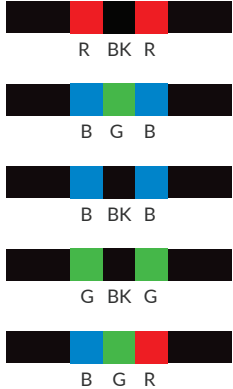


What's the Speed?

Data Chart

Ask a Question	What's the speed of Ozobot when programmed with each Color Code?
Make a Hypothesis (Predict the speed of the Color Codes by numbering them 1-5 from slowest to fastest)	Speed Code  Order of Speed 1. <u>Slowest</u> 5. <u>Fastest</u> 2. <u>Slow</u> 3. <u>Medium</u> 4. <u>Fast</u>
Test the Hypothesis	1 Add each Color Code to a path on the map. 2 Put your bot on the slowest path; R, BK, R first. 3 Time how long it takes your bot to travel the line. Begin the timer after the Color Code sequence lights up and stop the timer when the bot turns red. 4 Test each Color Code three times. Before each test, run the bot on the R,BK,R Color Code to slow the bot down for more accurate results when starting the timer.
Record the Result	Use the What's the Speed Data Sheet.
Draw a Conclusion Was your hypothesis close to the results? What is the order of Color Codes from slowest to fastest?	My hypothesis was not close to the results. The order of the Color Codes from slowest to fastest was: 1. R, BK, R 2. G, BK, G 3. B, BK, B 4. B, G, B 5. B, G, R

What's the Speed?

2

Data Chart

Color Code	Distance (inches)	Test Times (seconds)	Time Chosen (round to nearest whole number)	Speed (divide the distance by the average time)
R BK R	6	1 2 3 6.90 6.97 6.94	7	0.86 in./sec.
B G B	6	1 2 3 1.96 1.96 2.04	2	3 in./sec.
B BK B	6	1 2 3 2.68 2.88 2.65	3	2 in./sec.
G BK G	6	1 2 3 4.74 4.88 4.83	5	1.2 in./sec.
B G R	6	1 2 3 1.41 1.46 1.46	1	6 in./sec.

Use the space below to find the speed of each Color Code.

What's the Speed?

Testing Map

3

SAMPLE SOLUTION

