

CODING CARDS



BLOCKS



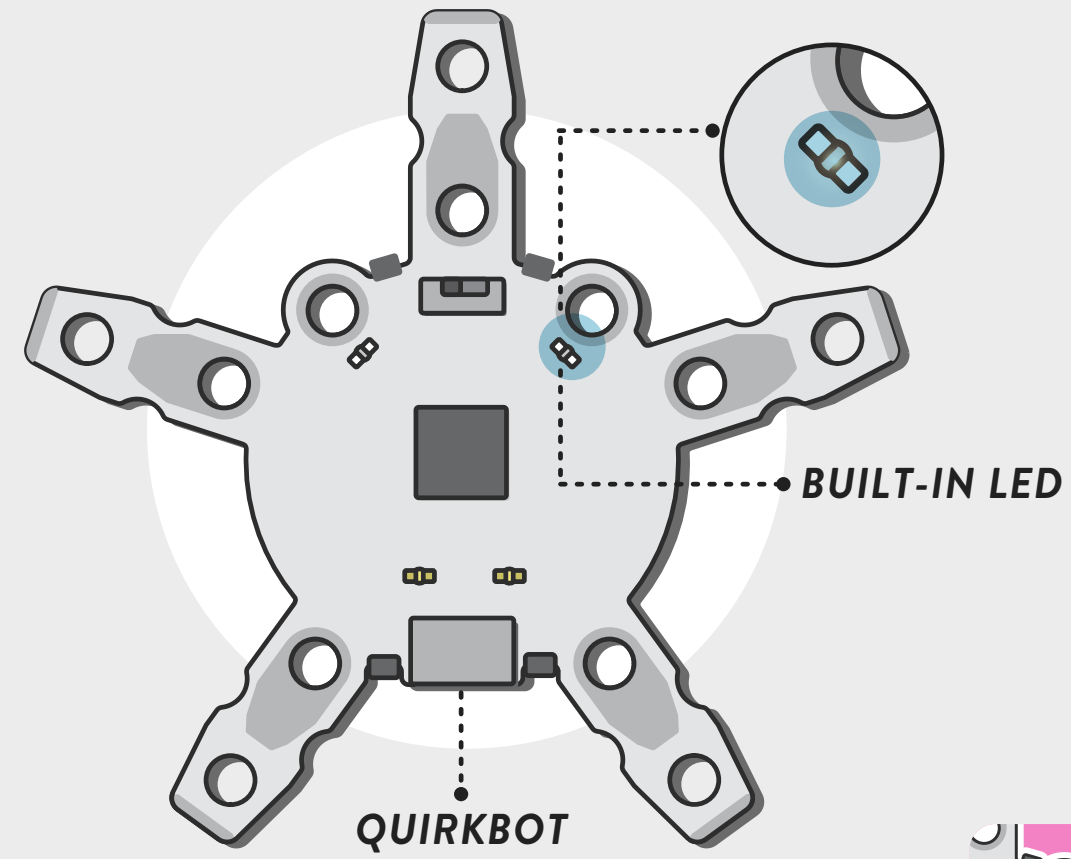
For courses, curriculum-aligned lessons, and other fun resources:

classroom.strawbees.com

BLINK

```
when program starts
  forever
    set led left eye light to 1
    wait 1 seconds
    set led left eye light to 0
    wait 1 seconds
```

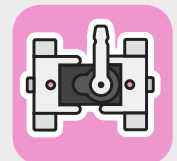
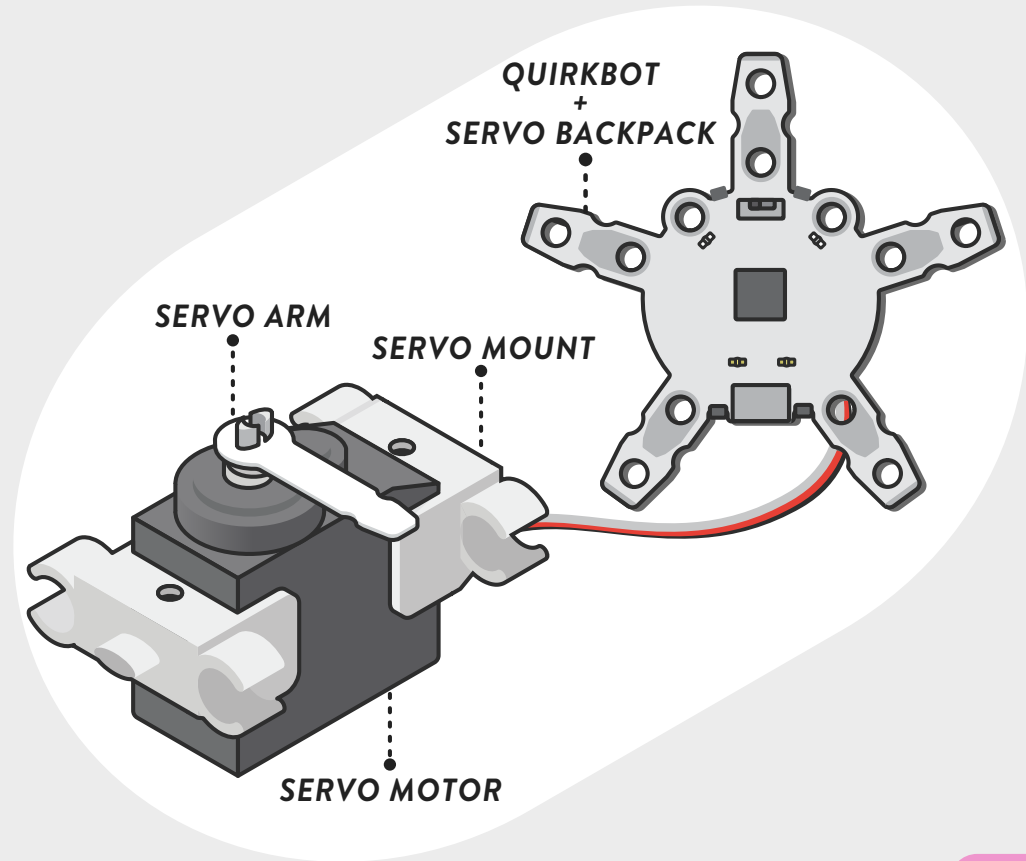
YOU WILL NEED



BACK AND FORTH

```
when program starts
  forever
    set servo 1 position to 1
    wait 1 seconds
    set servo 1 position to 0
    wait 1 seconds
```

YOU WILL NEED



SWITCHING COLORS

when program starts

set dual color led left arm ▼ light to 1

forever

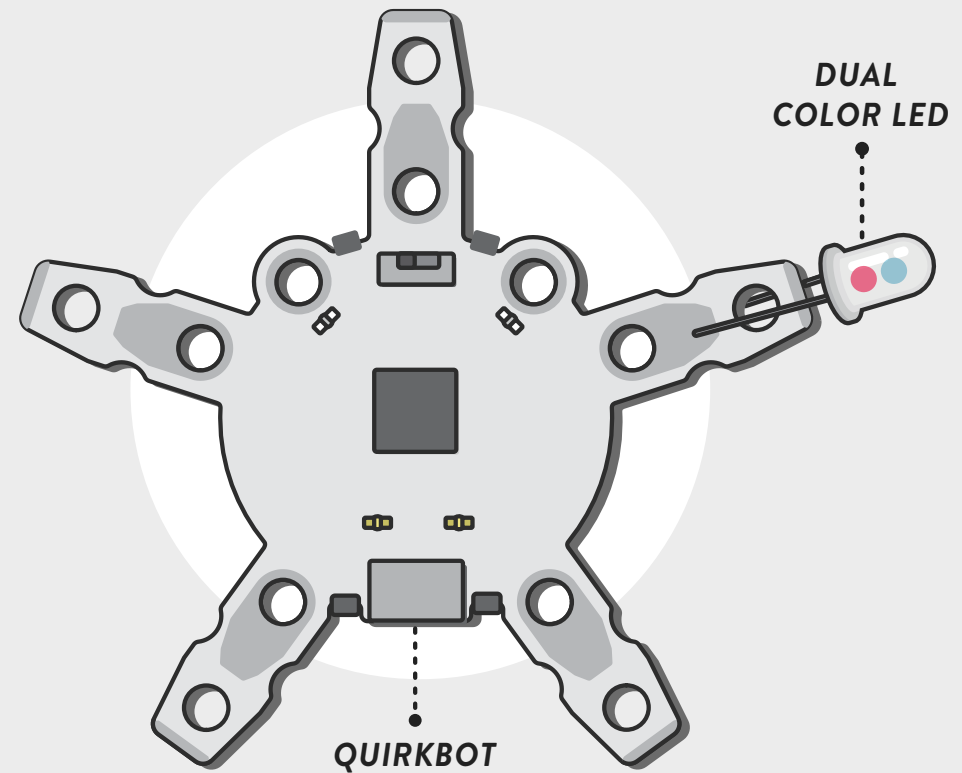
set dual color led left arm ▼ color to 1

wait 0.5 seconds

set dual color led left arm ▼ color to 0

wait 0.5 seconds

YOU WILL NEED

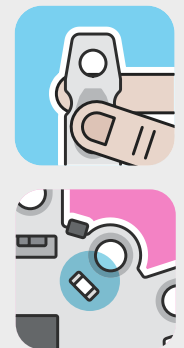
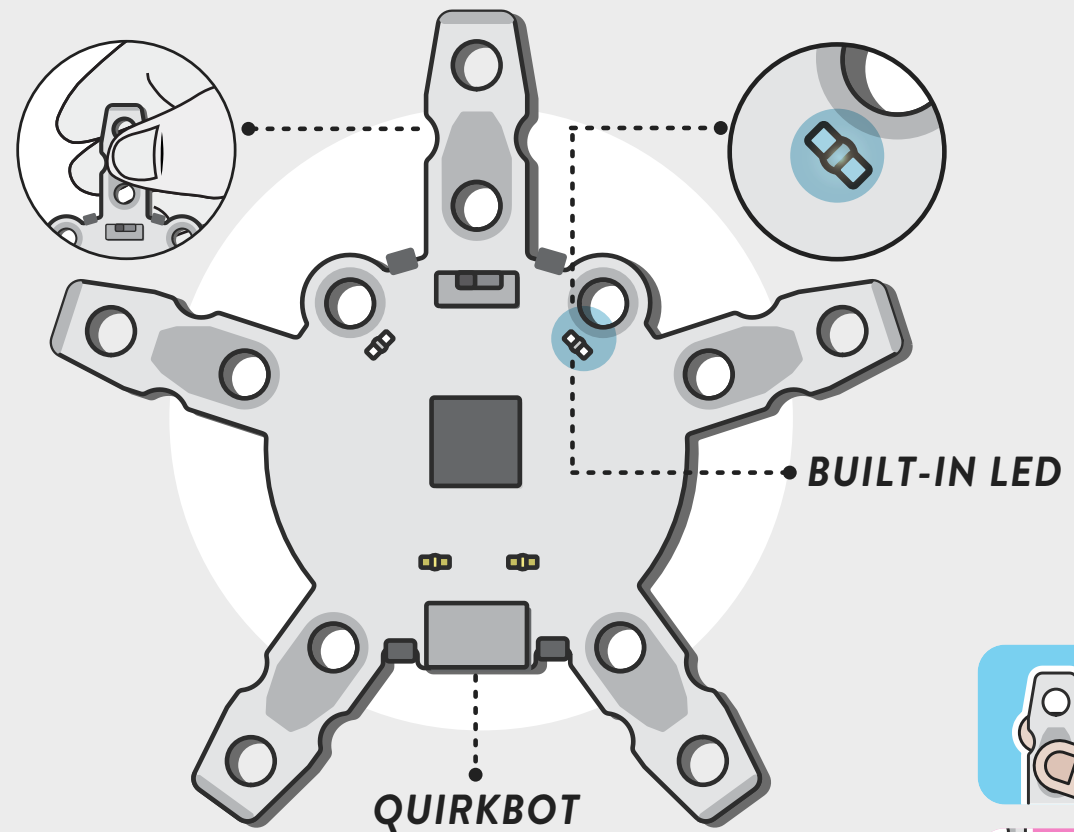




