# HUMMINGBIRD ROBOTICS DESIGN NOTEBOOK

THIS NOTEBOOK BELONGS TO:

DATE:



# DESIGN PROCESS

# ASK What's the problem? IMPROVE Make it better! UNDERSTAND Define the problem. CREATE Make it! PLAN Brainstorm!



#### ASK

#### STEP 1: WHAT ARE YOU TRYING TO DO?

What do you want your robot to look like?

What do you want your robot to be able to do?

Do you have any other goals for your robot?



#### UNDERSTAND

STEP 2: DEFINE THE PROBLEM

What are your criteria for success? How will you decide if the robot meets your goals?

What constraints	limit your	desi	gn?
Assignment Requirements:			

Materials:

Time:

Other:



### PLAN

#### STEP 3: BRAINSTORM SOLUTIONS

Brainstorm, sketch, and/or list your ideas for making a robot to meet these goals:



#### CREATE

#### STEP 4: CREATE DESIGN-ROBOT PLAN

What will your robot look like? What materials will you need?



## **IMPROVE**

STEP 5: MAKE IT BETTER!

How can you improve your design?

