

MATERIALS:

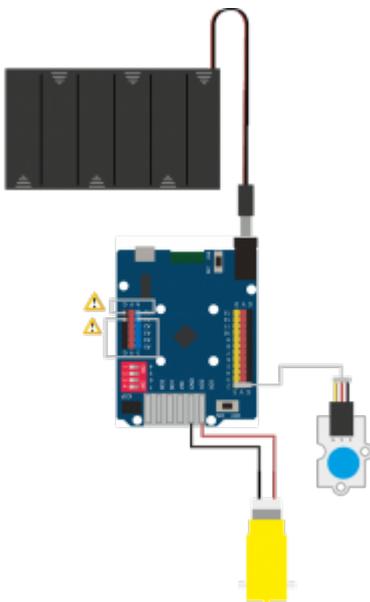
- Maker Inventor Kit
 - 4in1 main board
 - DC Motor
 - Switch button
 - Zootropoe template
 - Colored sticks
 - 20cm Wires
 - Battery holder
 - USB wire
- Adhesive
- 6 AA Cells
- Computer

CONSTRUCTION:

Follow video steps to build your flying Zootrope:

SCHEMATIC:

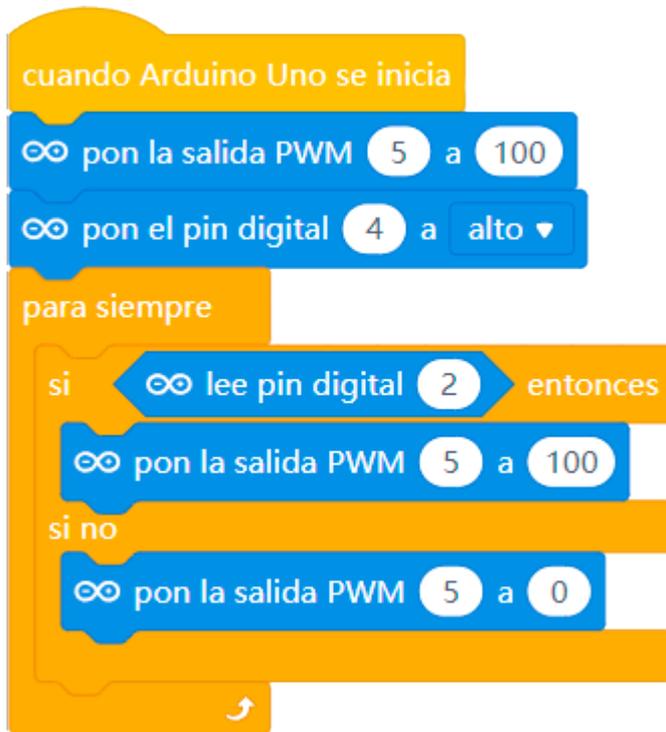
Electronic components should be connected according this diagram:



PROGRAM:

You can load your program to 4in1 main board using block programming or text code. If it's your first time with 4in1 board or you have any problem connecting it to your computer you can view our first steps document.

Here you find basic blocks program using **MBlock** software.



In our video you can see how to upload this program to 4in1 board.

If you prefer use text code, you can use our basic code for **Arduino IDE**. Feel free to modify and test.

```

//Definición de puertos
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//PULSADOR
#define BUTTON 2

//MOTORES
//motor A -> Derecha. Motor B -> izquierda
int PinSpeedMA = 5; // PIN DIGITAL PARA LA
VELOCIDAD DE LOS MOTORES
int PinTurnMA = 4; // PIN DIGITAL PARA SENTIDO DE
GIRO DE LOS MOTORES
int SpeedL = 175; //velocidad Izq
int SpeedR = 175; // velocidad Dcha
int databutton = 0;

void setup()
{
  Serial.begin (9600);

  // motores
  pinMode(PinSpeedMA, OUTPUT);
  pinMode(PinTurnMA, OUTPUT);

  //pulsador
  pinMode(BUTTON, INPUT);
}

void loop()
{
  if (databutton == HIGH)//si el boton está pulsado
  {
    digitalWrite (PinTurnMA, HIGH);
    analogWrite (PinSpeedMA, 100);
  }
  else// si el botón no está pulsado
  {
    analogWrite (PinSpeedMA, 0);
  }
}

```

And our video showing you how to upload this code using Arduino IDE

You can download files for MBlock 5 and ArduinoIDE

FINAL RESULT:

See this project finished and working: