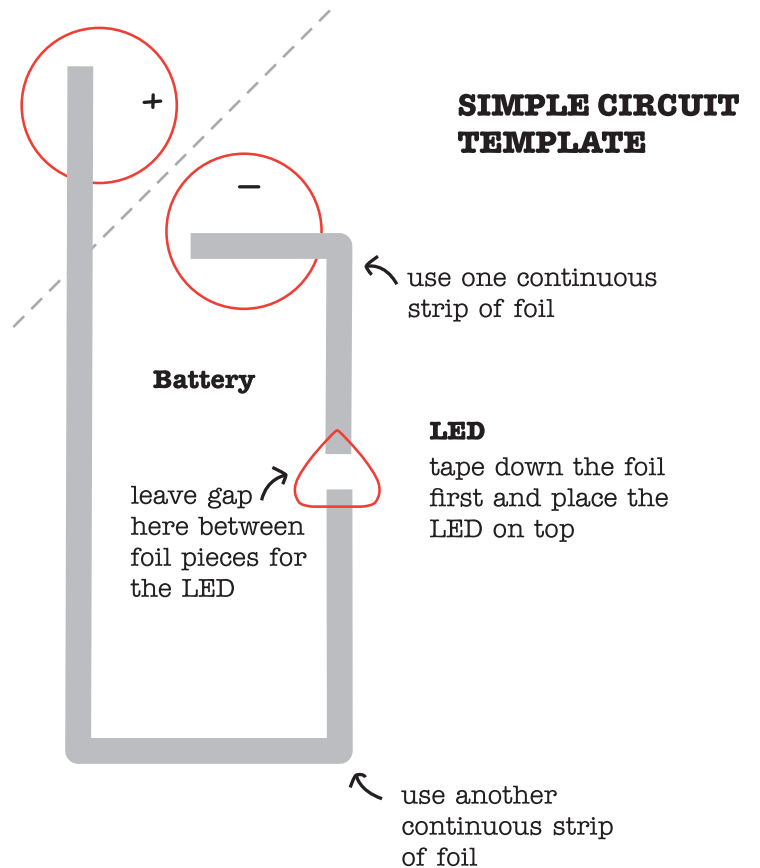
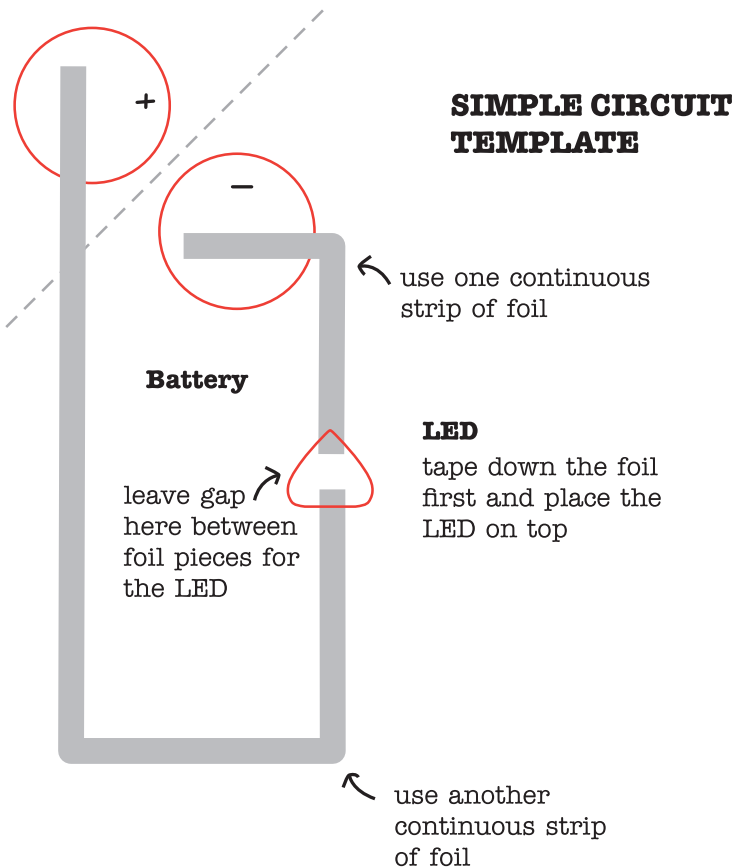


20



20

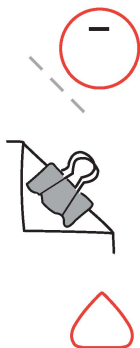
20

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines.

Note: Apply the foil as a continuous piece, rather than separate pieces, even when turning corners. The adhesive on the bottom side of the foil makes a weak connection.

2. Fold the page corner along dotted line and place the battery "+" side-up over the "-" circle.
3. Fold the corner flap over, and clip the battery in place with a binder clip.
4. Stick the LED sticker onto the foil, over the footprint. The light will turn on!



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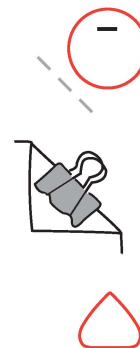
SIMPLE CIRCUIT 19

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines.

Note: Apply the foil as a continuous piece, rather than separate pieces, even when turning corners. The adhesive on the bottom side of the foil makes a weak connection.

2. Fold the page corner along dotted line and place the battery "+" side-up over the "-" circle.
3. Fold the corner flap over, and clip the battery in place with a binder clip.
4. Stick the LED sticker onto the foil, over the footprint. The light will turn on!



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SIMPLE CIRCUIT 19

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines.

Note: Apply the foil as a continuous piece, rather than separate pieces, even when turning corners. The adhesive on the bottom side of the foil makes a weak connection.

2. Fold the page corner along dotted line and place the battery "+" side-up over the "-" circle.
3. Fold the corner flap over, and clip the battery in place with a binder clip.
4. Stick the LED sticker onto the foil, over the footprint. The light will turn on!

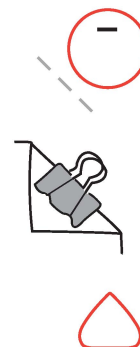


Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines.