TOUCH AND WINK

```
when program starts
  forever
    if horn is touched then
      set led left eye light to 0
      wait 0.25 seconds
      set led left eye light to 1
```

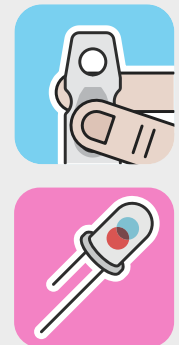
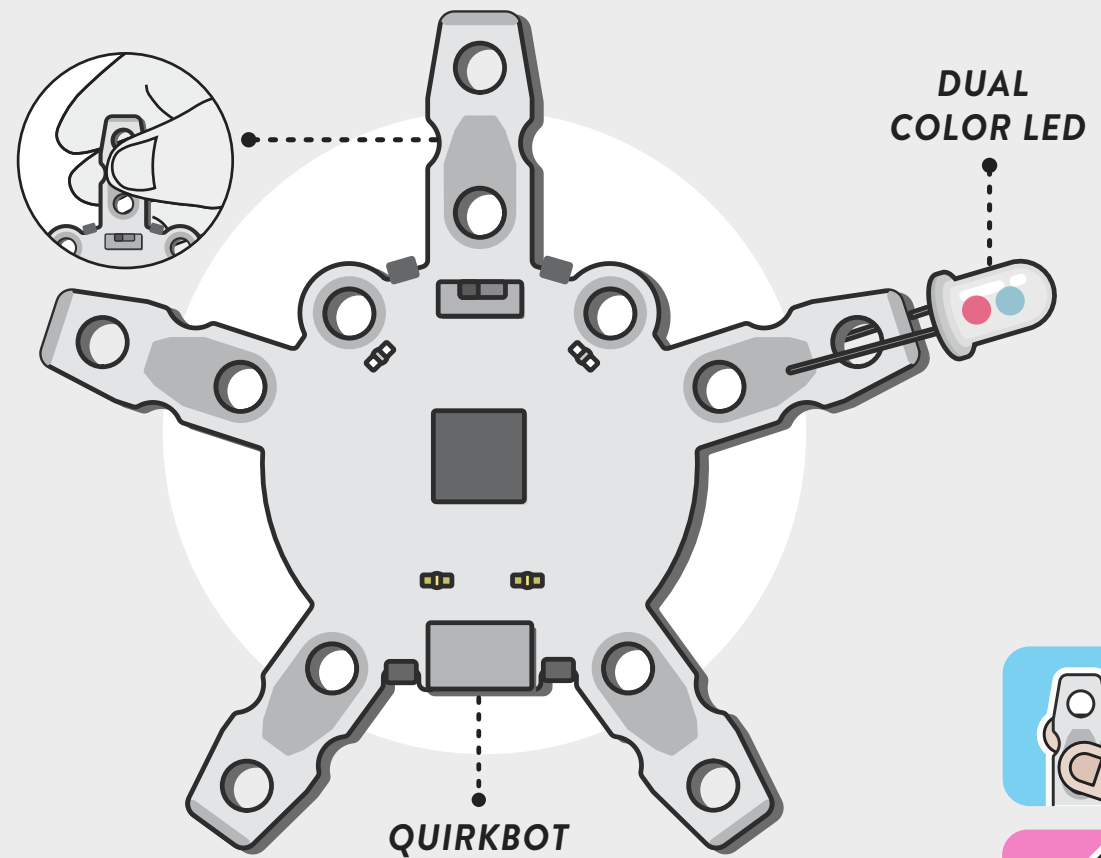
YOU WILL NEED



TOUCH TO SIREN LIGHT

```
when program starts
  forever
    if horn is touched then
      set dual color led left arm light to 1
      set dual color led left arm color to 1
      wait 0.1 seconds
      set dual color led left arm color to 0
      wait 0.1 seconds
    else
      set dual color led left arm light to 0
```

YOU WILL NEED



TOUCH AND TRAP

when program starts

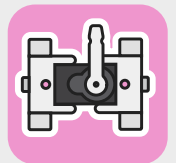
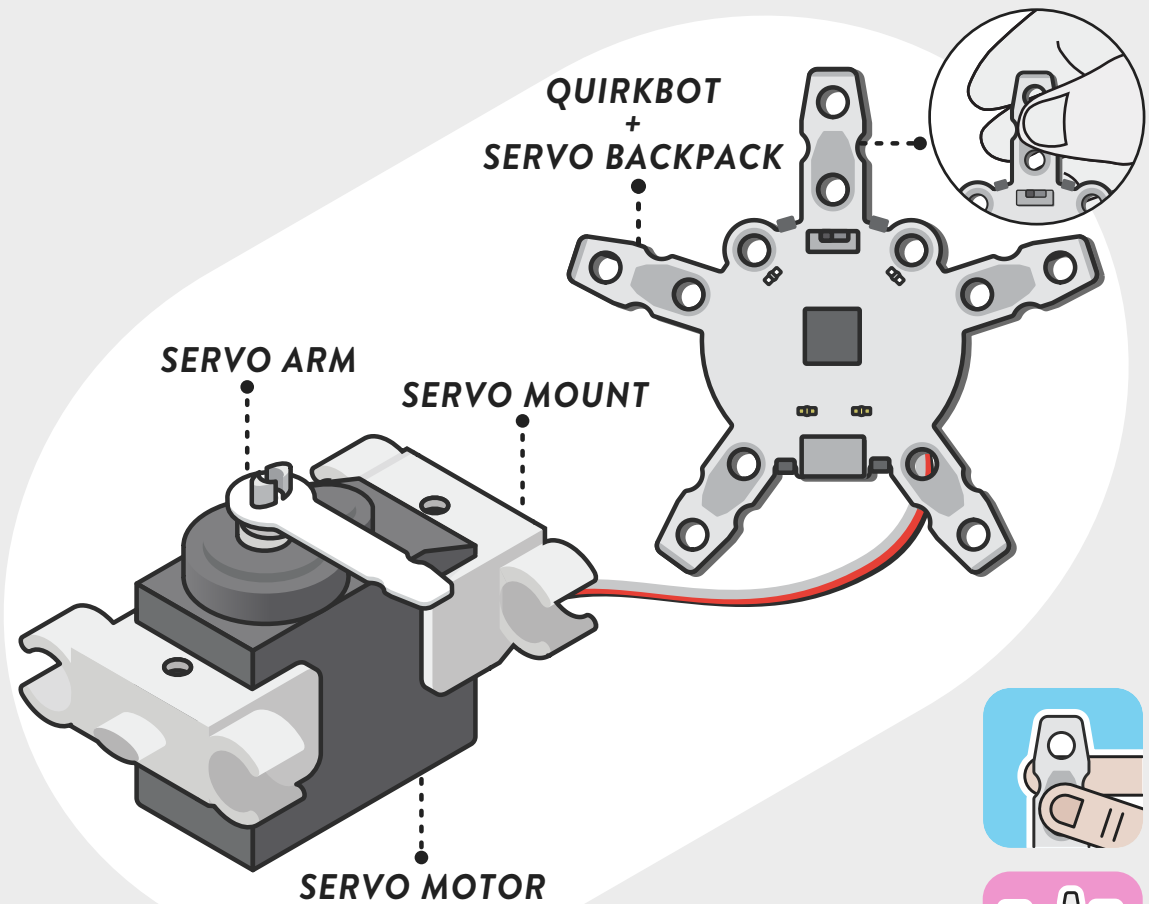
set servo 1 ▾ position to 0

