Motion

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

2. Drag out a motor or sensor 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. Tell the PicoCricket to repeat this five times:
   - turn motor on for 2 seconds,
   - reverse direction.

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

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

7. Tell the PicoCricket to wait until the sensor is touched, then repeat 5 times:
   - turn motor on for 2 seconds,
   - reverse direction.

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.

Want to find out what a block does? Select it 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.

Getting Started

with lights, sound, and motion

Want to find out what a block does? Select it 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 Picocircuit.
   Make sure the A symbol and the silver side of the plug are facing up.

2. Drag out a weight color block. Use the slider to choose a color. Click on the magic wand to send to the Picocircuit.
   (Shortcut: instead of using the magic wand, you can double-click with B.)

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

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

5. The Happy Birthday placeholder shows you how to make candles that light up.

6. Add a light sensor to the Picocircuit.

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 Picocircuit.

Sound

1. Connect the Picocircuit to the Sound Box.

2. Drag out a play button block. Click on the magic wand to send to the Picocircuit.

3. Click the color button to hear your melody.

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

8. Click the arrows to use the number to choose a different sound.

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

10. You can play your melody with different instruments.

Rhythms

For some ideas, see the Curious Creatures, Musical Play Dough, or Dream House placeholders.