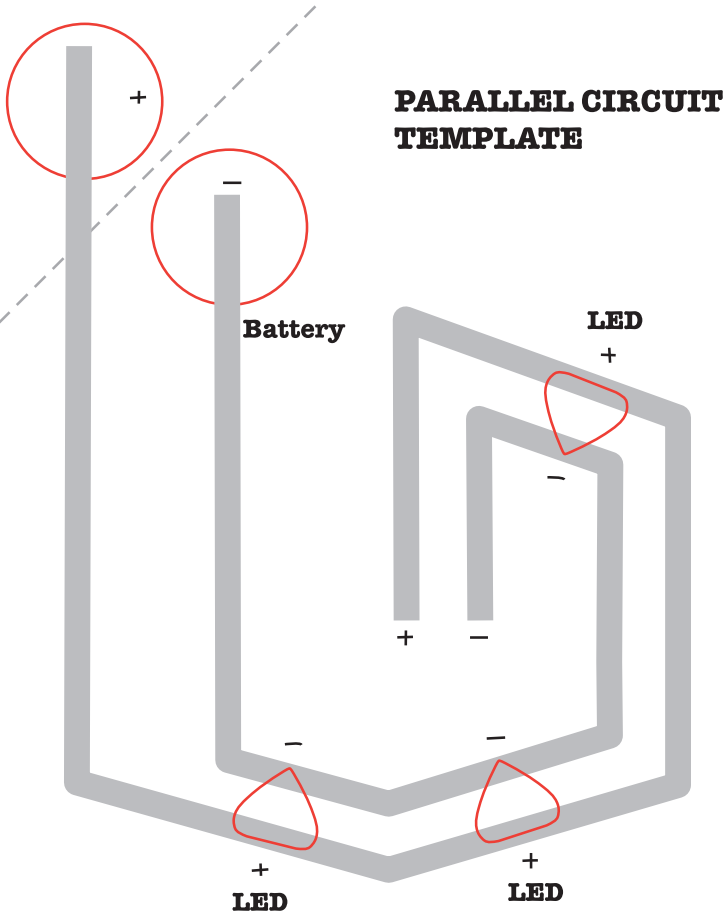
Note: Apply the foil as a continuous piece, rather than separate pieces, even when turning corners. The adhesive on the bottom side of the foil makes a weak connection.

2. Fold the page corner along dotted line and place the battery "+" side-up over the "-" circle.
3. Fold the corner flap over, and clip the battery in place with a binder clip.
4. Stick the LED sticker onto the foil, over the footprint. The light will turn on!

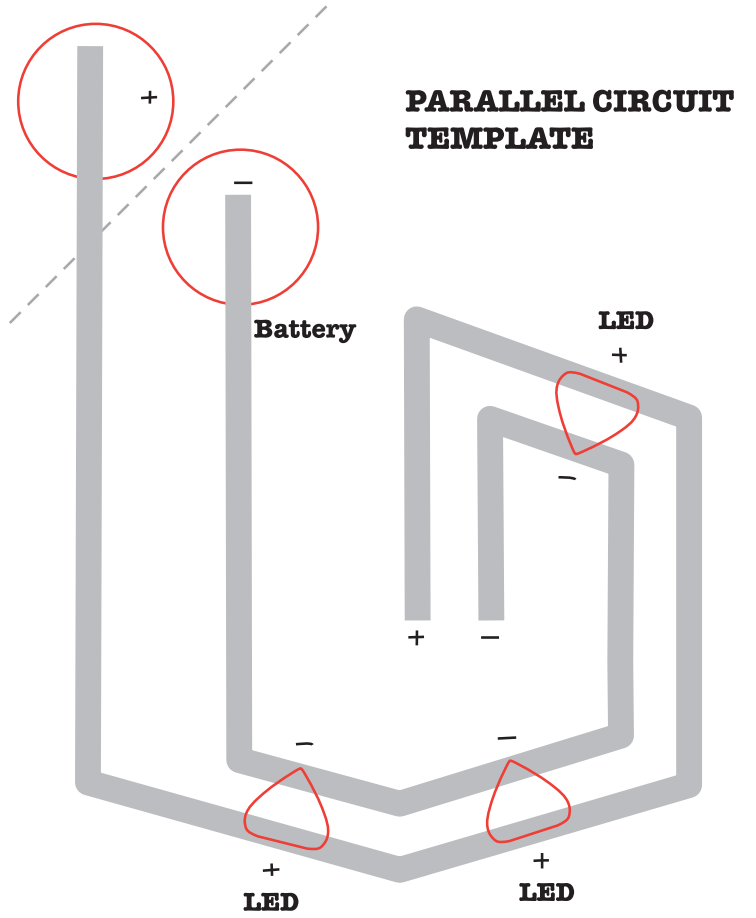


SIMPLE CIRCUIT 19

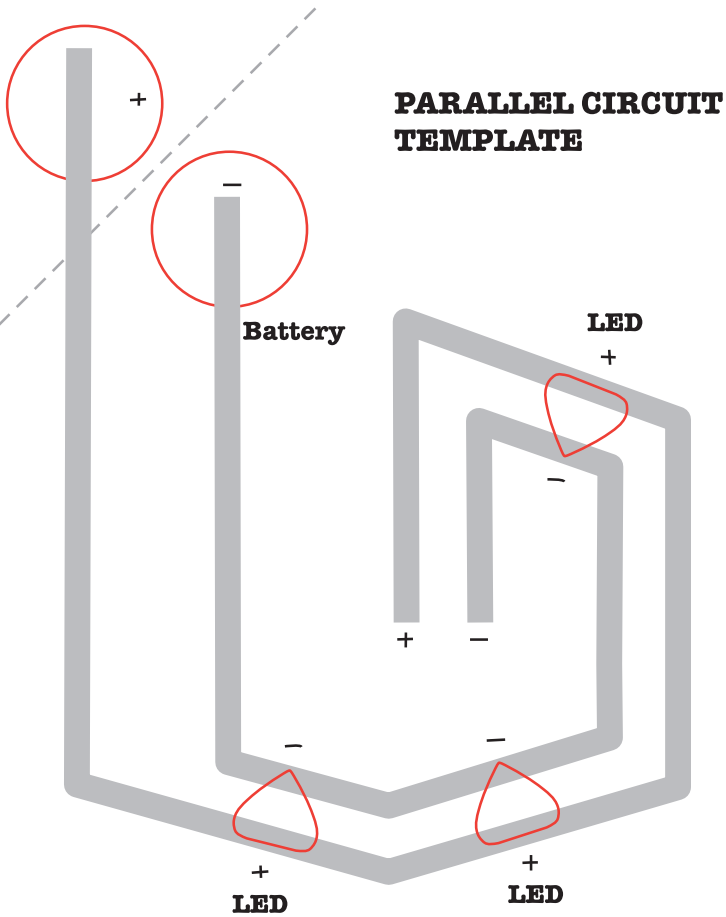
SIMPLE CIRCUIT 19



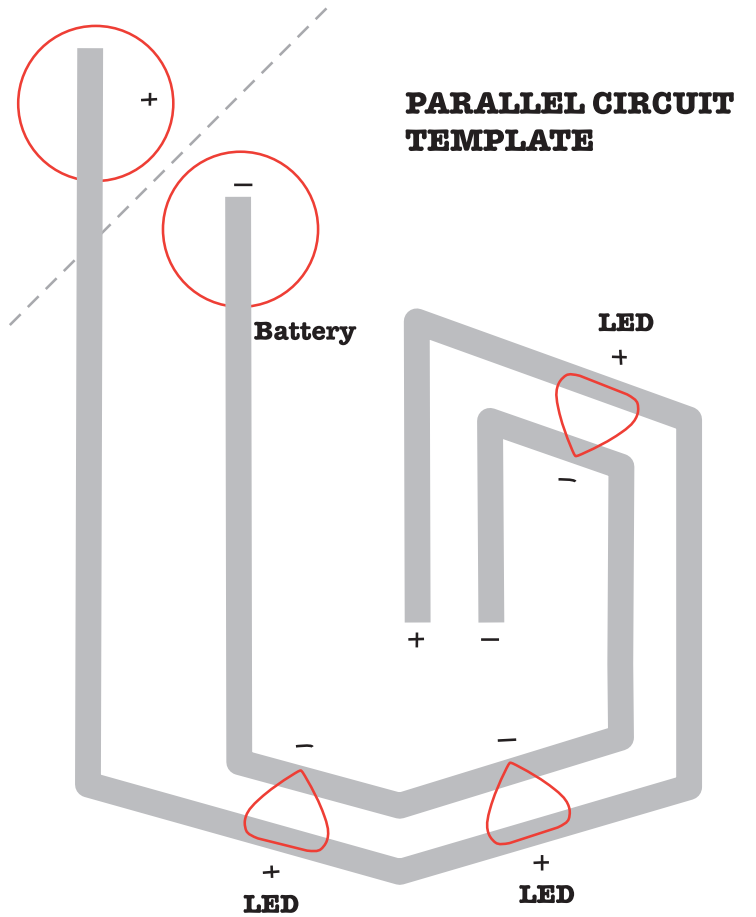
34



34



34

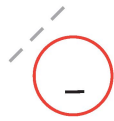


34

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines to create a “track” for your LED stickers. You will be able to place stickers anywhere along this track.

2. Fold the page corner along dotted line and place the battery “+” side-up over the “-” circle.



3. Fold the corner flap over, and clip the battery in place with a binder clip.



4. Stick LED stickers onto the foil track, over the footprints. Choose any colors you like. All the lights will turn on!



5. Now flip to the next page. You’ve created stars! How would you add more stars to the constellation? Try adding another LED to your parallel circuit.

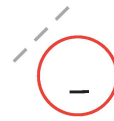
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PARALLEL CIRCUIT 33

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines to create a “track” for your LED stickers. You will be able to place stickers anywhere along this track.

2. Fold the page corner along dotted line and place the battery “+” side-up over the “-” circle.



3. Fold the corner flap over, and clip the battery in place with a binder clip.



4. Stick LED stickers onto the foil track, over the footprints. Choose any colors you like. All the lights will turn on!



5. Now flip to the next page. You’ve created stars! How would you add more stars to the constellation? Try adding another LED to your parallel circuit.

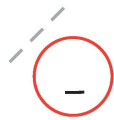
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PARALLEL CIRCUIT 33

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines to create a “track” for your LED stickers. You will be able to place stickers anywhere along this track.

2. Fold the page corner along dotted line and place the battery “+” side-up over the “-” circle.



3. Fold the corner flap over, and clip the battery in place with a binder clip.



4. Stick LED stickers onto the foil track, over the footprints. Choose any colors you like. All the lights will turn on!



5. Now flip to the next page. You’ve created stars! How would you add more stars to the constellation? Try adding another LED to your parallel circuit.

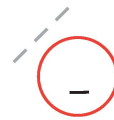
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PARALLEL CIRCUIT 33

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines to create a “track” for your LED stickers. You will be able to place stickers anywhere along this track.

