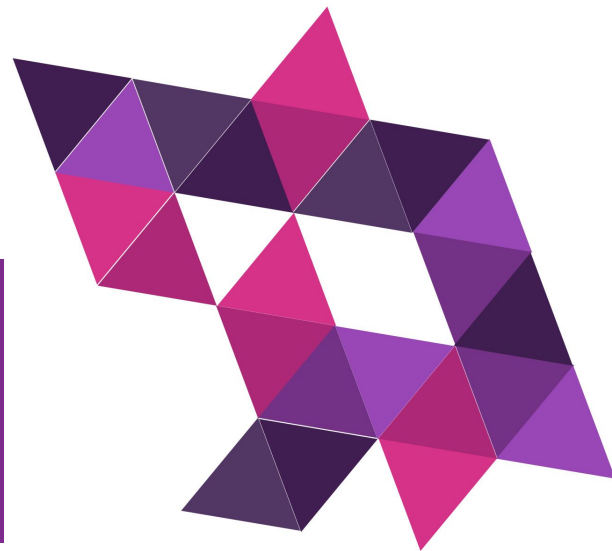




Sabe Tudo



Co-funded by the  
Erasmus+ Programme  
of the European Union

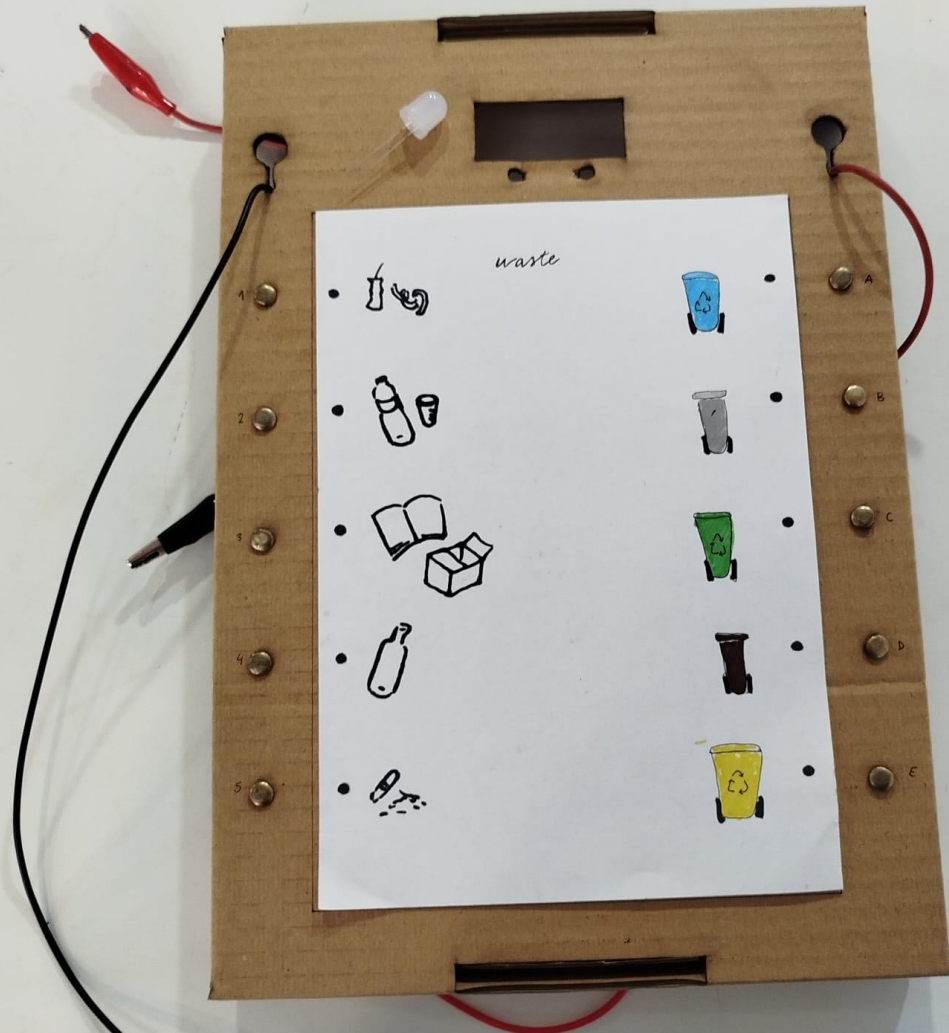


## O que vamos aprender?

- Utilizar a tecnologia para criar novas dinâmicas na sala de aula
- Construir em 3D a partir do **corte a laser** 2D
- Aprender as noções básicas dos **circuitos elétricos**
- **Corte a laser** com ficheiros já existentes
- Usar o canva.com