forever

if  horn ▾ is touched then

set servo 1 ▾ position to 1

YOU WILL NEED





TOUCH TO SHINE

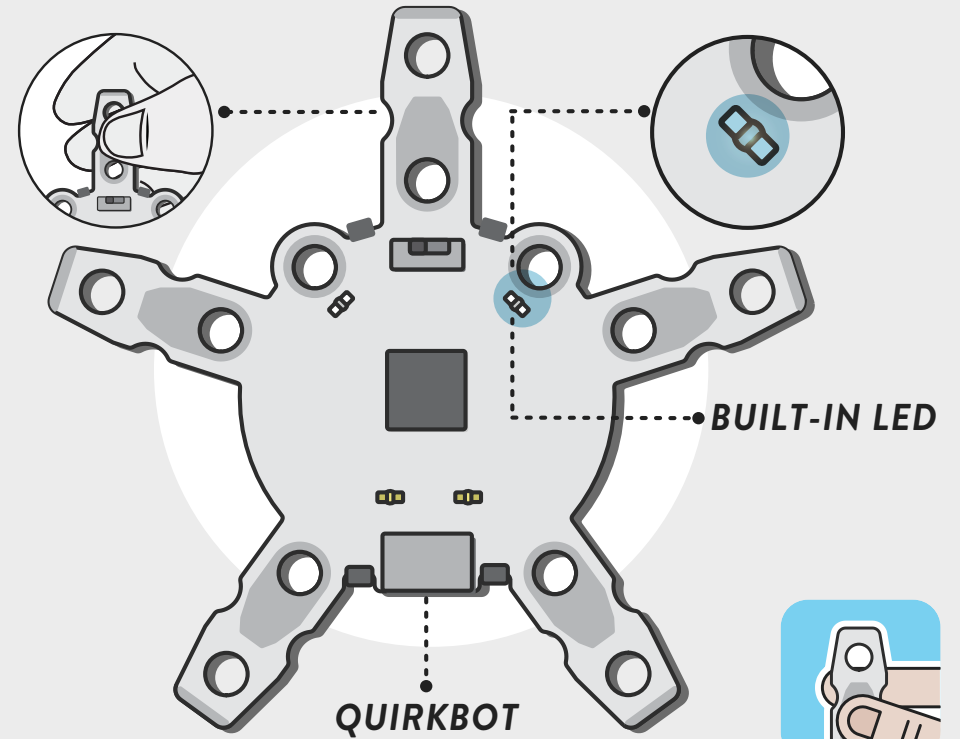
when program starts

forever

set led left eye ▾ light to value of circuit touch horn ▾



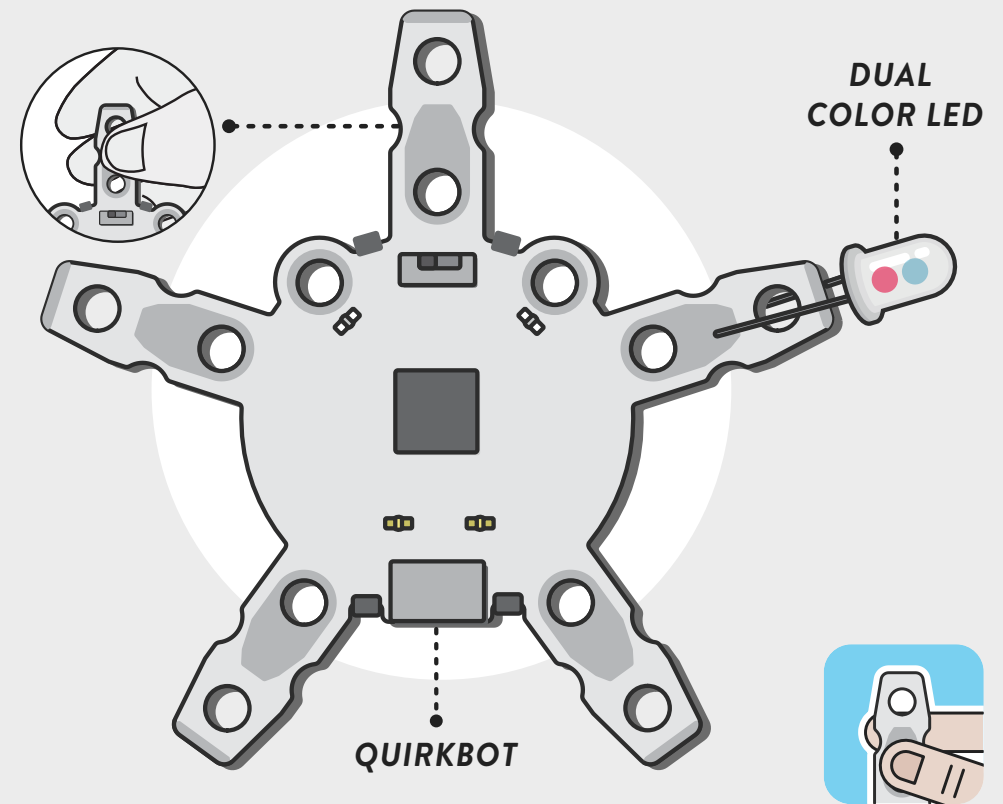
YOU WILL NEED



TOUCH TO CHANGE COLOR

```
when program starts
  forever
    set dual color led left arm light to 1
    set dual color led left arm color to value of circuit touch horn
    wait 0.01 seconds
```

YOU WILL NEED





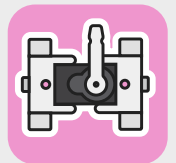
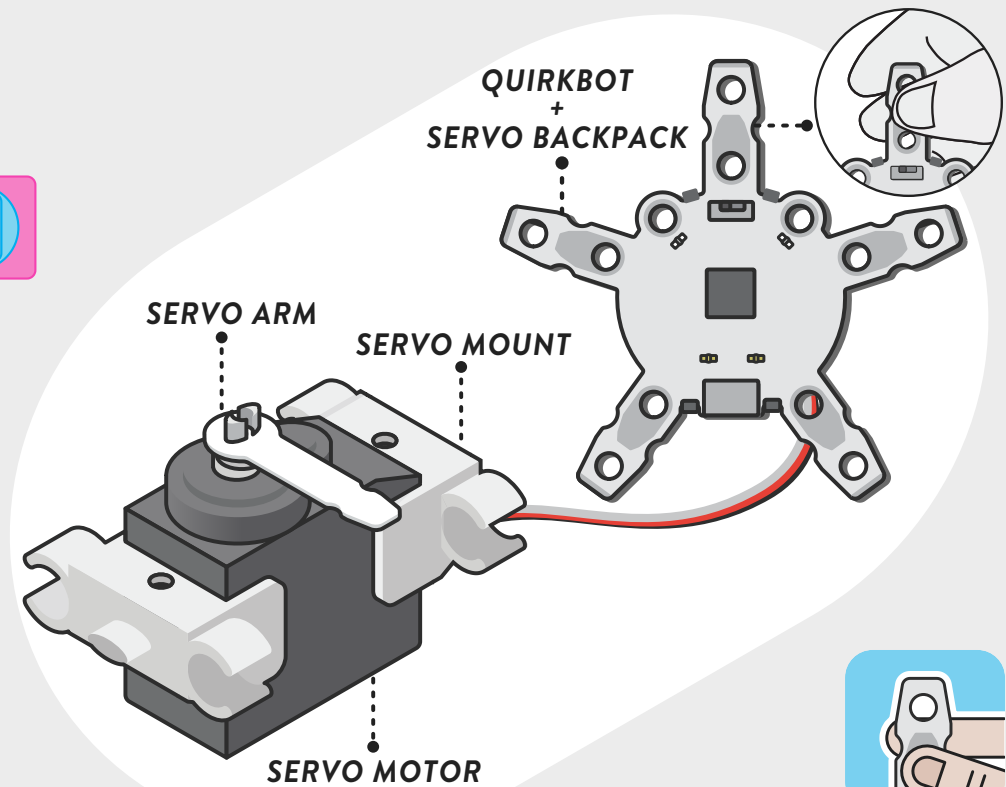
TOUCH AND HOLD POSITION

when program starts

forever

set servo 1 position to value of circuit touch horn

YOU WILL NEED





SHINE IN THE DARK

when program starts

forever

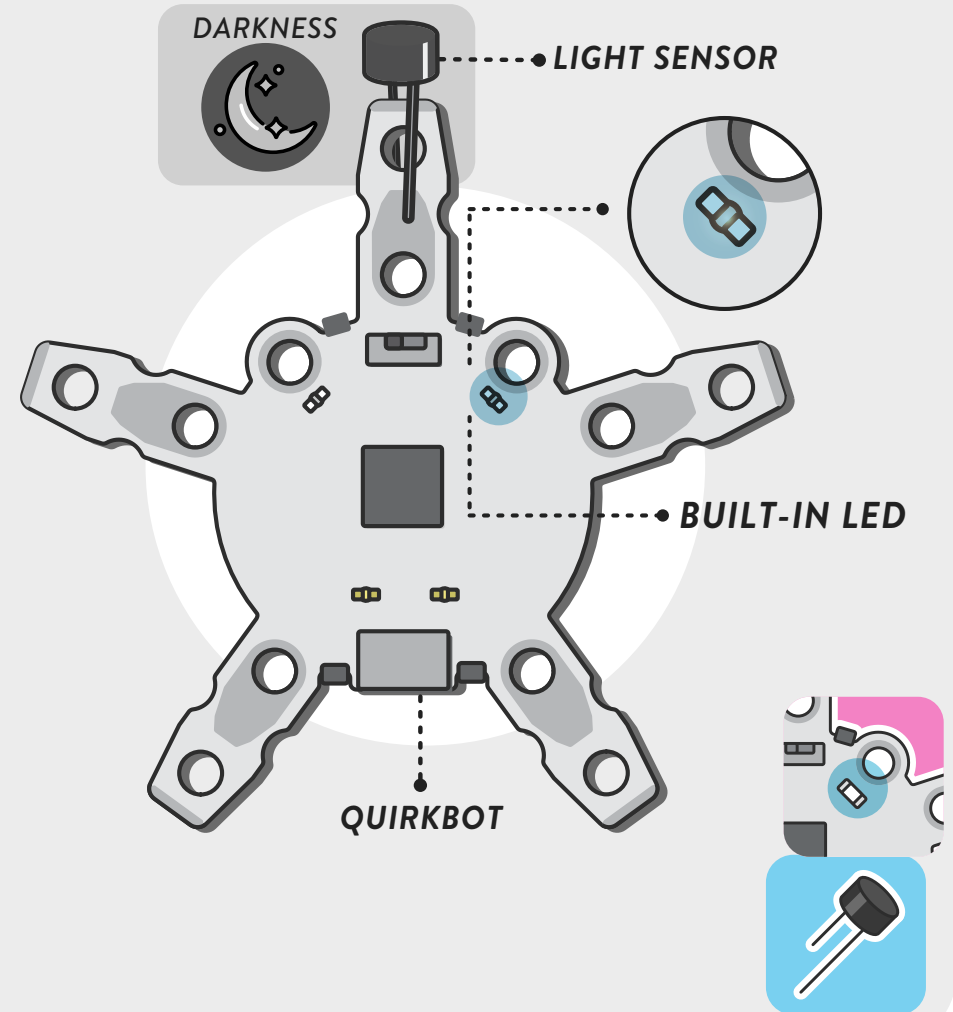
if value of light sensor horn > 0.01 then

set led left eye light to 0

else

set led left eye light to 1

YOU WILL NEED

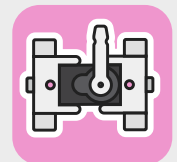
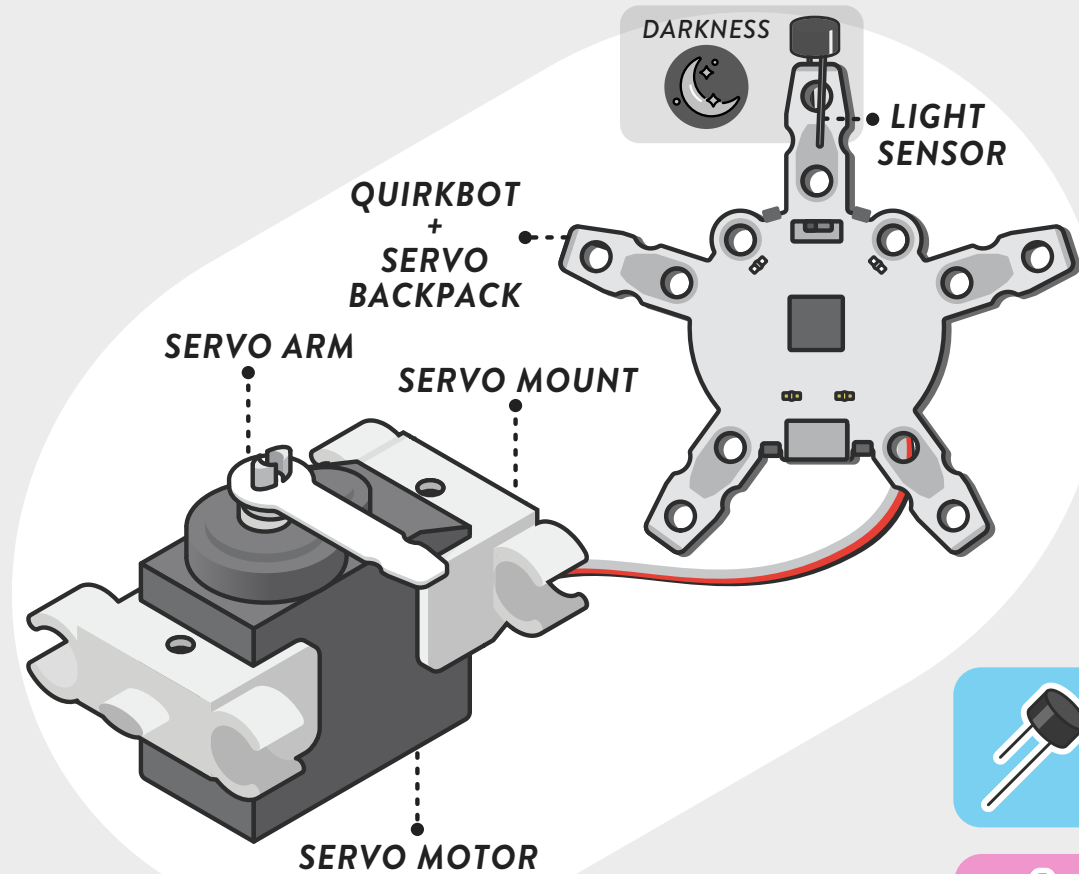