2. Fold the page corner along dotted line and place the battery “+” side-up over the “-” circle.



3. Fold the corner flap over, and clip the battery in place with a binder clip.



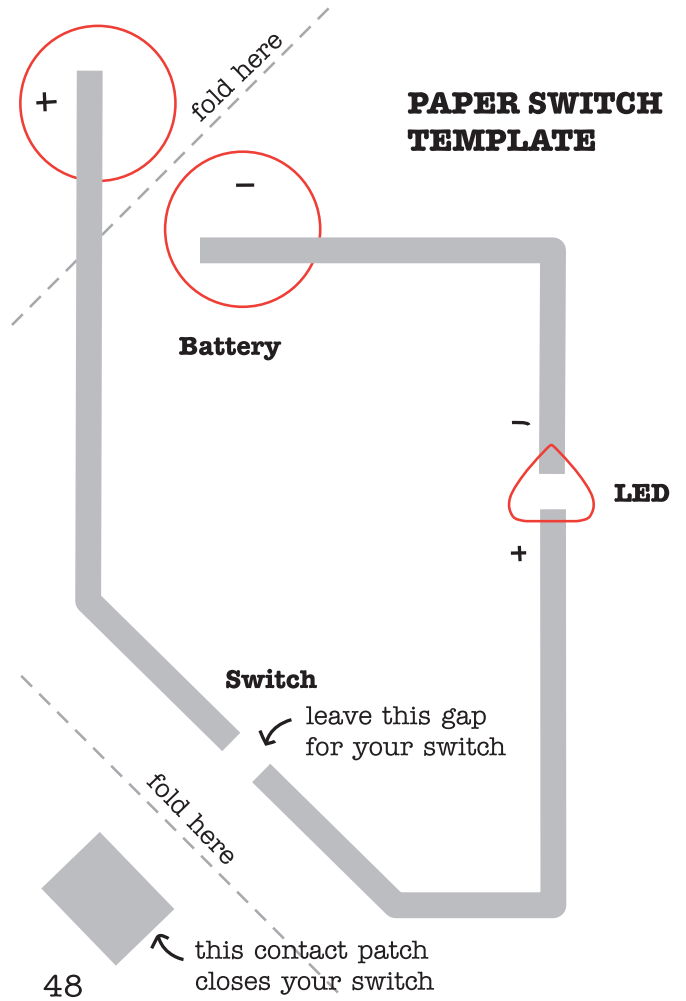
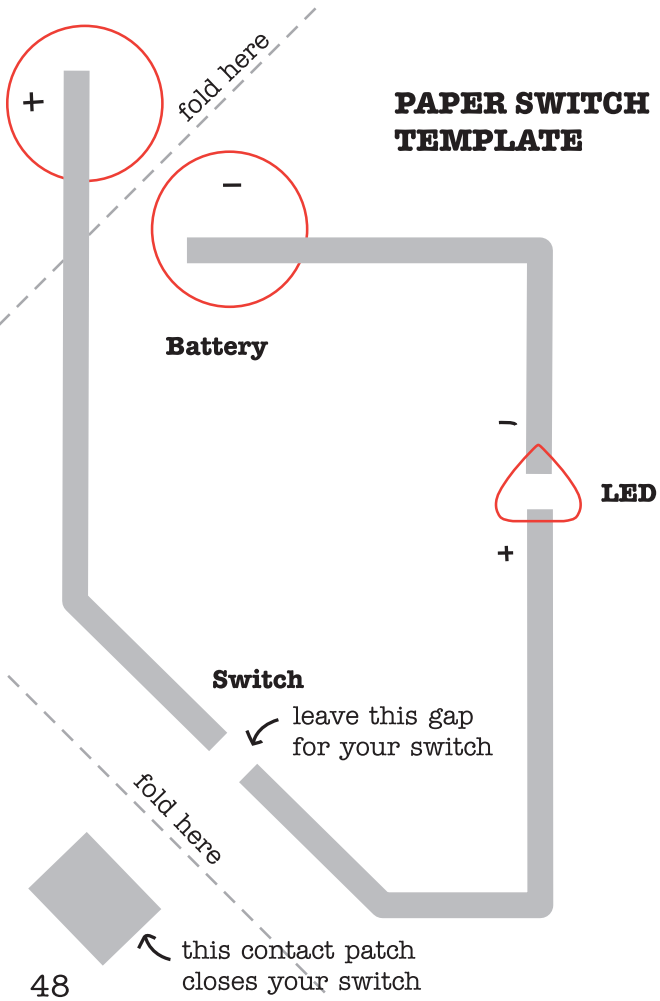
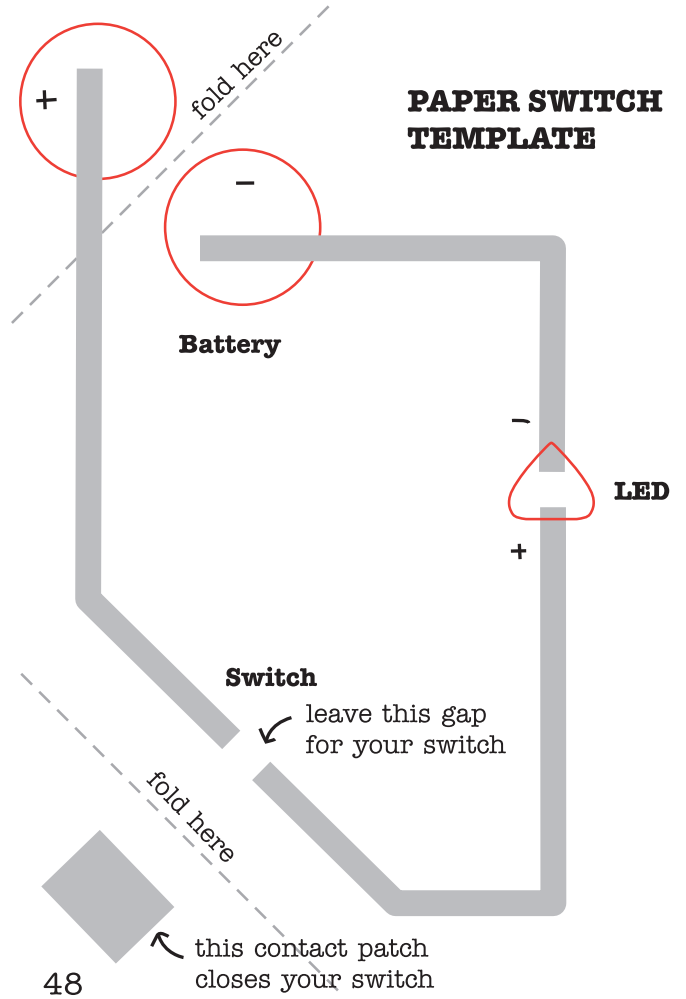
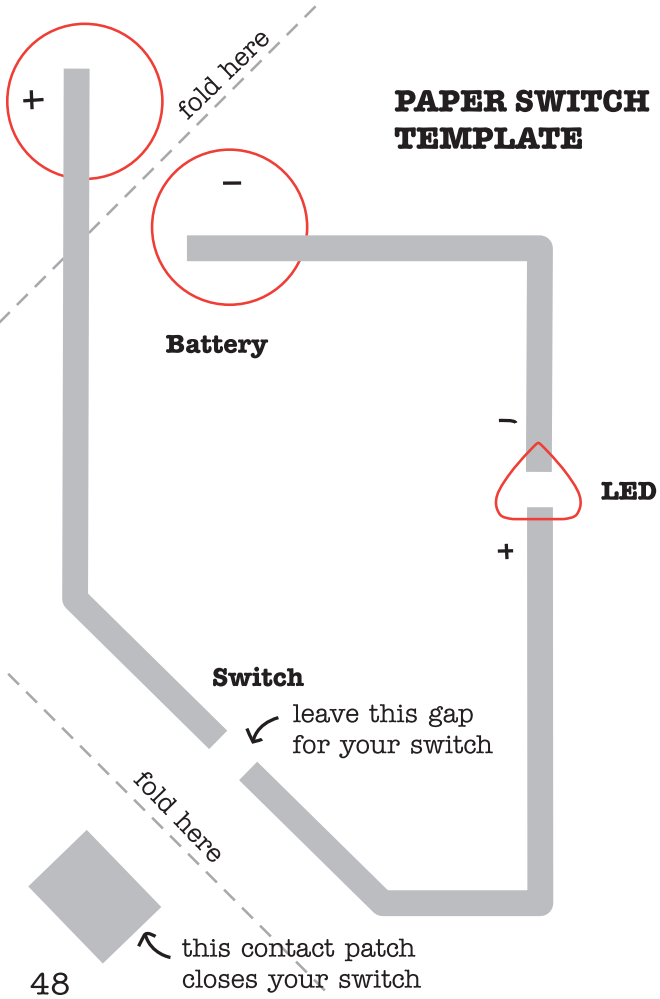
4. Stick LED stickers onto the foil track, over the footprints. Choose any colors you like. All the lights will turn on!



