# Direct Instruction Summary
## Intro to Color Codes 09: Skills Check 2 (Grades 6-12)

### 1. Introduction
Remind students that they have learned about Line Switch, Timer, and Counter Color Codes. Tell them they will complete their Introduction to Color Codes with a race to the finish!

### 2. Timer On
Find Start 1 on page 1 of the Activity Sheets. The first Color Code is the Timer On.

### 3. Speed
The next space for a Color Code is for a Speed code. Students can choose the speed they would like, but remind them they only have 30 seconds to finish the maze.

### 4. Line Switch
The third space on the first line segment is a Line Switch Code.  Add Line Switch Right.

### 5. Complete Lines 2 and 3
Lines 2 and 3 have spaces for three Color Codes. The line ends need a U-Turn, the second space is for a Speed code and the last space is for a Line Switch code.

### 6. Complete Remaining Color Codes
Students complete the remaining lines on their own. Most lines have space for a U-Turn at the end of the line, and a space for a Line Switch code.

### 7. Race Your Ozobot!
Place Ozobot on the Start and see how far it gets in 30 seconds. Run the bot multiple times to account for the random choices it makes when it switches lines.

### 8. Lesson Wrap-Up
Have students explain to a partner, in writing, or in a group discussion:
1. the Color Codes they used and why
2. a problem they encountered and how they attempted to solve it
3. how their bot behaved based on the Color Codes used and if the bot demonstrated the correct outcome

### 9. Point Counter Challenge Extension
Page 2 of the Activity Sheets is a Point Counter challenge. The first Color Code space is for the Point Counter code. Have students plan how they can get from start to finish with the Point +1 and Point -1 codes. Add the codes to the activity sheet. Run Ozobot from Start 2. Allow time for debugging and iteration.