Corte a  
Laser,  
Impressão  
3D e  
Eletrónica  
simples

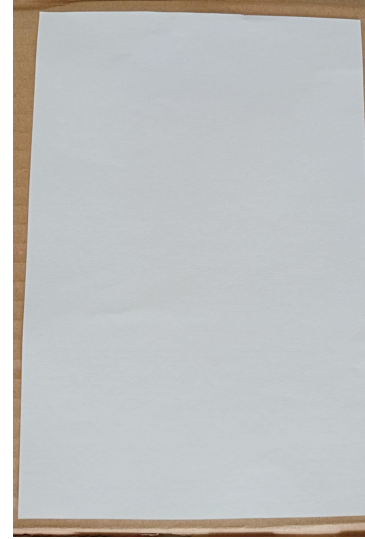


# Material

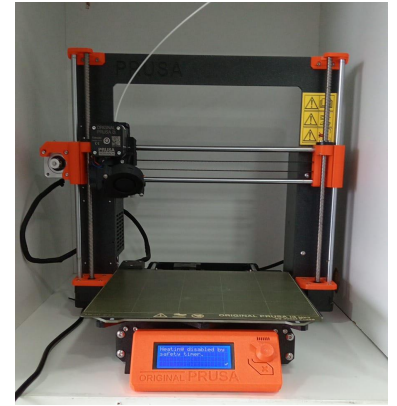
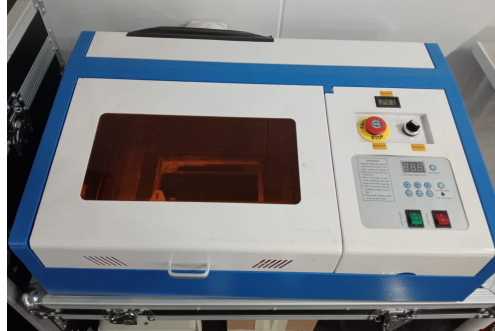
Cartão ( reutilizado)



Papel A5



Cortadora a Laser

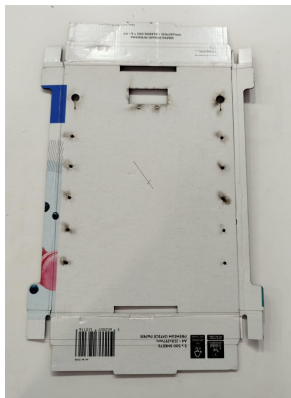


Impressora 3D

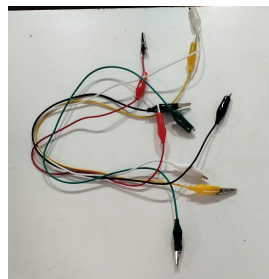


Impressora

# Material



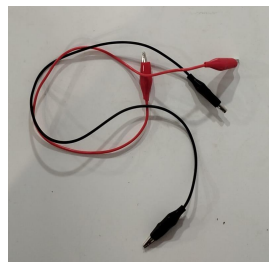
Modelo cortado



5 crocodilos  
de cores  
variadas

[Board laser cutting file A4](#)

+



2 crocodilos (  
1 preto + 1  
vermelho)

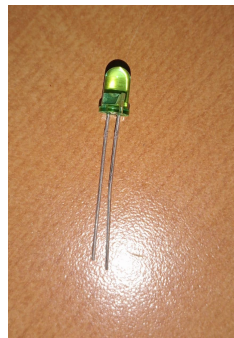
[Modelo folha  
perguntas](#)