5. Now flip to the next page. You’ve created stars! How would you add more stars to the constellation? Try adding another LED to your parallel circuit.

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PARALLEL CIRCUIT 33



Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines.
2. Cover the lonely gray patch with conductive foil. This forms the contact of the switch.
3. Fold the bottom page corner along the dotted line so that the patch closes the gap. Congrats! You just made a switch.
4. Crease the top page corner along the dotted line and clip your battery in place with a binder clip (see previous activities for details).
5. Stick an LED sticker over the footprint. When you press down on the switch, your LED will glow!
6. Now turn the page. What happens when you press the “do not press” button? Draw it on the page!

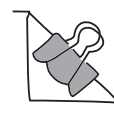


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DIY SWITCH 47

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines.
2. Cover the lonely gray patch with conductive foil. This forms the contact of the switch.
3. Fold the bottom page corner along the dotted line so that the patch closes the gap. Congrats! You just made a switch.
4. Crease the top page corner along the dotted line and clip your battery in place with a binder clip (see previous activities for details).
5. Stick an LED sticker over the footprint. When you press down on the switch, your LED will glow!
6. Now turn the page. What happens when you press the “do not press” button? Draw it on the page!



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DIY SWITCH 47

Directions:

1. Turn to the template on the next page and stick foil tape over the gray lines.
2. Cover the lonely gray patch with conductive foil. This forms the contact of the switch.
3. Fold the bottom page corner along the dotted line so that the patch closes the gap. Congrats! You just made a switch.
4. Crease the top page corner along the dotted line and clip your battery in place with a binder clip (see previous activities for details).
5. Stick an LED sticker over the footprint. When you press down on the switch, your LED will glow!
6. Now turn the page. What happens when you press the “do not press” button? Draw it on the page!

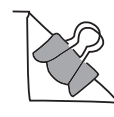


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DIY SWITCH 47

Directions:

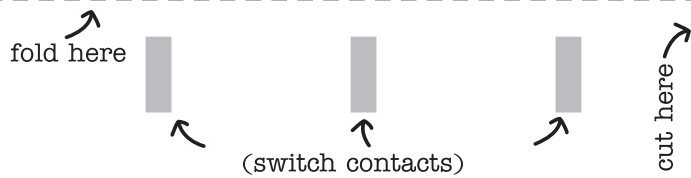
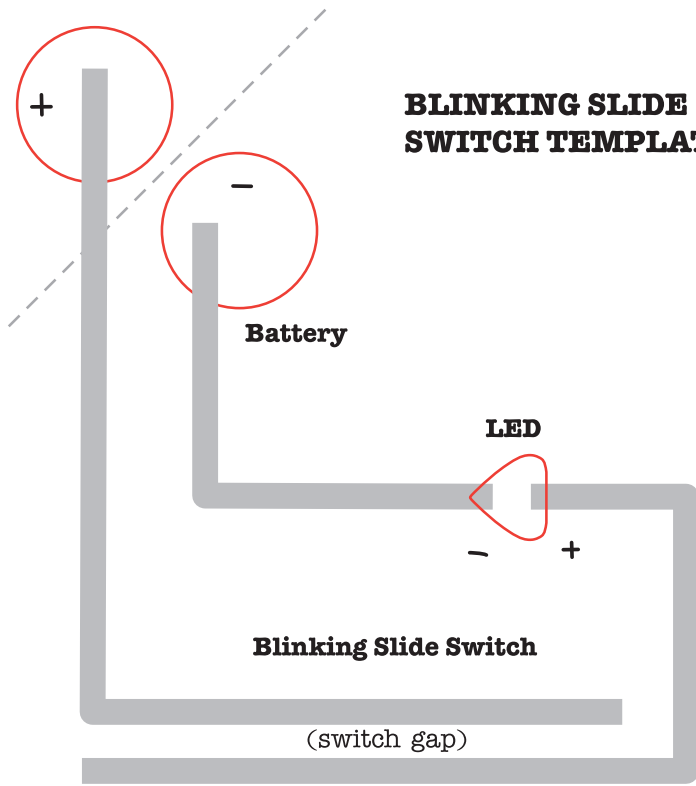
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2. Cover the lonely gray patch with conductive foil. This forms the contact of the switch.
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5. Stick an LED sticker over the footprint. When you press down on the switch, your LED will glow!
6. Now turn the page. What happens when you press the “do not press” button? Draw it on the page!



