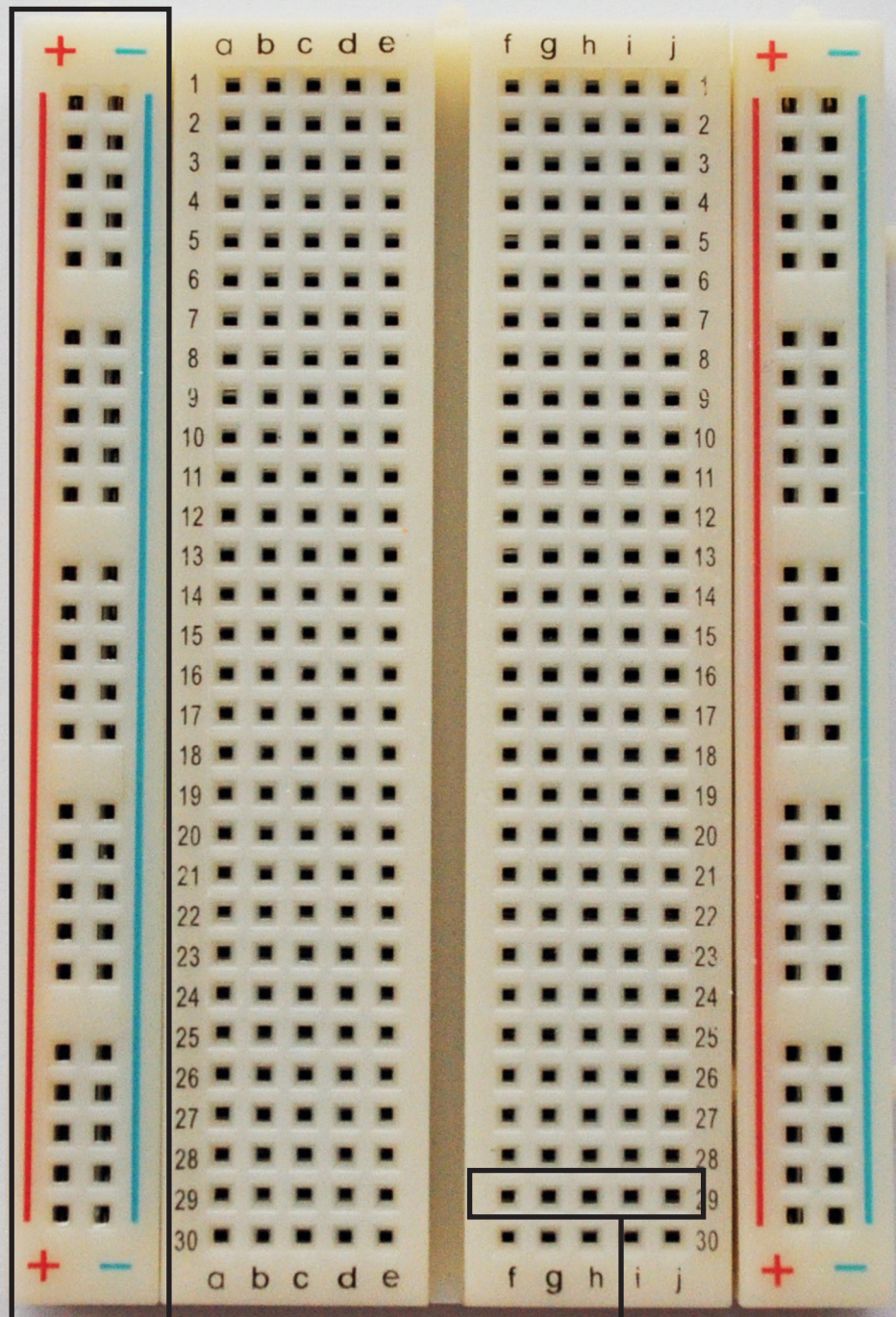# fabschoolino   Working with a breadboard

CODE / HACK / PLAY

Using a breadboard enables you to create an electrical circuit without having to solder, which means you can test a circuit quickly and easily.

The vertical lines are all connected to one another. The red line is the power supply while the blue line is for grounding.
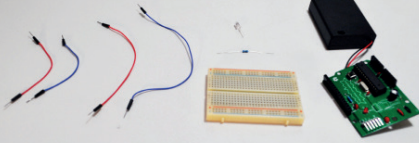
The horizontal holes on each side of the breadboard are connected to each other. All the parts that you insert will be connected to each other in the row.
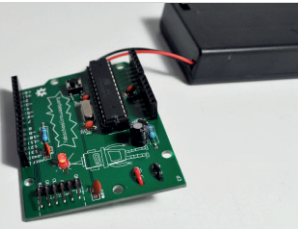
fabschoolino Working with a breadboard
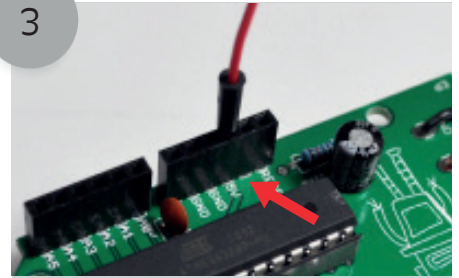
1