# Material

10 ataches



Canetas de feltro

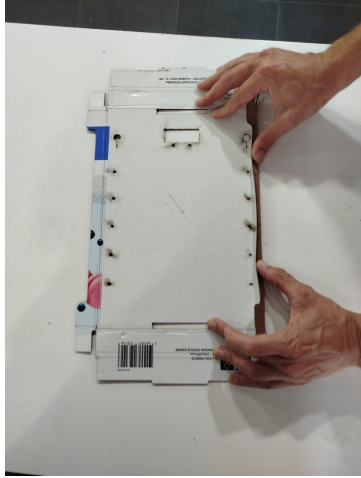


1 Led verde 10mm



1 pilha 3v

# Montagem do Tabuleiro



1



2



3



# Montagem do Tabuleiro



4



5

6

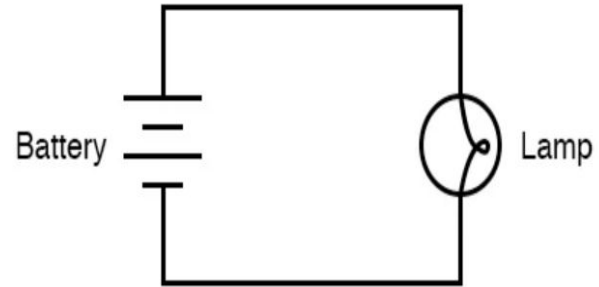




# O que é um Circuito Simples?

Configuração necessária para  
fazer um circuito

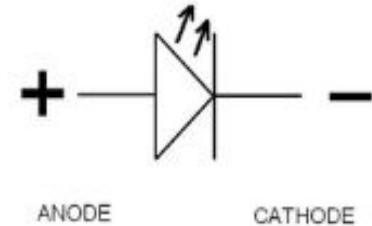
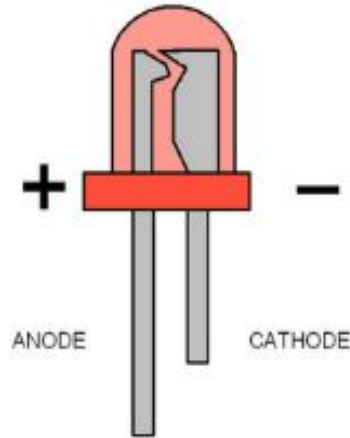
Definição de circuito “aberto” e  
“fechado”



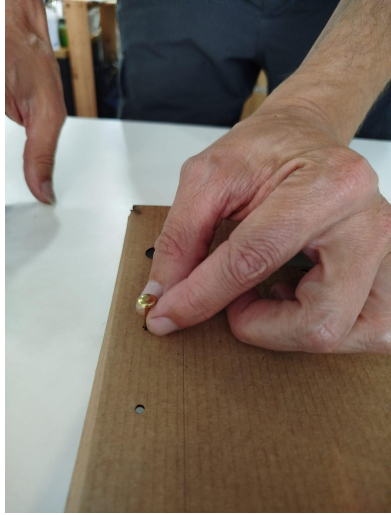
# O que é um LED?

Mais (+) é a perna mais longa

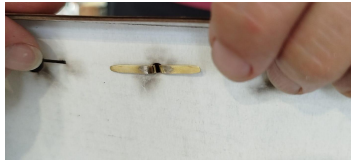
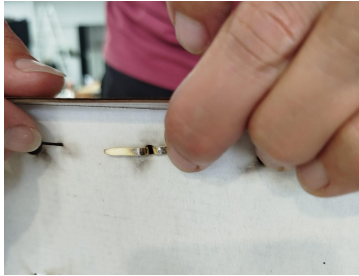
Menos (-) é a perna mais curta