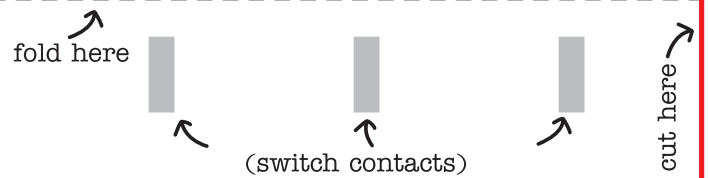
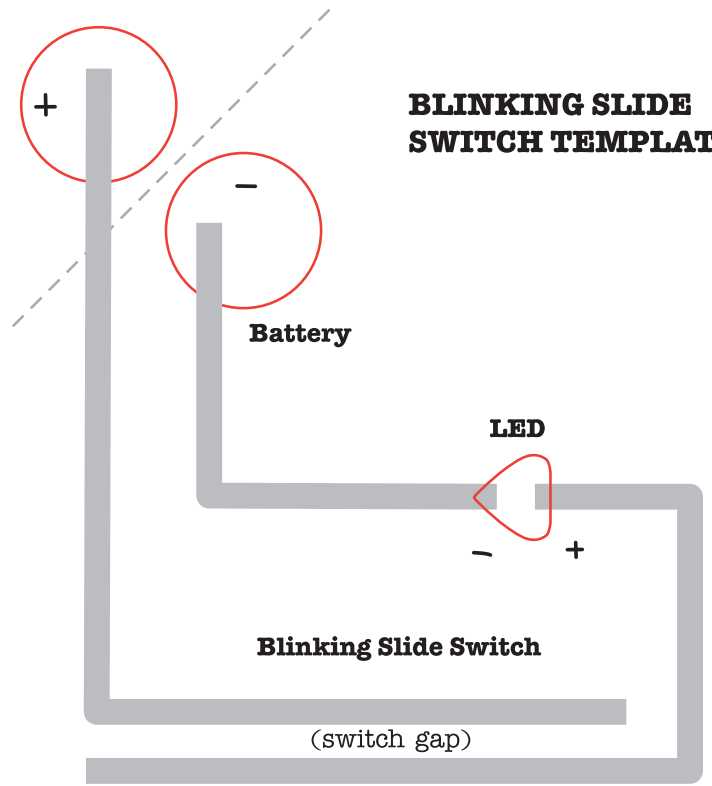
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DIY SWITCH 47

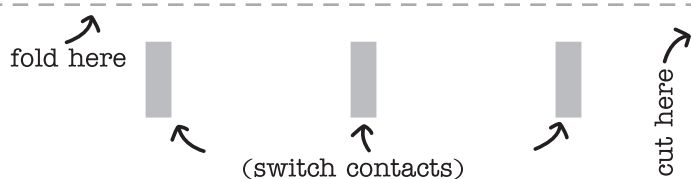
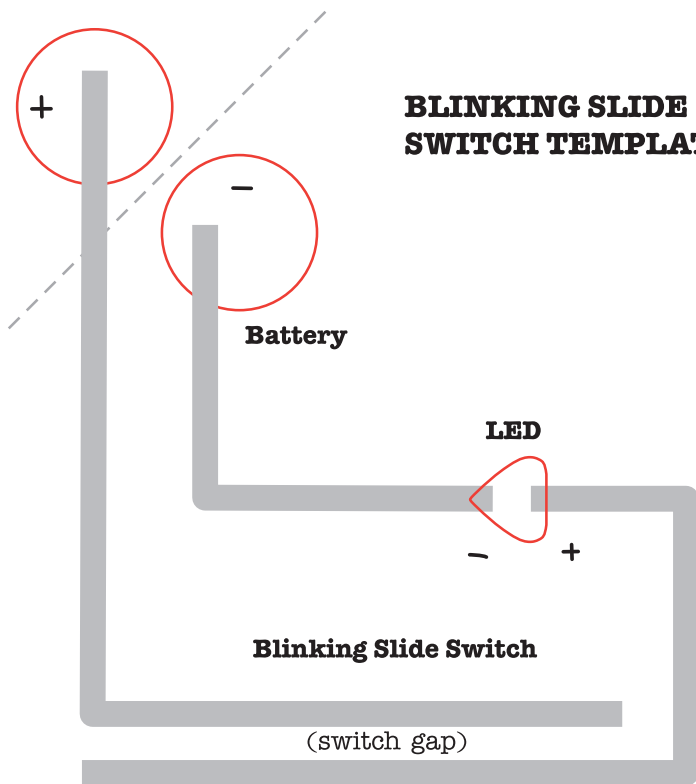
**BLINKING SLIDE
SWITCH TEMPLATE**



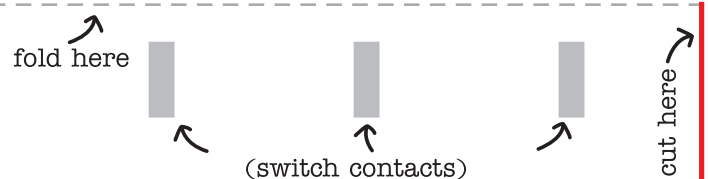
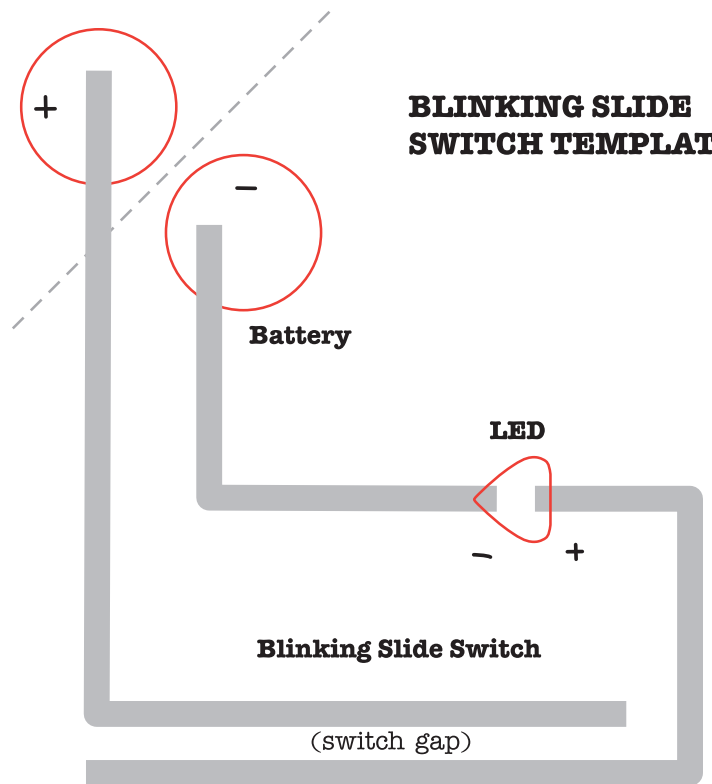
**BLINKING SLIDE
SWITCH TEMPLATE**








**BLINKING SLIDE
SWITCH TEMPLATE**



**BLINKING SLIDE
SWITCH TEMPLATE**



Directions:






- 1. Turn to the template page and stick foil tape over the gray lines. 
- 2. Stick the LED sticker onto the foil, on the footprint 
- 3. Create your battery holder and clip your battery in place (see previous activities for details); 
- 4. Cut along the bold red line 
- 5. Fold up along the horizontal dotted line to make your blinking switch. Press and slide your finger across this switch, and the light will blink on and off! 
- 6. Change the blinking pattern by moving or adding switch contact pieces!



