



Name: _____



01

MOVE STEERING 1 - ROTATIONS

1. Open Lego Mindstorms
2. Click File → New Project → Program
3. Click File → Save Project As → Computer → your name → file name {Name Move Steering 1}. For example, it would say "Hill Move Steering 1"
4. After saving your project create programs within this project by clicking the + next to Program tab (NOT THE + NEXT TO THE PROJECT!!). Name the programs:

Recreate	25 cm	50 cm	10 cm
50.10.30	100.50		
4. Since the project is already named at the end of every class you will click FILE → SAVE PROJECT NOT FILE → SAVE PROJECT AS

CHALLENGE 1: Recreate



The first green block makes the robot....?

The gold blocks make the robot.....?

What does the second green block do?

What does the third green block do?

CHALLENGE 2: Using rotations only, create a program that will make your robot travel 25 cm

First, determine how far your robot will travel in one rotation. Then write a program that will make the robot travel 25 cm. Write your results here as a proportion to prove your work.





CHALLENGE 3: Create a program that will make your robot travel 50 cm

How many motor rotations did you program? Why?

CHALLENGE 4: Create a program that will make your robot travel 10 cm

How many motor rotations did you program? Why?

CHALLENGE 5: Create a program that will make your robot travel 50.10.30

Create a program that has your robot move forward 50 cm at 100% power, backward 10 cm at 30% power and then forward 30cm at 50% power. (Use a mat if needed). What is the end distance of the robot? (don't cheat. Write down the results, not what you *think* it should be.

CHALLENGE 6: Create a program that will make your robot travel forward 4 rotations at 100% power, then wait 5 seconds, and then go forward 4 rotations at 50%.

Does the robot travel the same distance at 50% power and 100% power? If it does, is this what you would have expected? If it does not, why do you think it does not?



CHALLENGE COMPLETED