SHAKE IN THE DARK

```
when program starts
  forever
    if value of light sensor horn > 0.01 then
      set servo 1 position to 0.5
    else
      set servo 1 position to pick random 0 to 1
```

YOU WILL NEED





CHANGE COLOR IN THE DARK

when program starts

forever

set dual color led left arm ▾ light to 1

if value of light sensor horn ▾ > 0.01 then

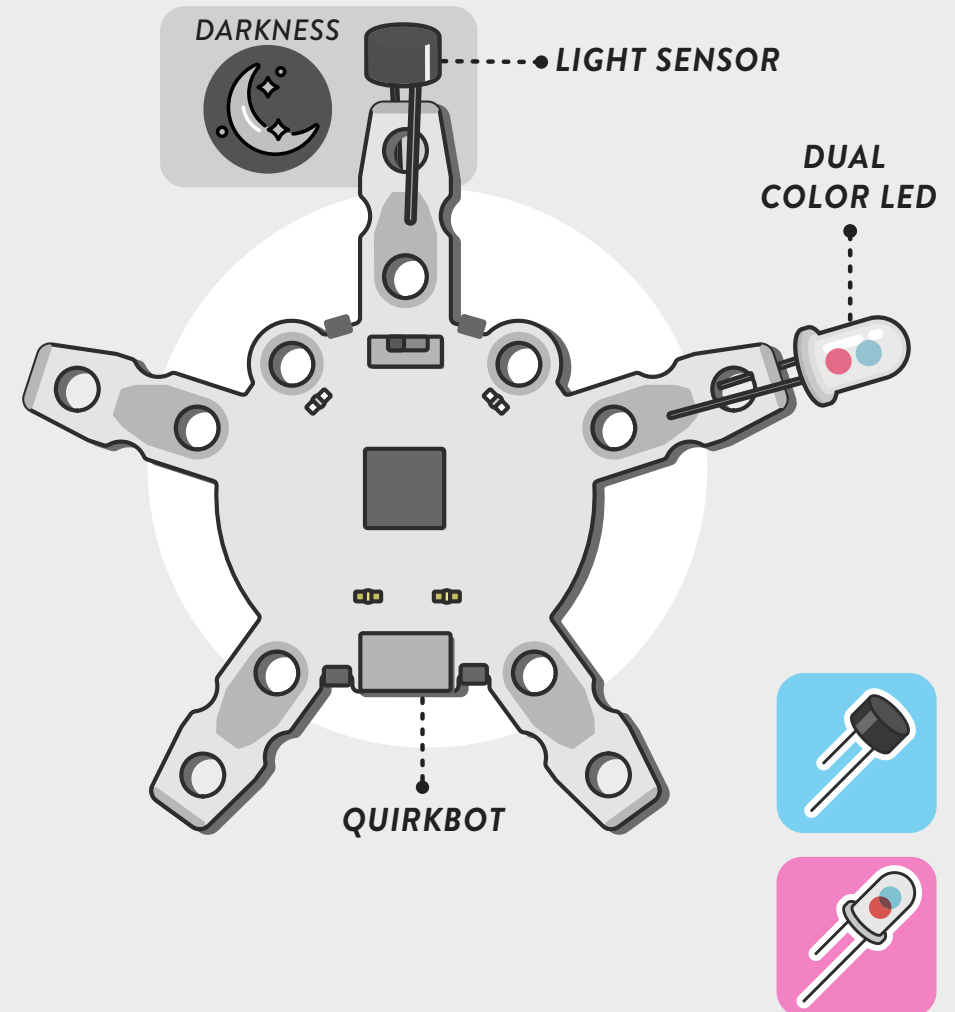
set dual color led left arm ▾ color to 0

else

set dual color led left arm ▾ color to 1



YOU WILL NEED





FLICKER

when program starts

forever

set led left eye ▾ light to 1

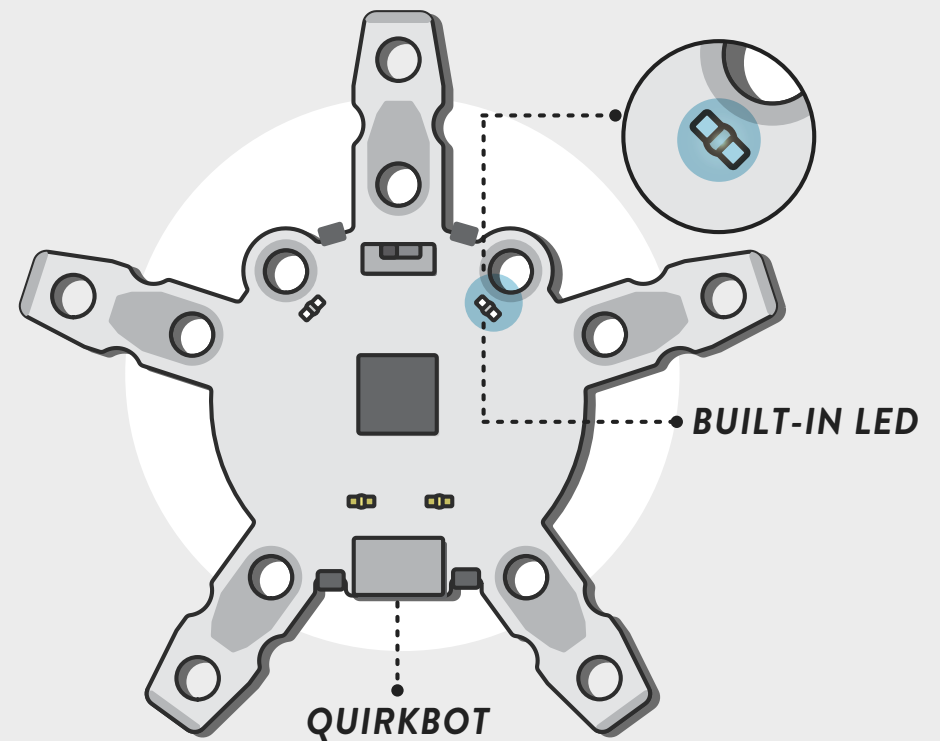
wait pick random 0 to 0.1 seconds

set led left eye ▾ light to 0

wait pick random 0 to 0.1 seconds



YOU WILL NEED



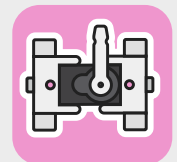
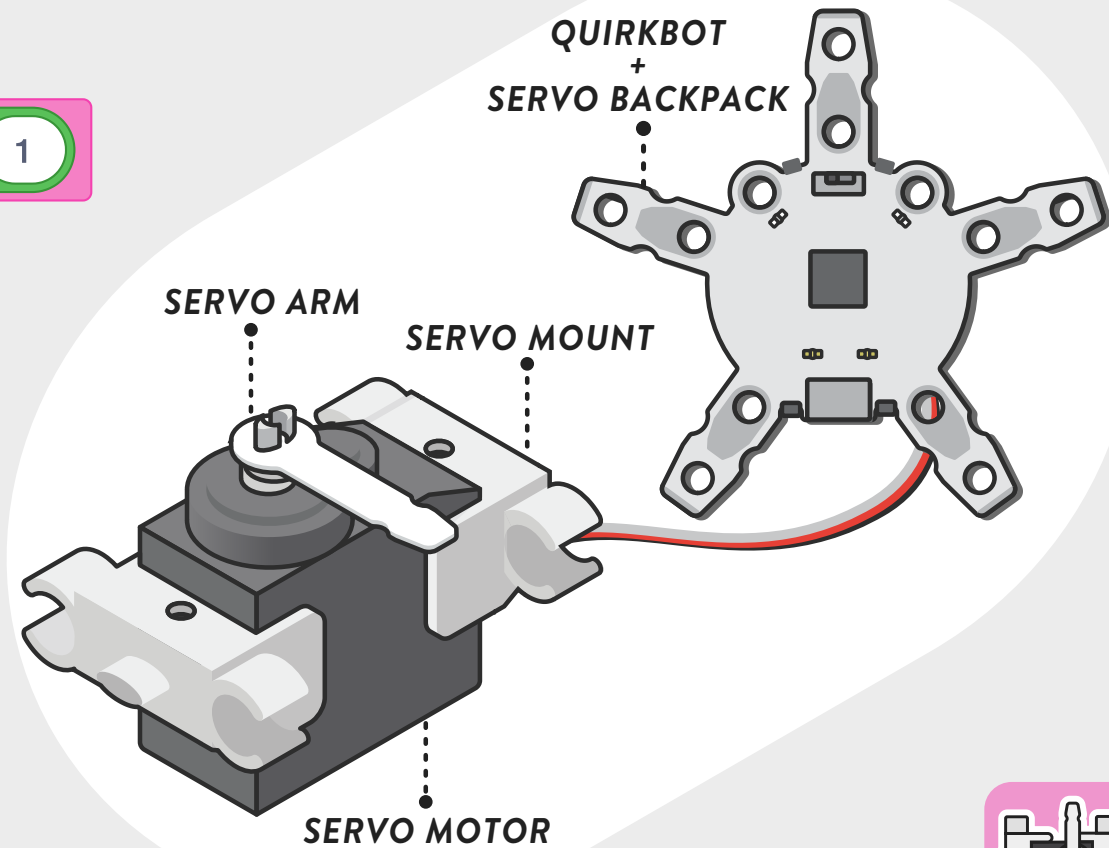
SHAKE

