Assignment 2 Digital and Analog Input & Output

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Format: Name the document in the combination of name、ID and No. of Assignment.

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**Task 1** Specify and mark **Arduino Uno onboard Digital and Analog Pins.**

任务1 描述和标注Arduino Uno板上的数字引脚和模拟引脚。

14个数字引脚

6个模拟输入 它们作为ADC（模数转换器）使用

这些引脚用作模拟输入，但也可用作数字输入或数字输出。

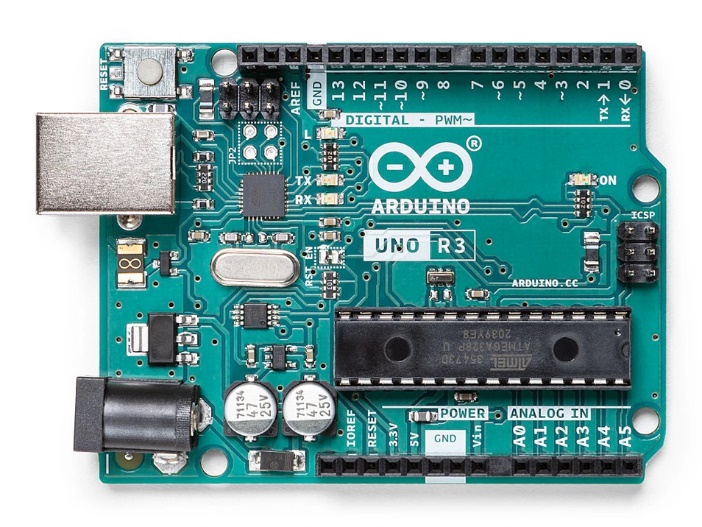
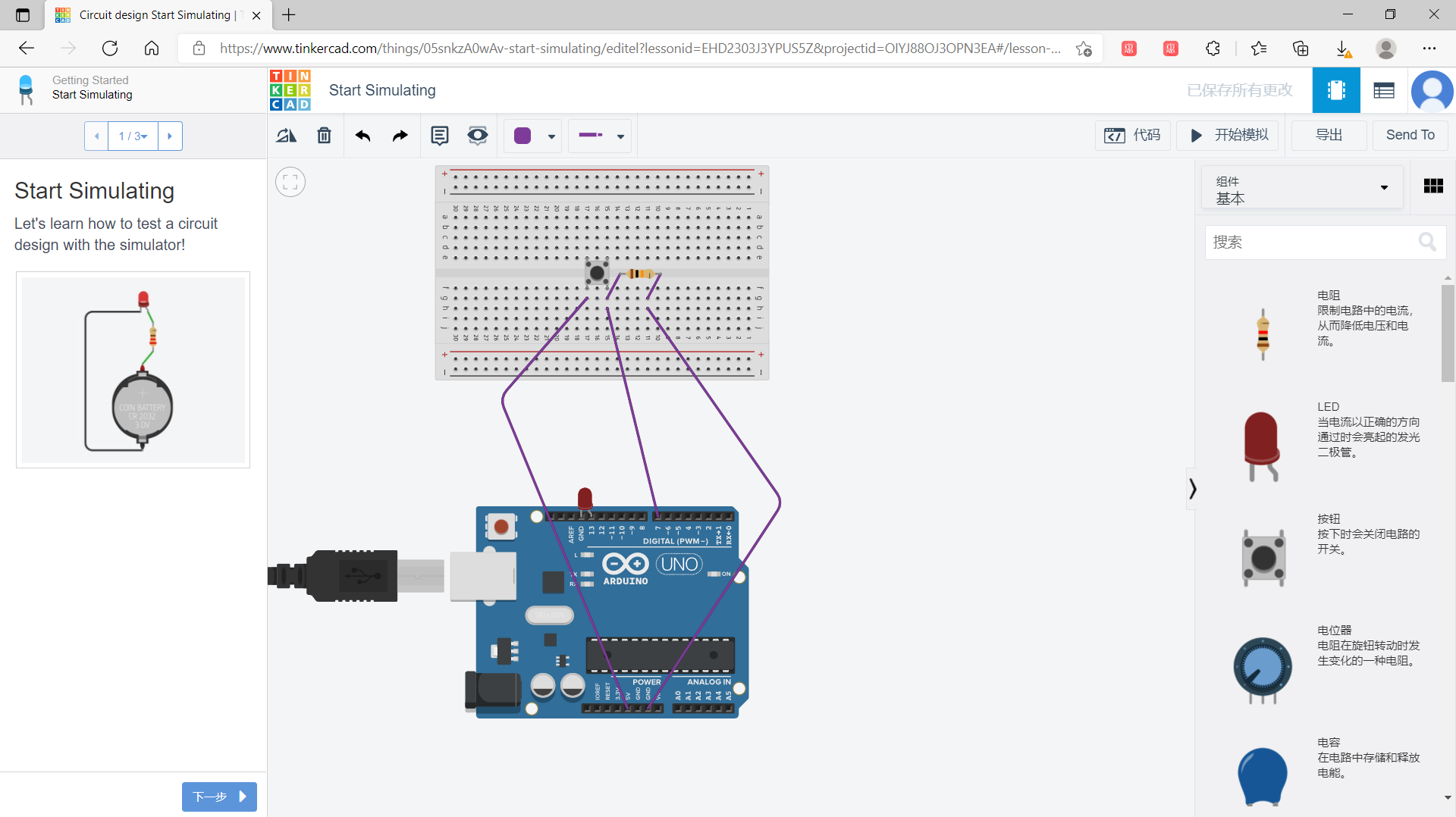


Fig 2 Arduino Uno Board

**Task 2 One** LED is linked with the **digital pin**, set up a circuit to use **a button (or two)** to control the on and off state of the LED. Draw the circuit in TinkerCAD, make the executable codes for the function.

任务2 一个LED与数字引脚相连，设置一个电路，用一个（或两个）按钮来控制LED的开启和关闭状态。在TinkerCAD中绘制电路，编写功能的可执行代码。

Fig 2 Circuit



const int LED=13;

const int BUTTON=7;

int val=0;

void setup() {

pinMode(LED,OUTPUT);

pinMode(BUTTON,INPUT);

}

void loop() {

val=digitalRead(BUTTON);

if(val==HIGH){

digitalWrite(LED,HIGH);

}else{

digitalWrite(LED,LOW);}

}