You will need:
red wires (long and short),
blue wires (long and short), a
breadboard, 1K ohm resistor, an
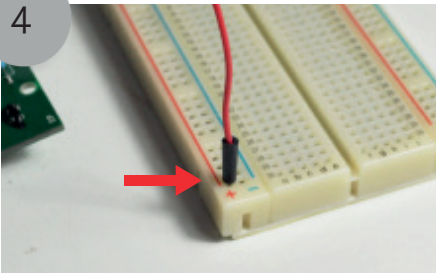LED, and a Fabschoolino.

2

Turn on the Fabschoolino.
Turn the switch on the battery
from off to on. If everything is
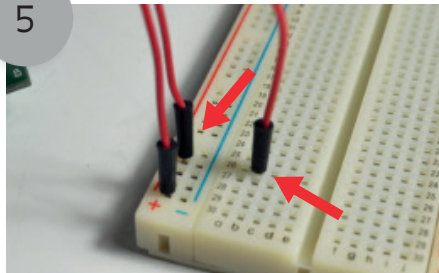working, the LED will flash when
you press the reset button.

3

Insert the end of your long red
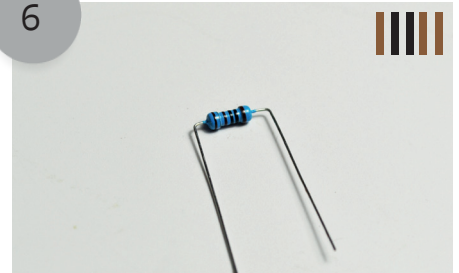wire in the header pin where 5V
is written.

4

Now insert the other end of
the long red wire into the
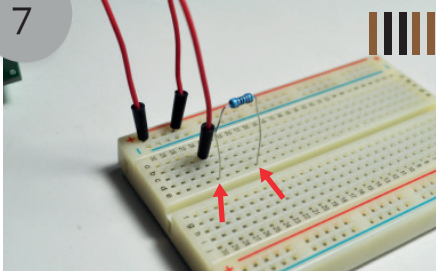breadboard on the side where
you see the red plus sign.

5

Take your short red wire and
insert it (just like you did with
the long wire) into the side with
the red plus sign. Then plug
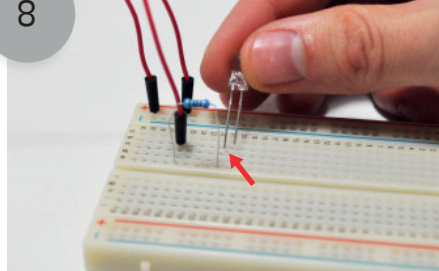the other end of the wire into a
hole.

6

Take the 1K ohm resistor and
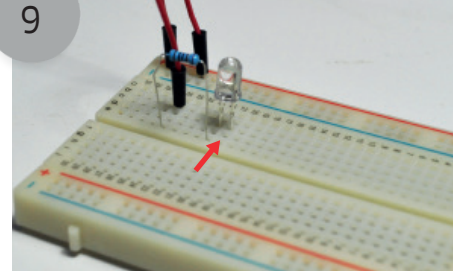bend its legs.

7

Insert one leg into the same
row as your short wire. Insert
the other leg in a different row
further down as shown above.

8

Now it's time to place your LED
on the board. NOTE: The LED
has both a long and a short leg.
Make sure the long leg ends up
in the same row as the resistor.

9

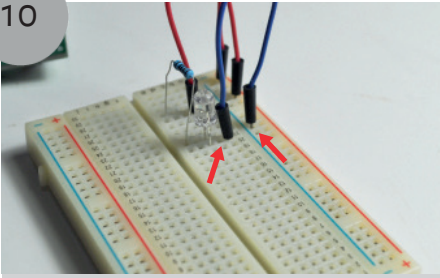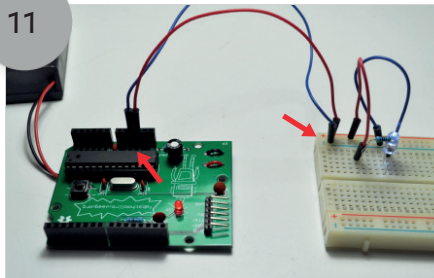Your LED's short leg goes
in a row further down the
breadboard.

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10

Place the short blue wire in the same row as the short leg of your LED. Insert the other end of the wire on the side where you see the blue minus sign.

11

Place the long blue wire next to the long red wire on the side with the minus sign. Insert the other end of the wire into the Fabschoolino where GND is written. If everything works, you'll see your LED turn on.

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