# Eletrónica



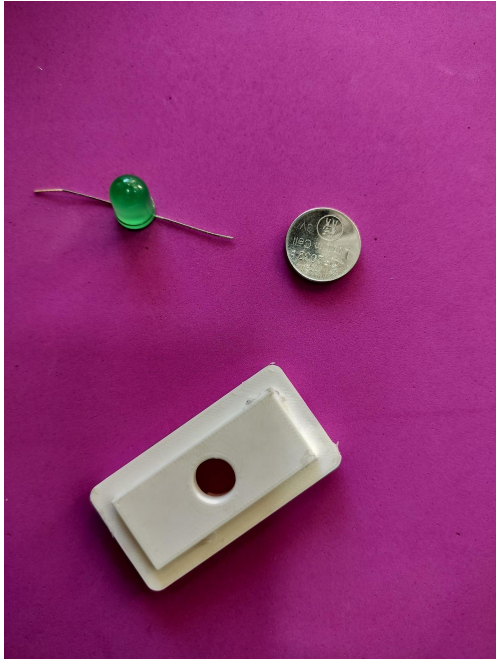
7



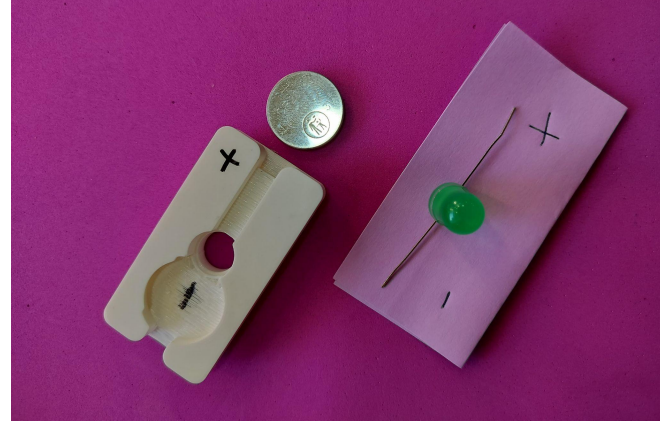
8



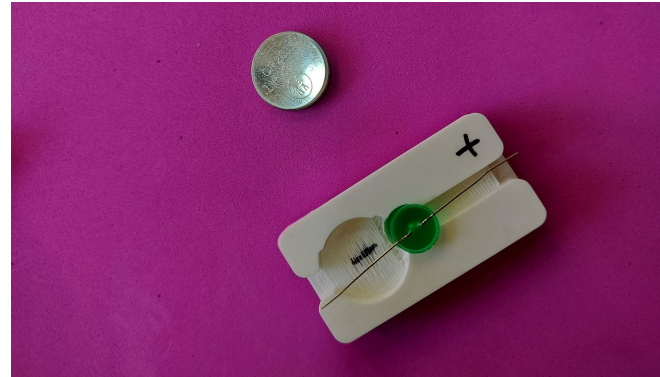
# Eletrónica



9



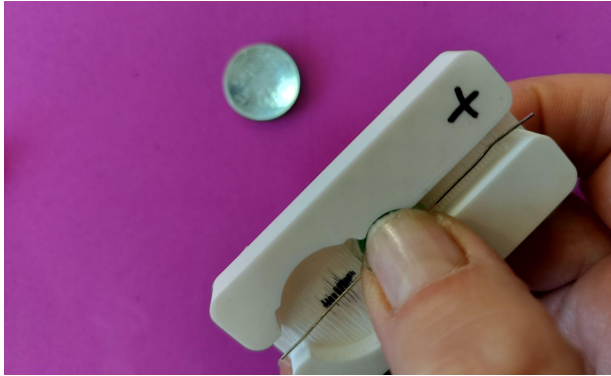
10



MATERIAL

# Eletrónica

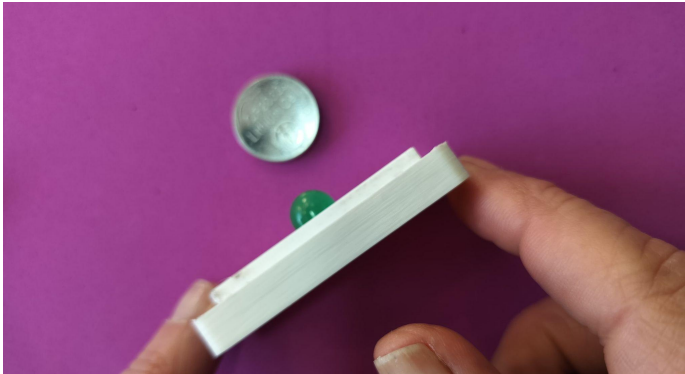
11



13



12



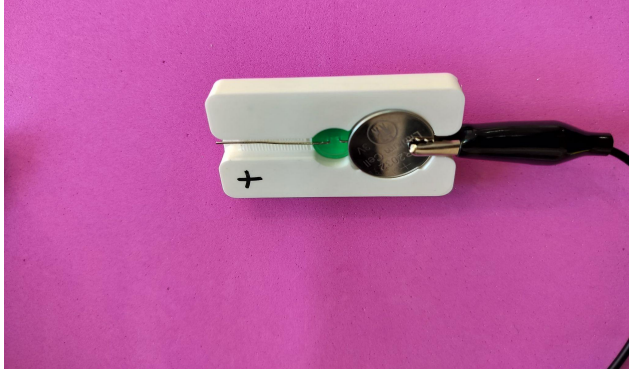
14





# Eletrónica

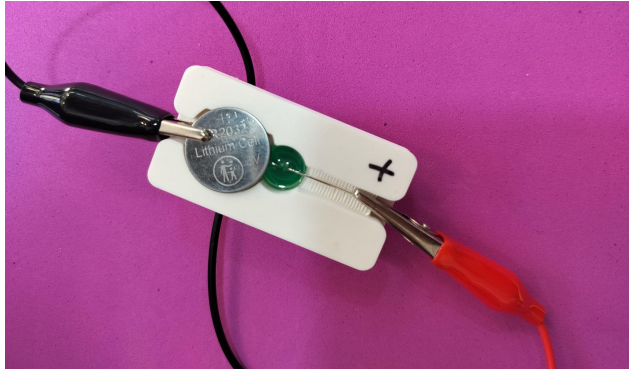
15



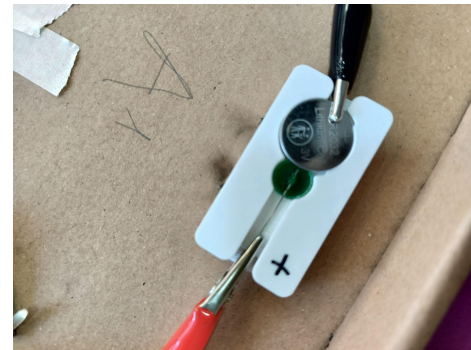
17



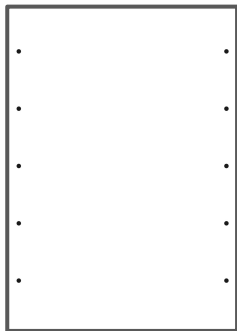
16



18



# Canva



[Link para o](#)  
[Canva](#)