	Turn	Power	Rotations
	0		

	Turn	Power	Rotations
	0		

	Turn	Power	Rotations
	55		1

	Turn	Power	Rotations
	55		1

	Turn	Power	Rotations
	-55		1

	Turn	Power	Rotations
	55		1

	Turn	Power	Rotations
	0		

	Turn	Power	Rotations
	0		

	Turn	Power	Rotations
	0		

	Turn	Power	Rotations
	0		

	Turn	Power	Rotations
	0		

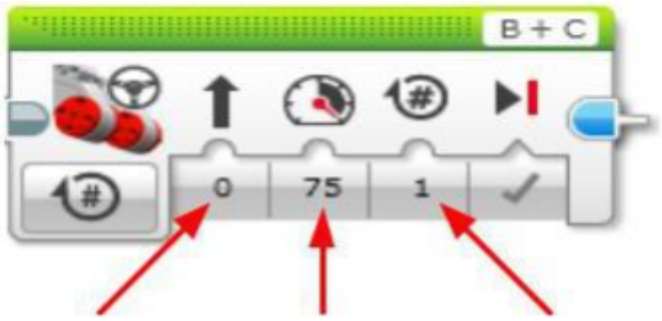
	Turn	Power	Rotations
	0		

Name:_____

The Move Steering Block

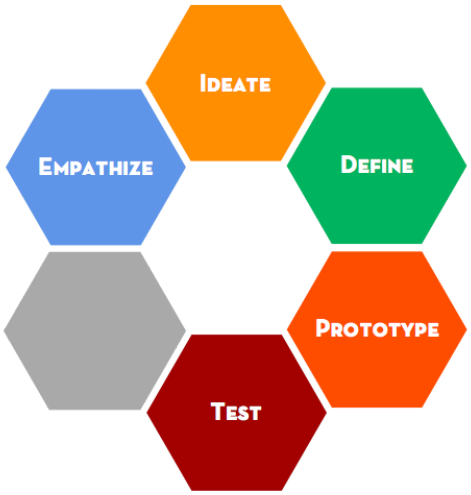
In the EV3 software, moving and turning are programmed using the **Move Steering** block.

There are three parts to the **Move Steering** block. Label them below.



_____ _____ _____

DESIGN THINKING



EMPATHIZE: _____

_____

_____

DEFINE: _____

_____

_____

IDEATE: _____

_____

PROTOTYPE: _____

_____

TEST: _____

_____

devBots Sumo

Building the ultimate sumo robot

Your job is to design a sumo wrestling robot. Before you begin building, you must go through the design thinking process to design and create the best sumo wrestling robot. The three most important aspects you should consider are: defense, offense, and simple attachments. That means your robot should be able to defend itself from attacking robots, effectively knock over, wedge, or push its opponent, and be able to clip its attachments on and off in less than 3 minutes.

EMPATHIZE

Watch the robot battle then answer the following questions.
What happened in your battle? What problems did you encounter?

DEFINE

WHAT PROBLEM ARE YOU SOLVING?

IDEATE

Develop a game plan for building your robot. Sketch a sample of your attachments below. (*What type of attachments does your robot need? Will that help defend your robot from attackers? How can your robot attack other robots?*)

PARTNER IDEATE

With your partner, develop an idea that uses the best parts of each design.

PROTOTYPE

Time to finalize your design! Grab a robot parts box and build a prototype of your design. Then, write a paragraph explaining how your design includes defense, offense, and simple attachments.

Explain your design in the space below:

TEST

Let's put your design to the test! We will battle other groups in a mini sumo competition.

1. How did your attachments hold up during the competition? Did any parts fall off?

_____

_____

2. Were your defense attachments able to protect your robot from its opponent?

_____

_____

3. How did your offense attachments perform in attacking the other robot?

_____

_____

4. Are you able to rebuild your robot in less than 3 minutes?

_____

_____

Robotics Iteration Log

Our goal is... _____

Test #	What worked well?	What needs to be fixed?