when program starts

forever

set servo 1 position to pick random 0 to 1

YOU WILL NEED

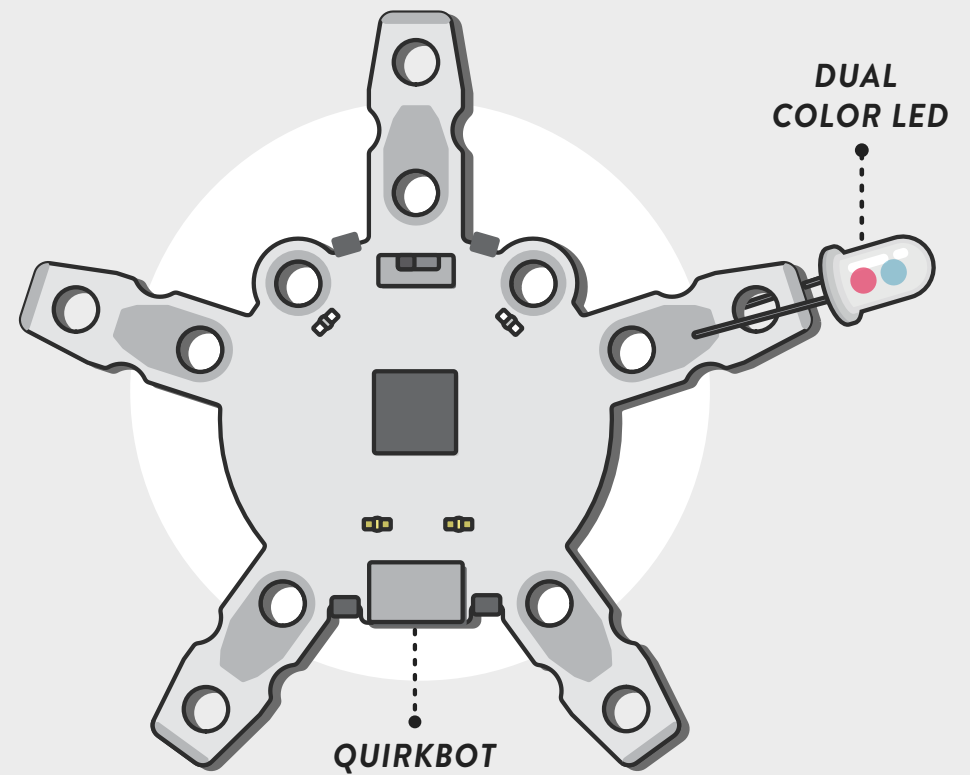




FLICKERING COLOR

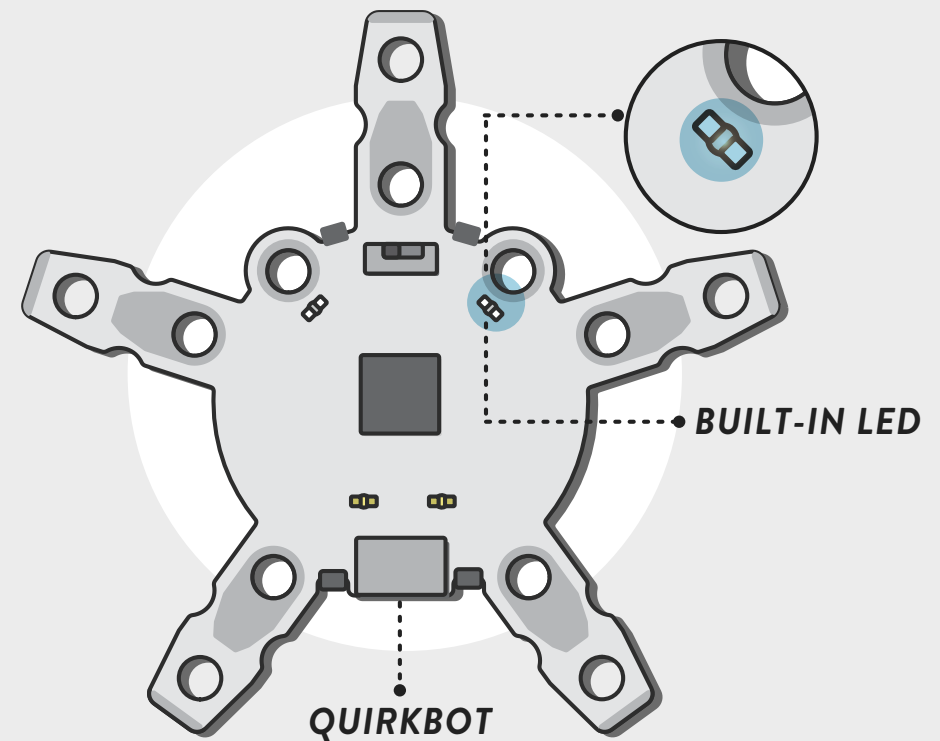
```
when program starts
  forever
    set dual color led horn light to 1
    set dual color led horn color to pick random 0 to 1
    wait pick random 0 to 0.1 seconds
```

YOU WILL NEED




```
when program starts
  forever
    set brightness ▼ to 0 CREATE A VARIABLE
    repeat 100
      change brightness ▼ by 0.01
      set led left eye ▼ light to brightness
      wait 0.02 seconds
```

YOU WILL NEED





FADING COLORS

when program starts

forever

set color to 0

CREATE A VARIABLE

set dual color led left arm light to 1

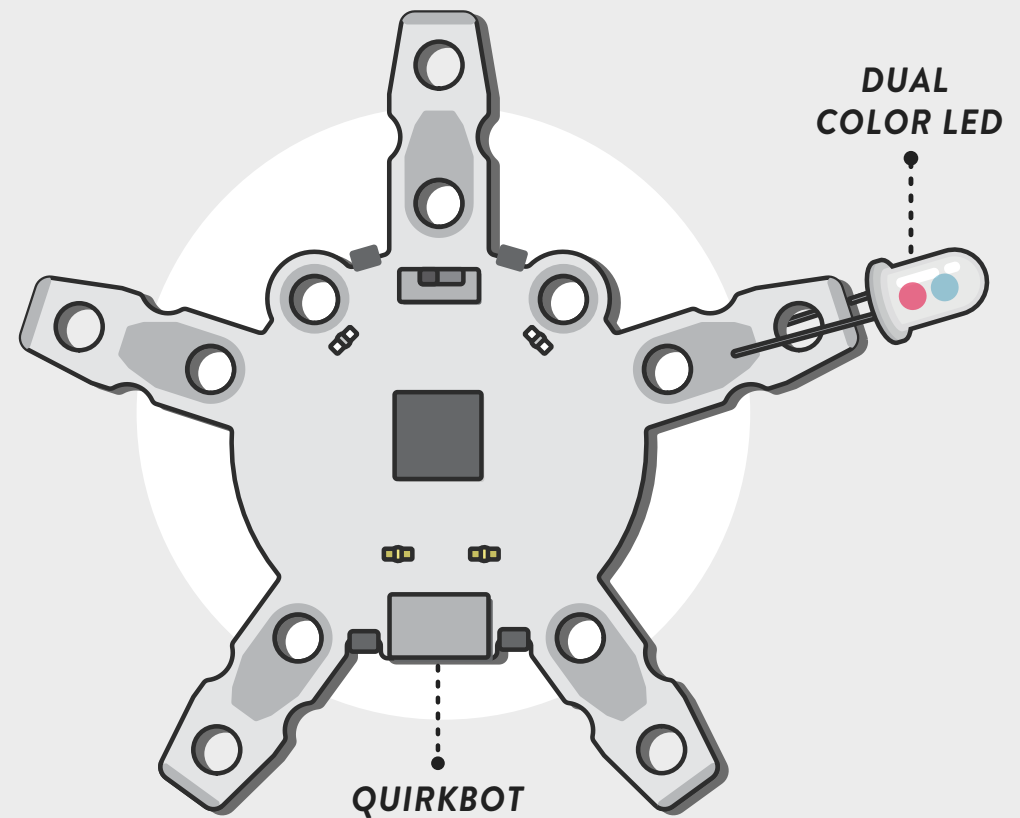
repeat 100

set dual color led left arm color to color

change color by 0.01

wait 0.01 seconds

YOU WILL NEED



SWEEP

when program starts

forever

set position ▾ to 0

CREATE A VARIABLE

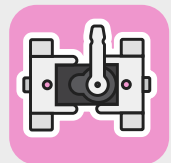
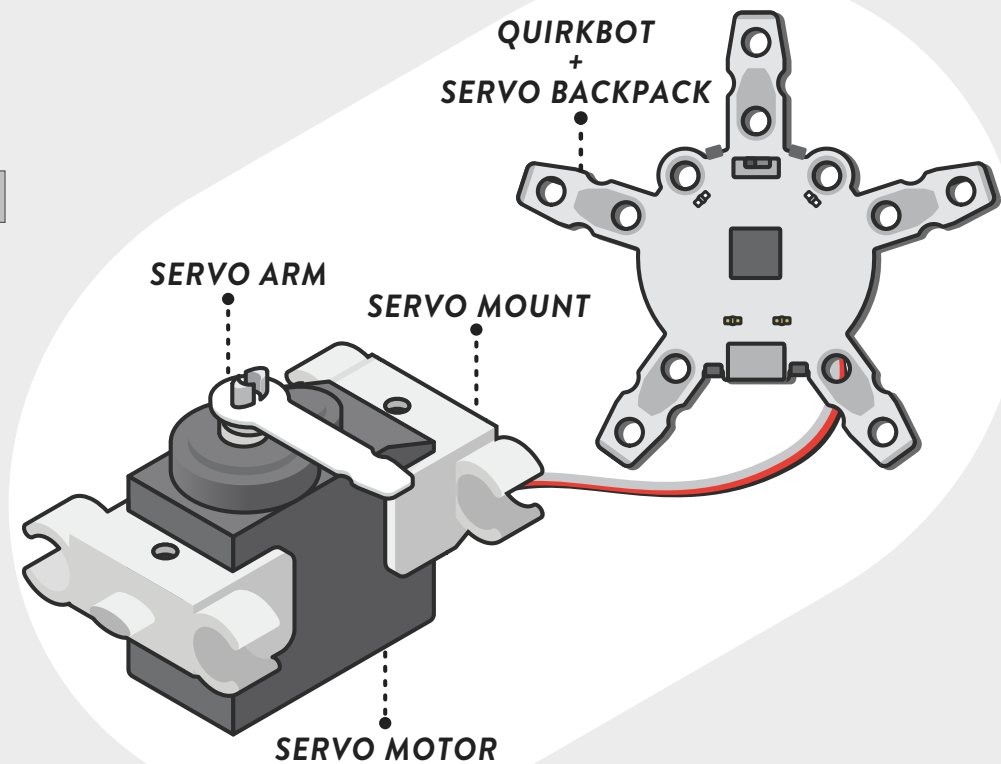
repeat 100