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BLINKING SLIDE SWITCH 61

Directions:

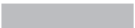




- 1. Turn to the template page and stick foil tape over the gray lines. 
- 2. Stick the LED sticker onto the foil, on the footprint 
- 3. Create your battery holder and clip your battery in place (see previous activities for details); 
- 4. Cut along the bold red line 
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BLINKING SLIDE SWITCH 61

Directions:

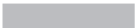




- 1. Turn to the template page and stick foil tape over the gray lines. 
- 2. Stick the LED sticker onto the foil, on the footprint 
- 3. Create your battery holder and clip your battery in place (see previous activities for details); 
- 4. Cut along the bold red line 
- 5. Fold up along the horizontal dotted line to make your blinking switch. Press and slide your finger across this switch, and the light will blink on and off! 
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BLINKING SLIDE SWITCH 61

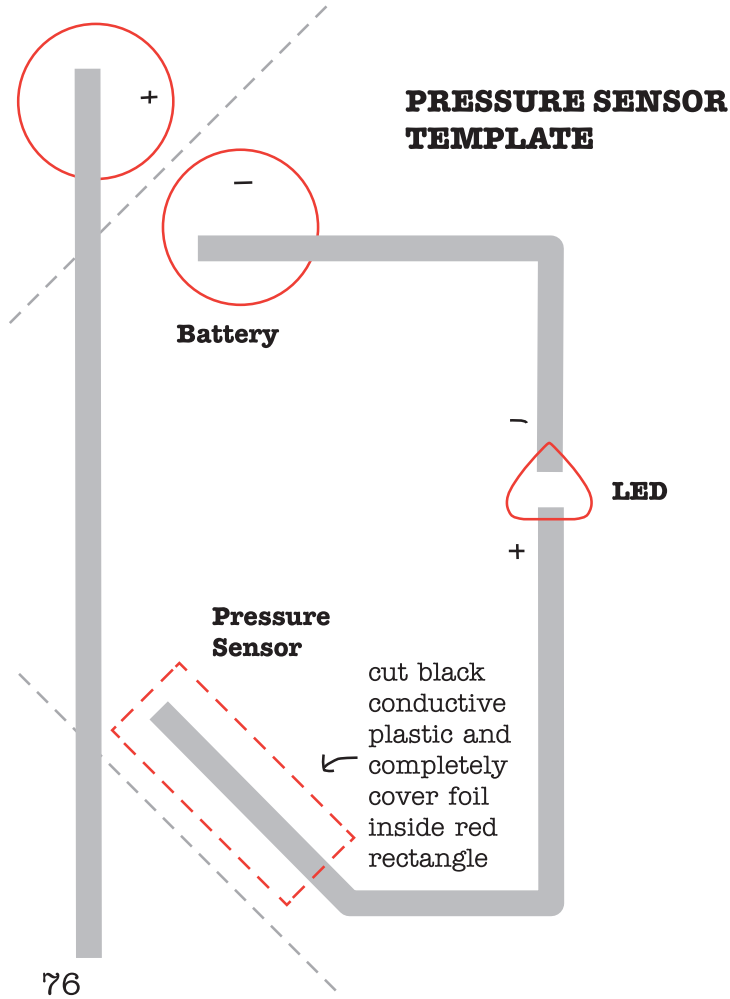
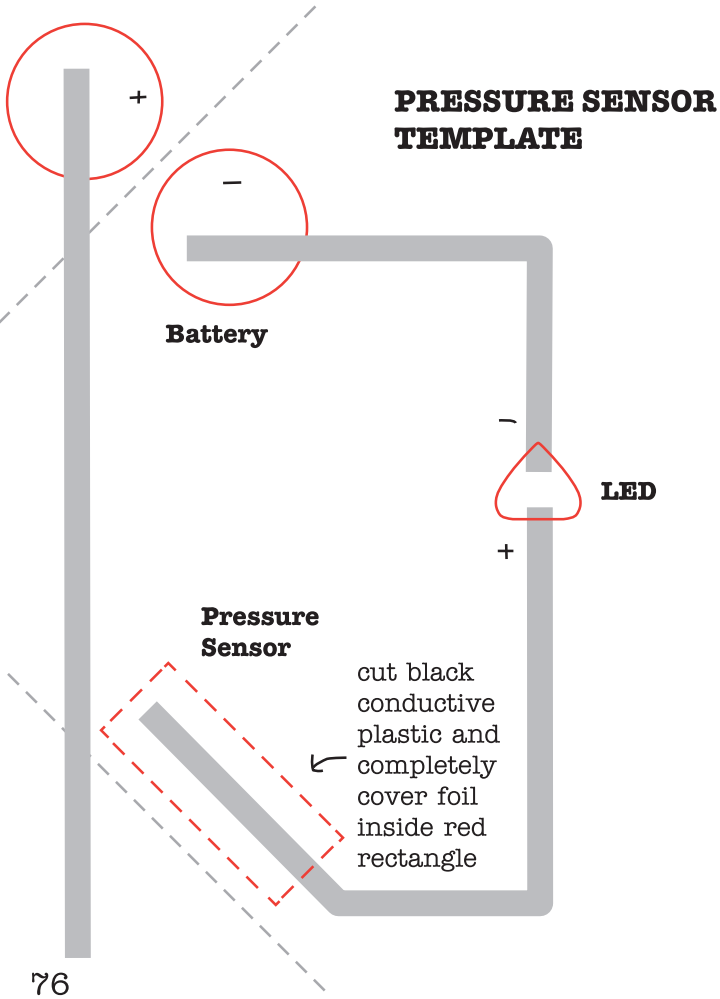
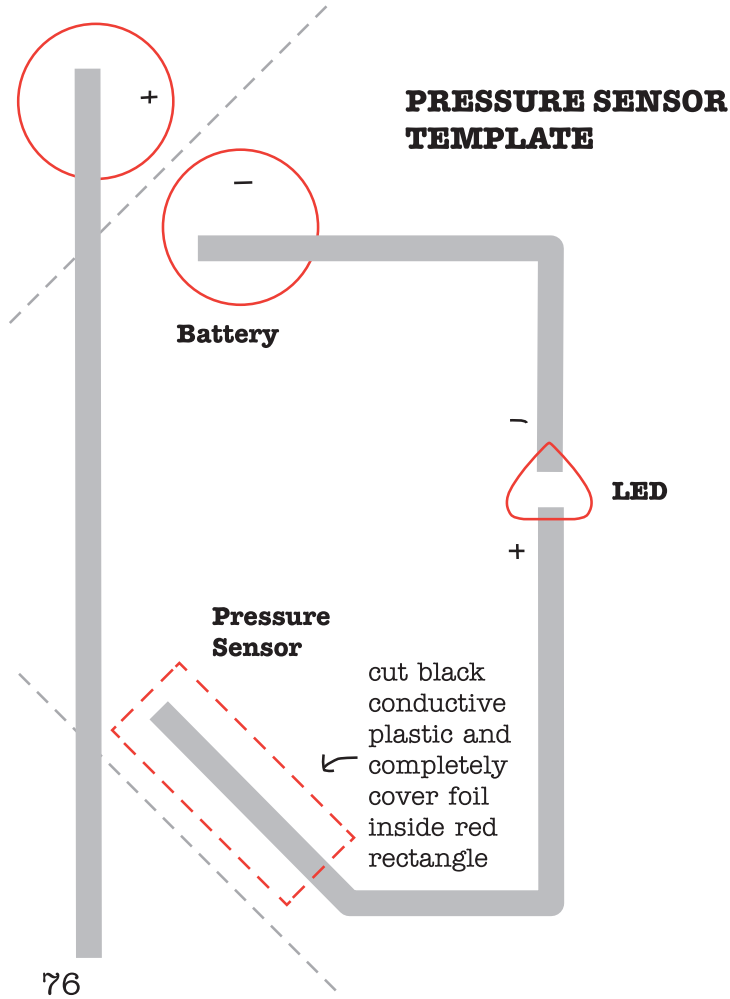
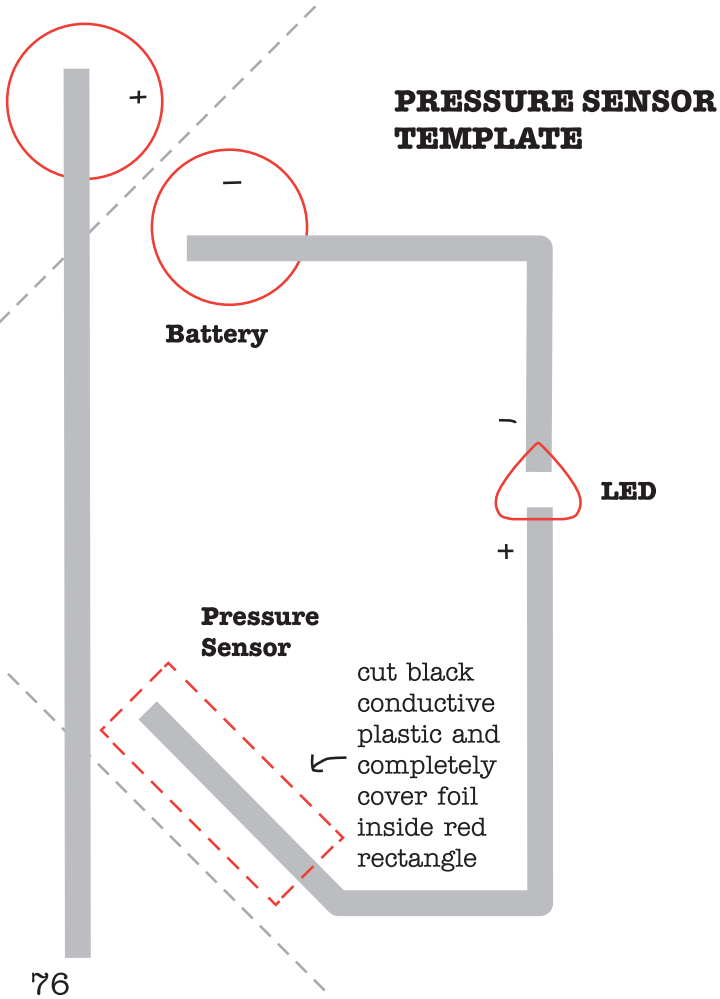
Directions:

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- 2. Stick the LED sticker onto the foil, on the footprint 
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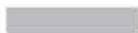
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BLINKING SLIDE SWITCH 61



Directions:

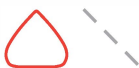
1. Turn to the next page and stick foil tape over the gray lines.



2. Fold the top page corner along dotted line and clip your battery in place with a binder clip.



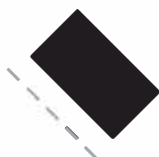
3. Stick an LED sticker over the footprint and fold along the dotted line at the bottom of the page. Your LED will turn on, since you've just made a switch!



4. Unfold the switch you just made and cut the black conductive plastic in the shape of the red dotted rectangle.



5. Put the plastic over the dotted rectangle and fold the bottom flap again. Now when you press, the light will become brighter the harder you press – you just made a pressure sensor!



6. Turn the page. When you press on the heart, something comes to life! What is it?

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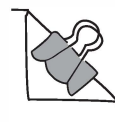
PRESSURE SENSOR 75

Directions:

1. Turn to the next page and stick foil tape over the gray lines.



2. Fold the top page corner along dotted line and clip your battery in place with a binder clip.



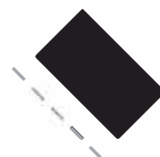
3. Stick an LED sticker over the footprint and fold along the dotted line at the bottom of the page. Your LED will turn on, since you've just made a switch!



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PRESSURE SENSOR 75

Directions:

1. Turn to the next page and stick foil tape over the gray lines.



2. Fold the top page corner along dotted line and clip your battery in place with a binder clip.



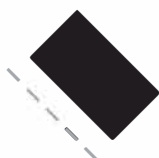
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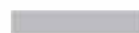
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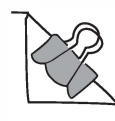
PRESSURE SENSOR 75

Directions:

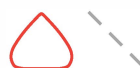
1. Turn to the next page and stick foil tape over the gray lines.



2. Fold the top page corner along dotted line and clip your battery in place with a binder clip.



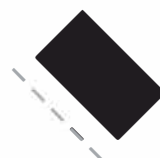
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PRESSURE SENSOR 75