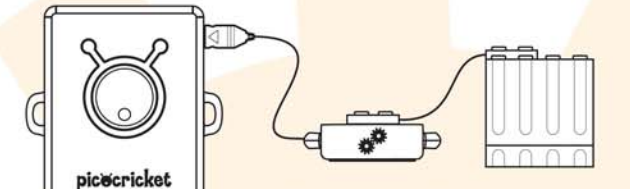



Motion

1




Connect the PicoCricket to the **motor board** and **motor**.

2




Drag out a **motor onfor** block. Click with the magic wand to turn the motor on for 1 second (10 ticks = 1 second).

3



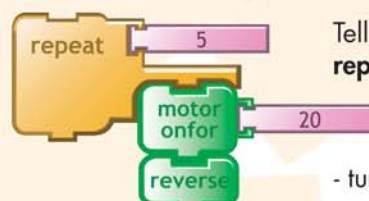
Click the number using the **arrow**, and then **type** 20.

4



Click with the wand to turn the motor on for 2 seconds.

5



Tell the PicoCricket to **repeat** this five times:

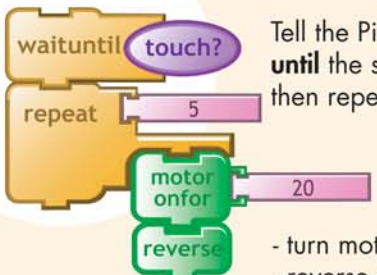
- turn motor on for 2 seconds,
- reverse direction

6



Add a **touch sensor** to the PicoCricket.

7



Tell the PicoCricket to **wait until** the sensor is touched, then repeat 5 times:

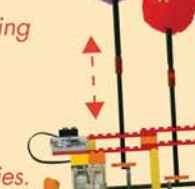
- turn motor on for 2 seconds,
- reverse direction

8



Press the **start button** on the PicoCricket to start the program again.

You can use the motor to make moving sculptures, interactive puppets, and other creative contraptions. The **Movers and Shakers** placemat shows you one of the many possibilities.



Tips & Tricks

Here's a shortcut: Double-click to send your program to the PicoCricket.



The PicoCricket will remember the last thing it did, even if you turn it off. To start a program again, push the button on top of the PicoCricket.

If you push the PicoCricket button while a program is running, it will stop the program.



Put pipe cleaners and other materials through the loops to connect things together.

Save batteries! Remember to turn off your PicoCricket when you're not using it.


When the PicoCricket's batteries are low, the orange light will flash rapidly.



Getting Started

with lights, sound, and motion

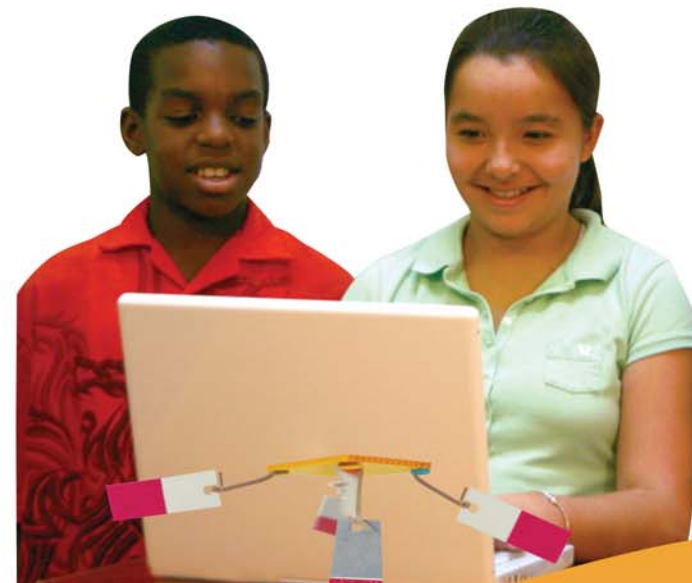
Want to find out what a block does? Select  from the toolbar, then click on the block.

To make two stacks run at the same time, click one stack with , click the other with .

If you get the error message "Beamer can't see the PicoCricket," make sure the PicoCricket is turned on, and the Beamer and PicoCricket are facing each other.

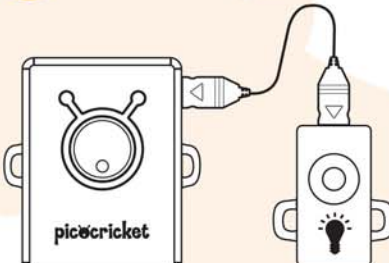
To get rid of blocks, just drag them off the workspace.

Need a longer PicoCricket cable? Use an extender to connect two cables together.



Light

1




Connect a **light** to any of the four ports on the **PicoCricket**. Make sure the Δ symbol and the silver side of the plug are facing up.

2



Drag out a **setlight color** block. Use the slider to choose a color. Click with the **magic wand** to send to the PicoCricket.

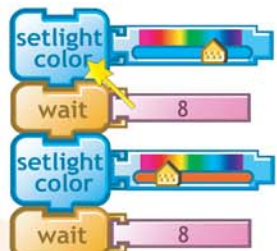
[Shortcut: Instead of using the magic wand, you can double-click with ]

3




Slide to choose a different color. Send to the PicoCricket by clicking with the magic wand.

4



Connect blocks to make a stack, then click with the magic wand.

5




Tell the PicoCricket to keep running the stack **forever**.

6



Add a **light sensor** to the PicoCricket.

7



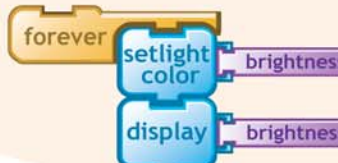
Change the color of the light based on the **brightness** detected by the light sensor. Try covering the light sensor or holding it up to brighter light.

8



Connect the **display** to the PicoCricket.

9



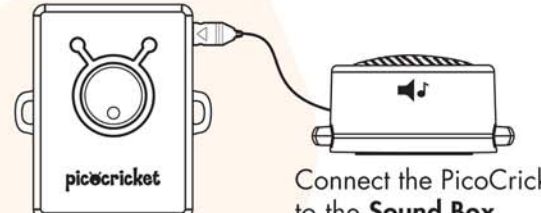
Display the value of the light sensor. Watch how the number and color change.

The **Happy Birthday** placemat shows you how to make candles that light up.



Sound

1




Connect the PicoCricket to the **Sound Box**.

2



Drag out a **playsound** block. Click with the magic wand to send to the PicoCricket.

3



Click the **arrows** (or use the slider) to choose a different sound.

4




Click with the magic wand to hear the new sound.

5



Click the **melodies** button to open the melody editor.

6



Use the **piano keys** (or click directly in the editor) to create a melody.

7




Click the **play** button to hear your melody.

8



Click **OK**. Your melody will turn into a block.

9



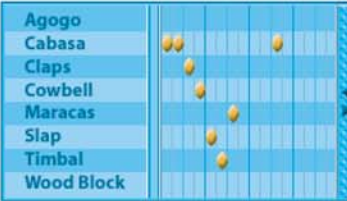
Drag out your new melody block. Click with the magic wand to play the melody.

10



You can play your melody with different instruments.

11



You can make your own rhythm patterns too. Click the **rhythms** button to open the rhythm editor.

For some ideas, see the **Curious Creatures**, **Musical Play-Dough** or **Dream House** placemats.