change position ▾ by 0.01

set servo 1 ▾ position to position

wait 0.02 seconds

YOU WILL NEED



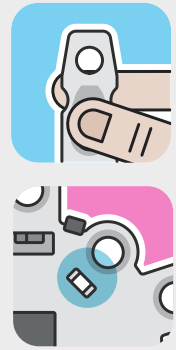
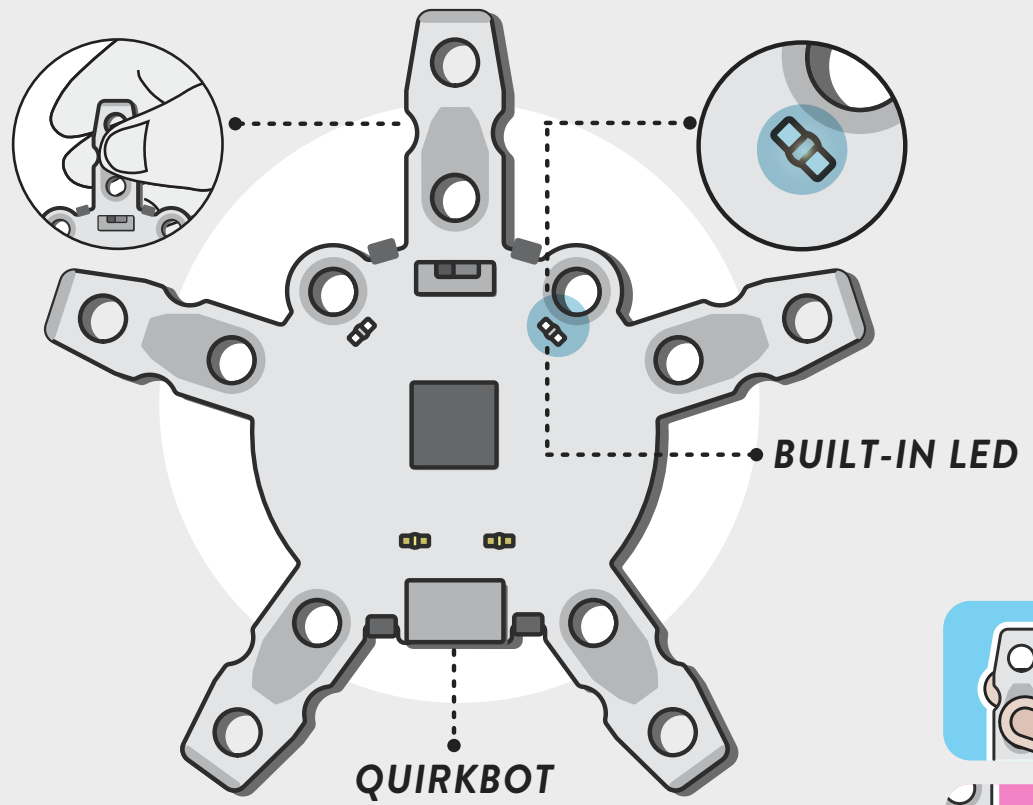


LIGHT SWITCH

```
when program starts
  set toggle to 0
  forever
    if horn is touched then
      if toggle > 0 then
        set toggle to 0
      else
        set toggle to 1
      set led left eye light to toggle
      wait 0.3 seconds
```

CREATE A VARIABLE

YOU WILL NEED



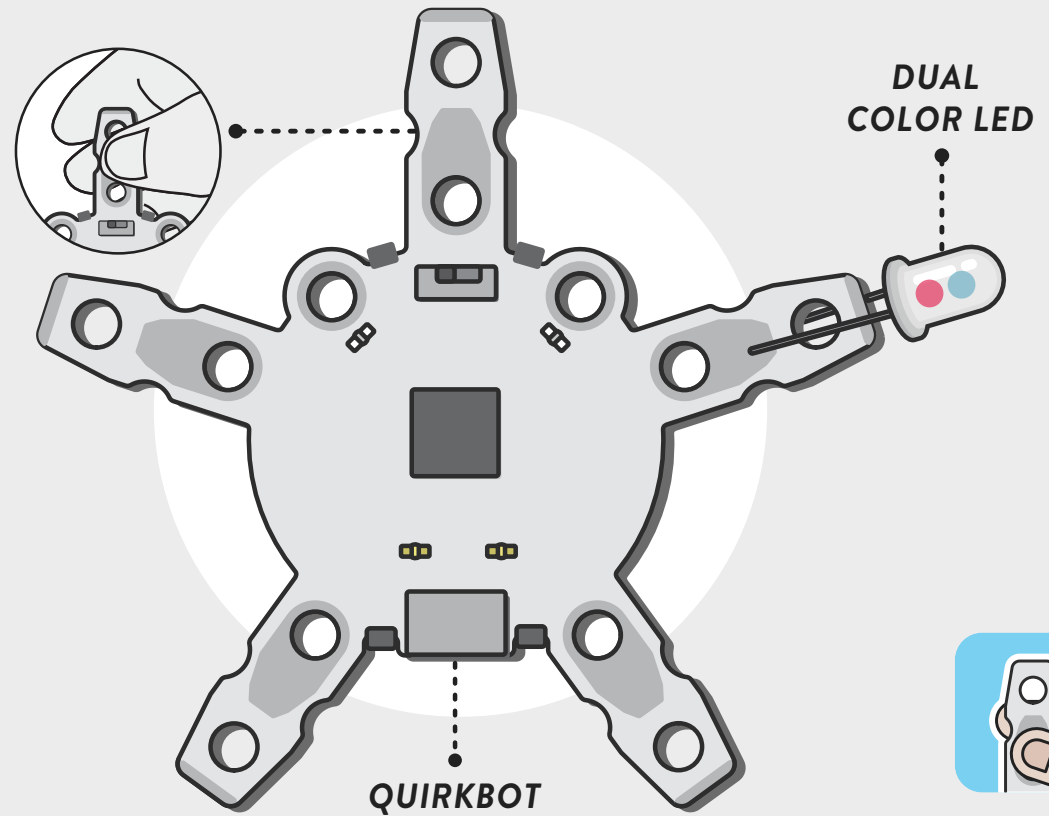


MOOD LIGHT SWITCH

```
when program starts
  set toggle to 0
  set dual color led left arm light to 1
  forever
    if horn is touched then
      if toggle > 0 then
        set toggle to 0
      else
        set toggle to 1
      set dual color led left arm color to toggle
      wait 0.5 seconds
```

CREATE A VARIABLE

YOU WILL NEED



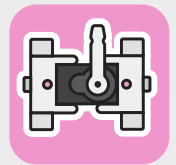
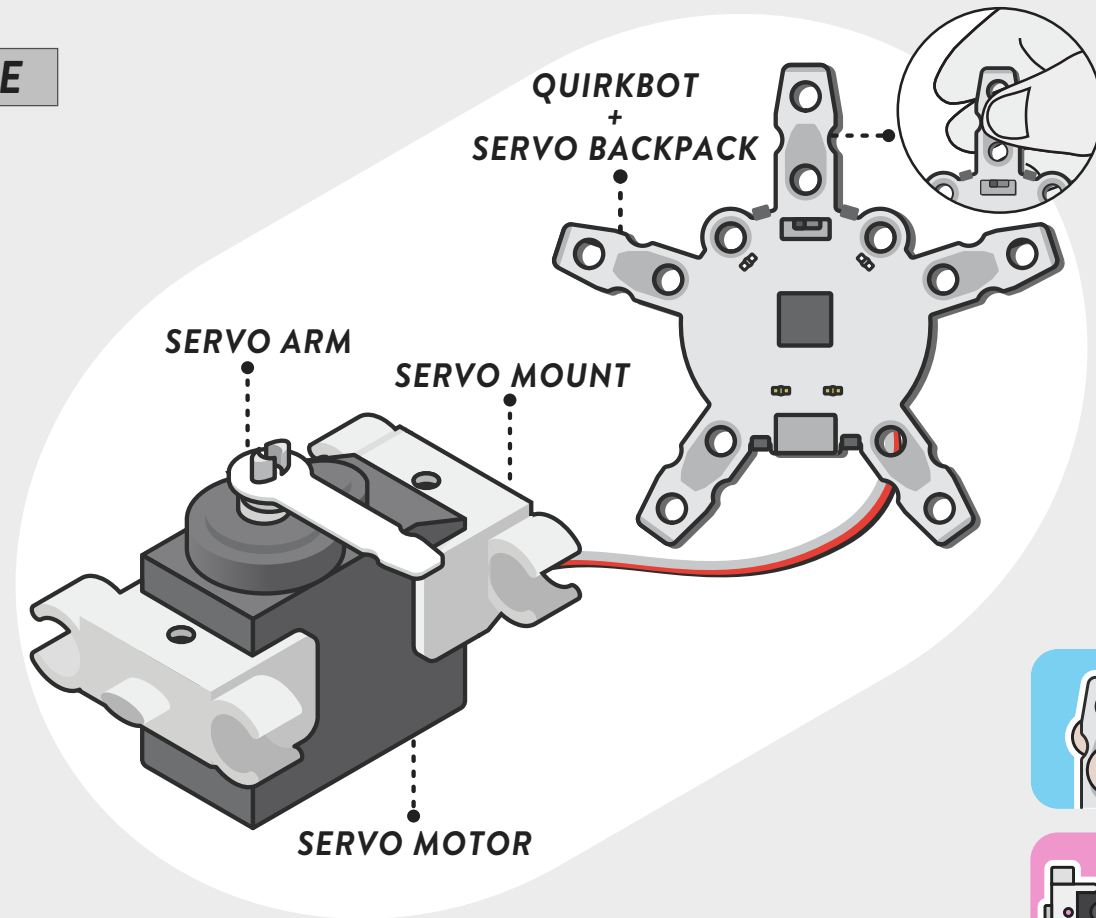


TOUCH TO SWITCH POSITION

```
when program starts
  set toggle to 0
  forever loop
    if horn is touched then
      if toggle > 0 then
        set toggle to 0
      else
        set toggle to 1
      set servo 1 position to toggle
      wait 1 seconds
```

