASSEMBLED
PARTS

YOU CAN START EXPERIMENTING RIGHT AWAY!

Conductors with plugs

Conductors with
plugs on both sides

Conductor with a
plug on one-side

Pre-wound coil

Up to approx.
200 times winding

Approx.
100 times winding

Pre-assembled parts

Soccer Robot

Remote control

Compass

Battery box

Please check and make sure you have everything you need.
After confirming, put a ✓ (check) in the □ box.

Parts Name	Check	Parts Name	Check
Battery box	<input type="checkbox"/>	Soccer robot body / remote control	<input type="checkbox"/>
Coil (yellow) (approx. 100 windings)	<input type="checkbox"/>	Coil (white) (approx. 200 windings)	<input type="checkbox"/>
Magnets & Holders	<input type="checkbox"/>	Compass	<input type="checkbox"/>
Plastic core	<input type="checkbox"/>	Connector component	<input type="checkbox"/>
Conductor with plugs on both sides	<input type="checkbox"/>	Conductor with a plug on one side... 2	<input type="checkbox"/>
Iron core... 2	<input type="checkbox"/>	Hanging platform	<input type="checkbox"/>
Paper clips... approx. 14	<input type="checkbox"/>	Hook... 2	<input type="checkbox"/>
Sandpaper	<input type="checkbox"/>	Ball	<input type="checkbox"/>
Motor box	<input type="checkbox"/>		

Please use manganese batteries for this material

Always remove the batteries after learning

Cutting line

Decorative parts

For the right side of the body

For the left side of the body

To be used on part that is bouncing up and down when the robot is moving