First Program: Moving Straight

Click on “Behaviors”; Under “Movement,” click on “Moving Straight”

Follow the NXT Trainer and program your robot to “move straight.” (Note: the REMbot is the same as the Tribot) Go through 3-13 the steps.

1. What block will you be using to make the robot move?

*Video 4 – Do the programming as the video plays. Remember to pause.*

1. What did the robot do when you ran the program?

*Video 5*

1. What did you add to your program in this step?
2. Why did you second move block go backward instead of forward?
3. Why does the robot go forward first and backward second?

*Video 6*

1. What happens when you change the Power setting of the Move Block?

*Video 7*

1. What method is your robot now using to determine how far it goes?
2. Did your robot go farther with time or rotations?
3. What are some of the possible side effects of having your robot for a certain amount of time instead of a set number of rotations?

*Video 8*

1. What method is your robot now using to move?

*Video 9*

1. What method is your robot now using to move?
2. In which situation did your robot go the farthest: rotation, seconds, or degrees?

*Video 10: Make your robot travel exactly 25cm by adjusting the Duration of the Move Block*

Duration for exactly 25 cm = \_\_\_\_\_\_\_\_\_

1. If you want the robot to go farther, what do you do?
2. If you want the robot to go less far, what do you do?

*Video 11:*

1. What is the duration to make your robot go 50 cm = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the duration to make your robot go 1 meter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. How does the proportional method differ from the guess-and-check method?
4. Explain briefly how the proportional method works?

*Slide 12:*

1. Describe the differences from the mini-videos:

*Slide 13: Label each section and draw arrows to the area…*



Finished? Turn this in with your name on it. Read through “Close Shave Challenge” Begin programming your robot to travel 30 cm, 60 cm, and 90 cm exactly…