CREATE A VARIABLE

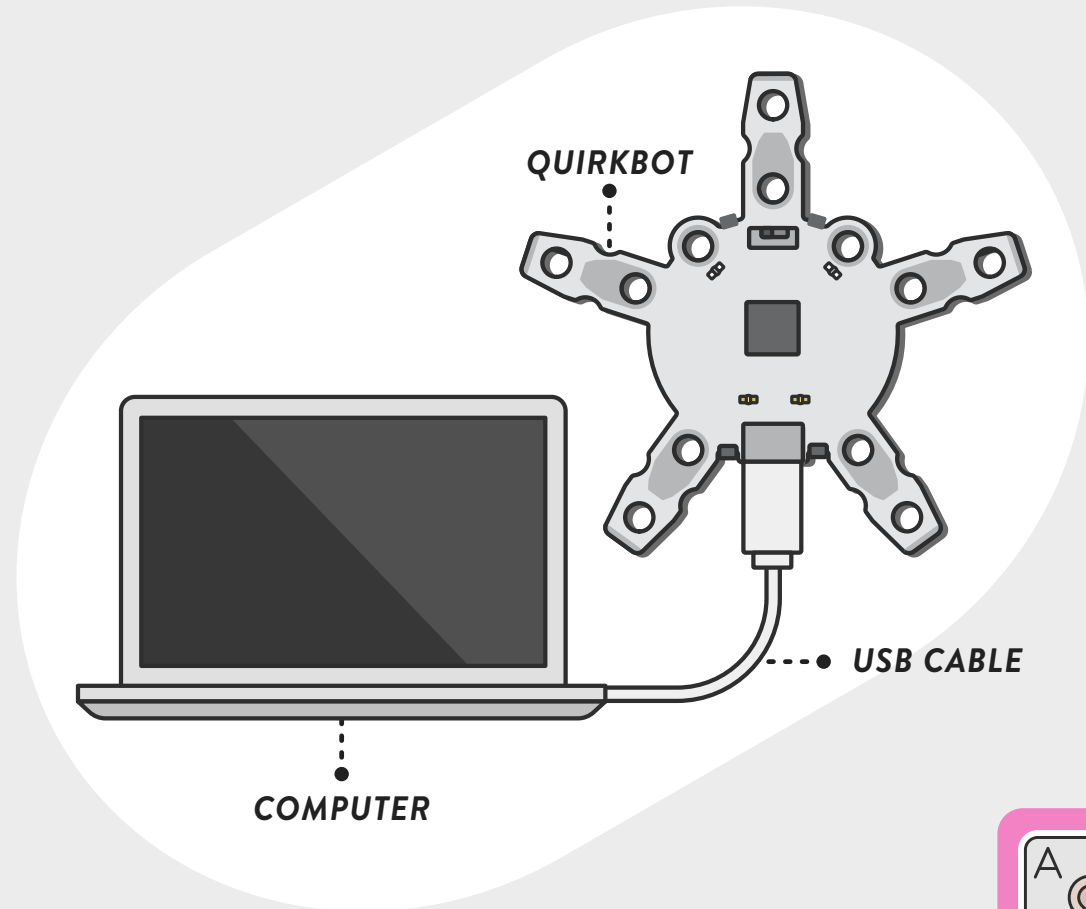
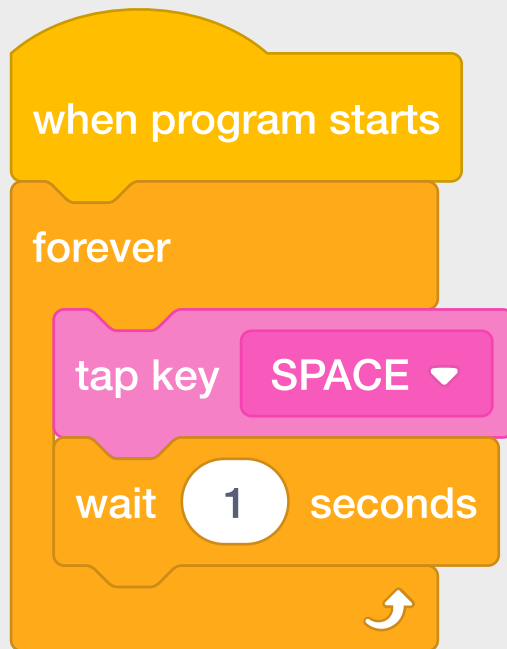
YOU WILL NEED





TYPE A KEY OVER AND OVER

YOU WILL NEED

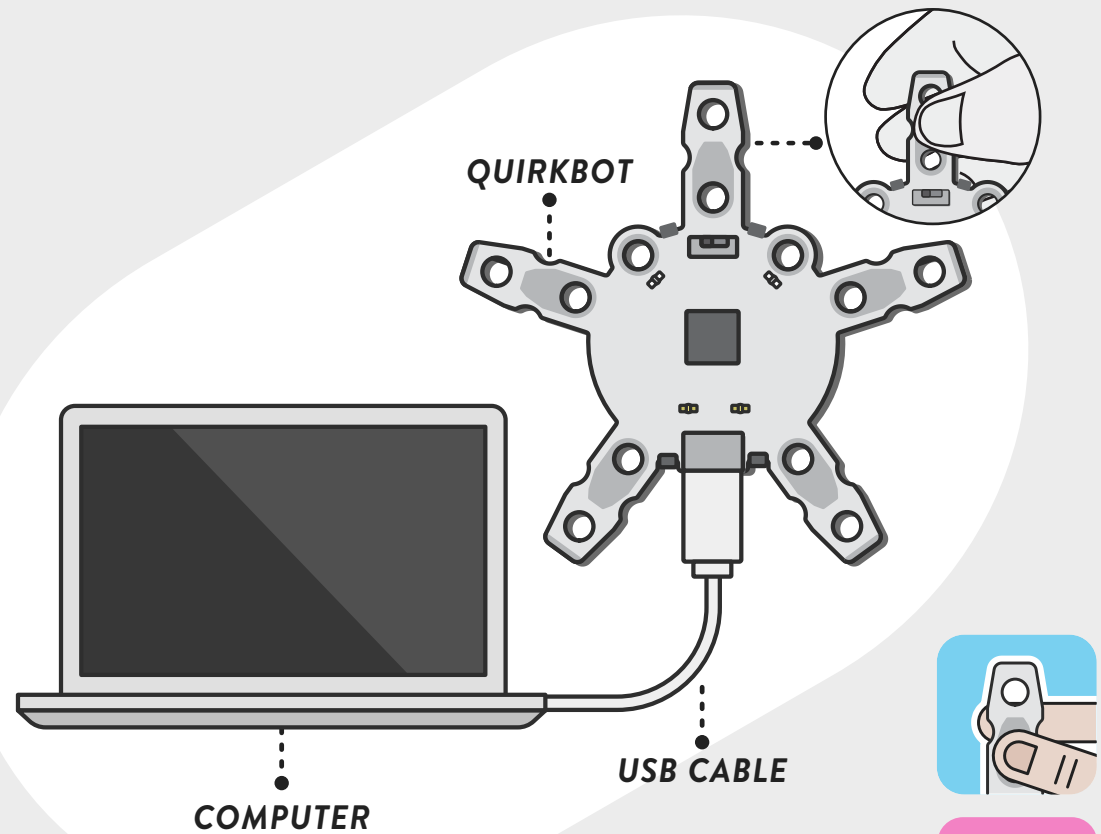




TOUCH TO WRITE A WORD

```
when program starts
  forever
    if horn is touched then
      tap key H
      tap key E
      tap key Y
```

YOU WILL NEED

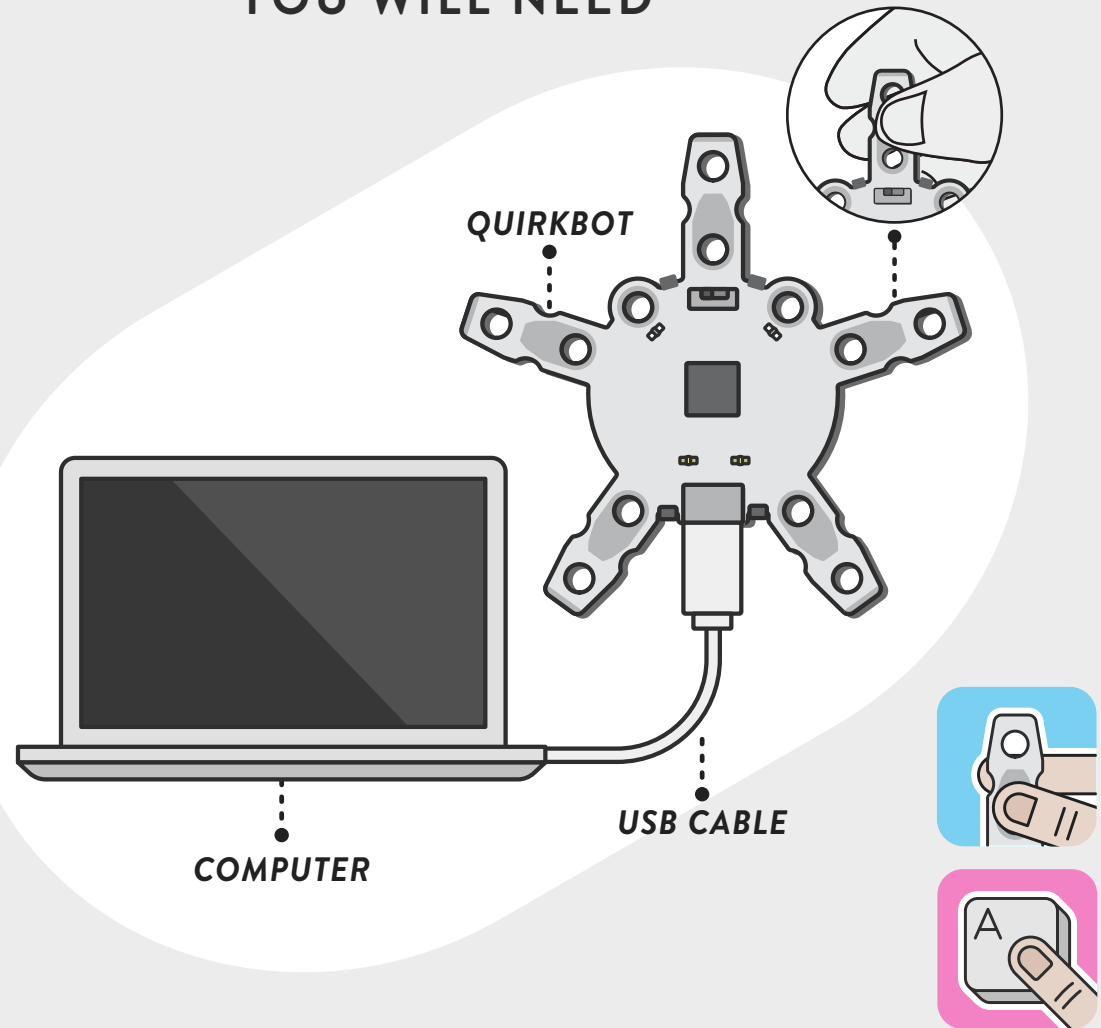




TOUCH TO STEER

```
when program starts
  forever
    if left arm is touched then
      press key Left
    else
      release key Left
    wait 0.1 seconds
```

