Errata for *The LEGO Boost Activity Book* (updated to 5th printing)

Page xi: The heading "improving line-following with Switch blocks" should now read "improving line-following with two Switch blocks"

Page xiv: The heading "the Brick-Sorting Bird program" should now read "the brick-sorting program"

Page xvii: The line:

Chapter 4: moving your robot precisely shows how to move and steer your robot.

should now read:

Chapter 4: moving your robot precisely shows how to make your robot move and steer with precision.

Page 17: In Figure 2-3, "Make a mistake? Click Undo" should now read "Made a mistake? Click Undo"

Page 30: The sentence:

In Chapter 4, you'll learn how to tell a robot to drive for a precise distance, turn by a precise number of degrees, and repeat actions.

should now read:

In Chapter 4, you'll learn how to tell a robot to drive for a precise distance and turn by a precise number of degrees.

Page 39: In the Brain BOOSTer box, all instances of $360/\pi$ should now read $\pi/360$.

Page 51:: The first sentence under "trigger contents" that reads:

When two blocks or sequences try to control the motors in different ways, it creates a trigger conflict.

should now read:

When two blocks or sequences try to control the motors in different ways, it creates a conflict.

Page 62: In Figure 7-2, the steering input values 100 and -100 should be swapped (-100 should be on the row labeled "right," and 100 should be on the row labeled "left").

Page 72: The heading "improving line-following with Switch blocks" should now read "improving line-following with two Switch blocks"

Page 76 (Ebooks only): In Figure 8-12, B and C appear double-printed.

Page 84: In the Note, the line:

This means that both sequences can never run at the same time.

should now read:

This means that both sequences can never run at the same time, thus preventing the conflict described on page 51.

Page 104: The line that reads:

In this section, you'll learn how to control the three motors using the blocks shown in Figure 11-1.

should now read:

In this section, you'll learn how to control the three motors independently using the blocks shown in Figure 11-1.

Page 131: In Figure 12-10, the missing number ball (8) should now appear below the subtraction operator block.

Page 132: In Figure 12-11, the spacing between the number ball (6) and the bottom-right pale blue box should now be increased to show that (6) refers to the top-right hourglass.

and the "Stop composite block" and "Shoot composite block" sections have now been added, beginning at the bottom of page 132, as shown:

the Stop composite block

The *Stop* c-block, shown in **FIGURE 12-13**, simply calls the **Drivebase Stop** block and then calls the blocks that hide all the remote-control widgets.

FIGURE 12-13 The Stop composite block sequence and final look.



the Shoot composite block

Next we'll create a composite block to control the shooting mechanism. The Shoot c-block runs the external motor to trigger the shooter, as you can see in FIGURE 12-14.



FIGURE 12-14 The Shoot composite block aims and shoots the dart while playing a sound.

To play a shooting sound effect in sync with the action, the main sequence runs a **Flag Trigger** block that starts the parallel sequence attached to the **Start on Flag** block. This sequence runs a **Play Sound** block playing the Sound 7 from the *Shoots and Hits* category (). We need the **Wait for Time** block in the main sequence to wait 0.1 seconds after starting the sequence that plays the sound; otherwise it won't be perfectly in sync with the shooting.

Page 175: In step 36, the black arrow in the upper-left corner has now been updated to match the other arrows' style.

Page 192: The heading "the Brick-Sorting Bird program" should now read "the brick-sorting program"

Page 194: The line beginning "In Chapter 16, we'll build and CYBOT, a . . . " should now read "In Chapter 16, we'll build CYBOT, a . . . "

Page 203: In section 14, "1x" under the long 1x8 piece should now read "2x"

Page 205: In section 20, "2x" under the 2x3 blue piece should now read "1x"

Pages 241–243: The solutions for experiments 8-3, 8-5, and 10-1 have been corrected as shown:

experiment 8-3



experiment 8-5



experiment 10-1