YOU WILL NEED

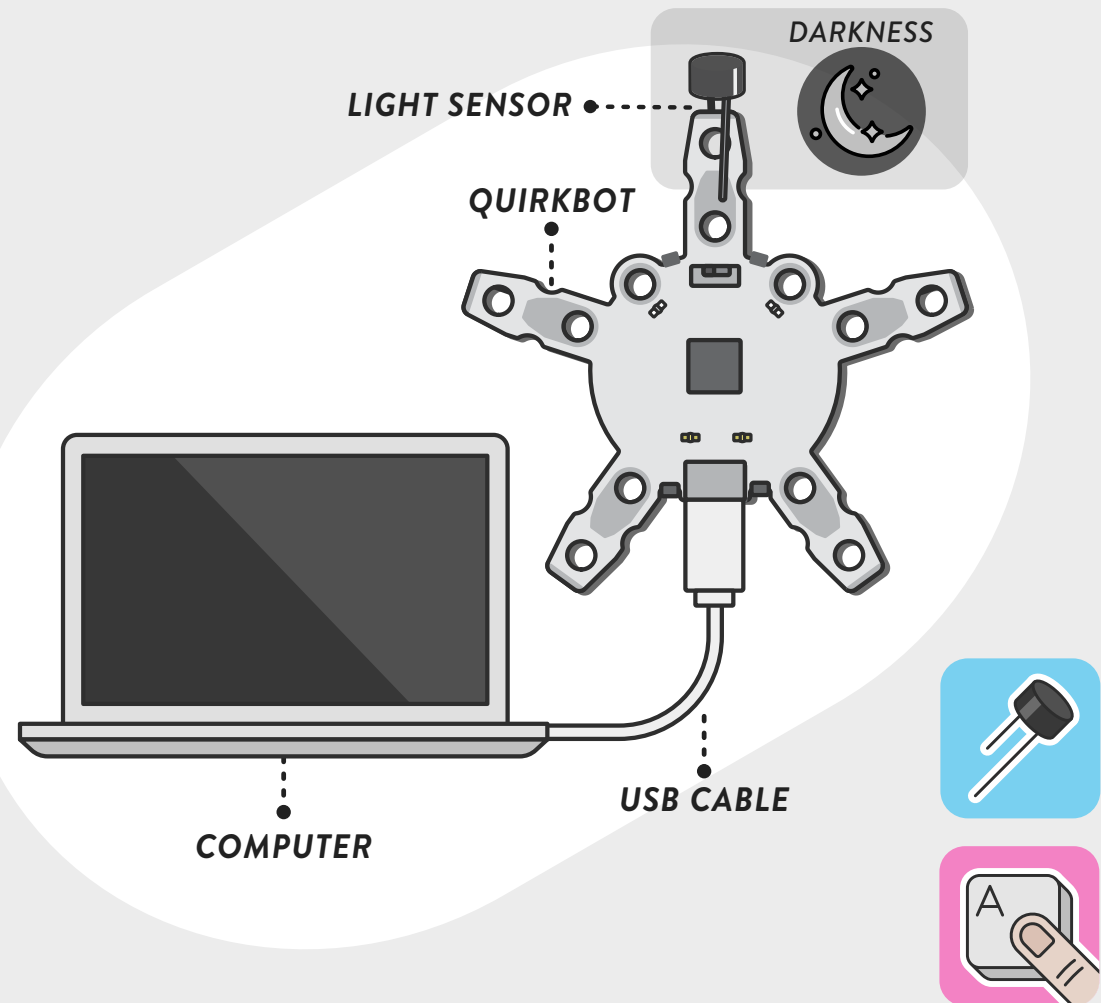




PRESS A KEY IN THE DARK

```
when program starts
  forever
    if value of circuit touch horn < 0.1 then
      hold key SPACE for 2 seconds
    wait 0.1 seconds
```

YOU WILL NEED



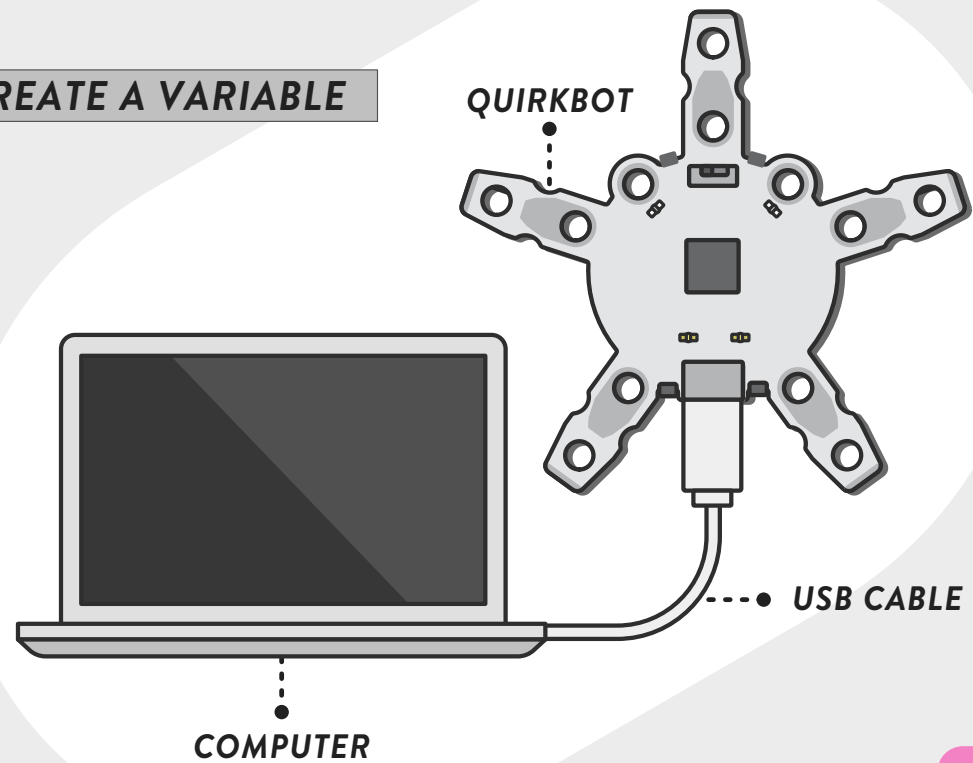


LAUGHTER GENERATOR

```
when program starts
  forever
    set letter to round pick random 1 to 2
    if letter = 1 then
      tap key H
    if letter = 2 then
      tap key A
    wait 0.1 seconds
```

CREATE A VARIABLE

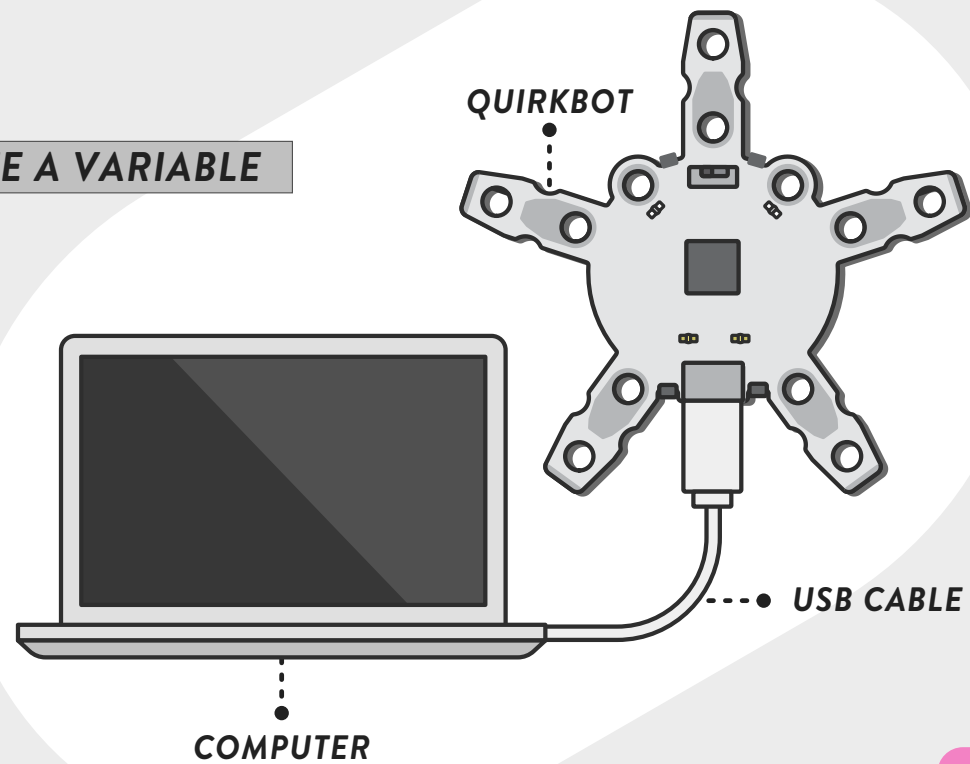
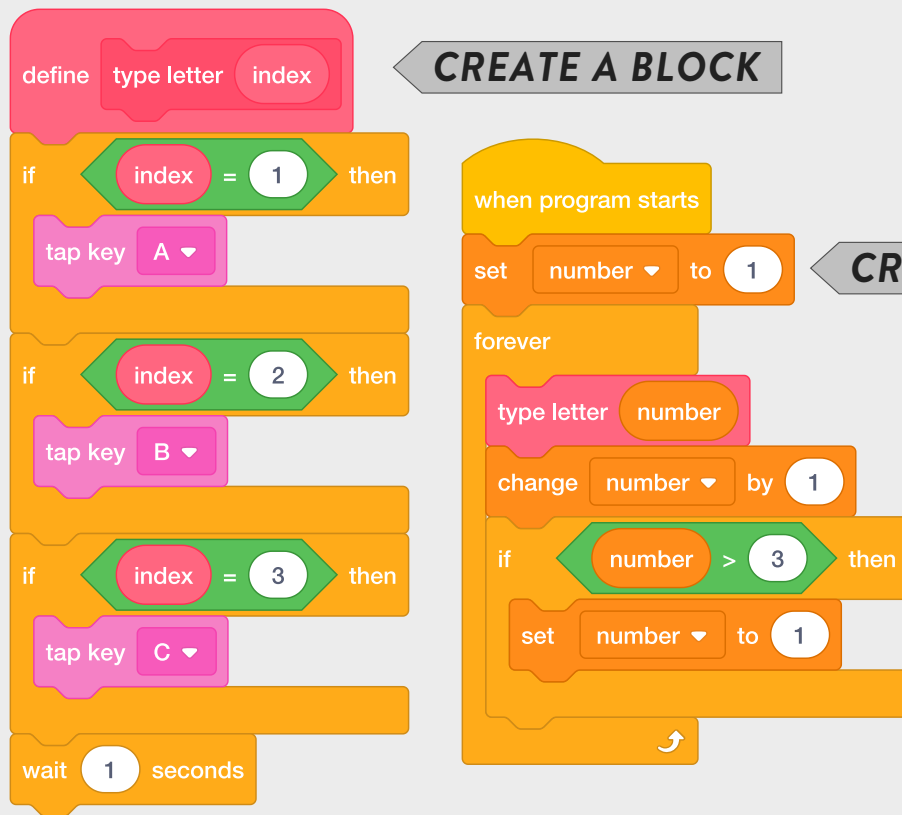
YOU WILL NEED





TYPE A SEQUENCE OF LETTERS

YOU WILL NEED





TOUCH TO ALTERNATE KEYS

when program starts

set toggle to 0

CREATE A VARIABLE

forever

if horn is touched then

if toggle = 0 then

set toggle to 1

tap key A

else

set toggle to 0

tap key B

wait 0.2 seconds



YOU WILL NEED

