

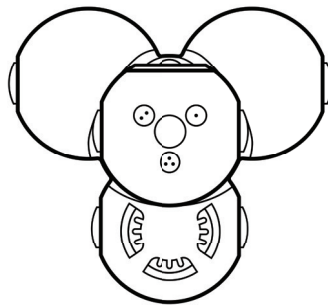
# Dash Planning Worksheet

Name(s): \_\_\_\_\_ Date: \_\_\_\_\_

Coding Level: \_\_\_\_\_ Card #: \_\_\_\_\_

What do you want Dash to do?

Draw out the steps of the challenge or write a few sentences describing your goal.



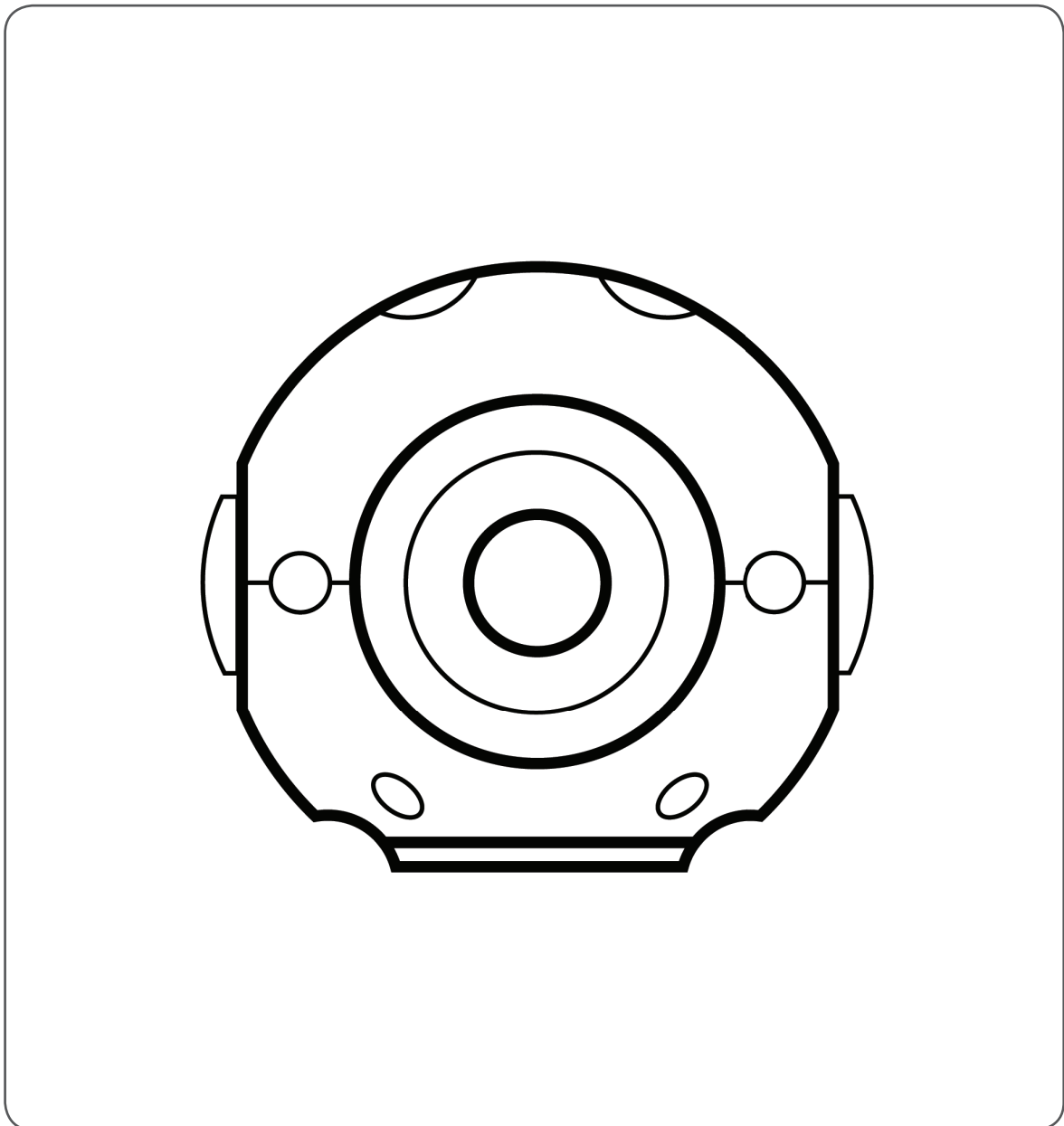
# Dot Planning Worksheet

Name(s): \_\_\_\_\_ Date: \_\_\_\_\_

Coding Level: \_\_\_\_\_ Card #: \_\_\_\_\_

What do you want Dot to do?

Draw out the steps of the challenge or write a few sentences describing your goal.



# General Planning Worksheet

Name(s): \_\_\_\_\_ Date: \_\_\_\_\_

Coding Level: \_\_\_\_\_ Card #: \_\_\_\_\_


## 1. What do you want Dash or Dot to do?

Draw out the steps of the challenge or write a few sentences describing your goal.



## 2. What will you do to achieve your solution?

What will each team member do? What steps will you need to take? What blocks will you use?



# Reflection Worksheet

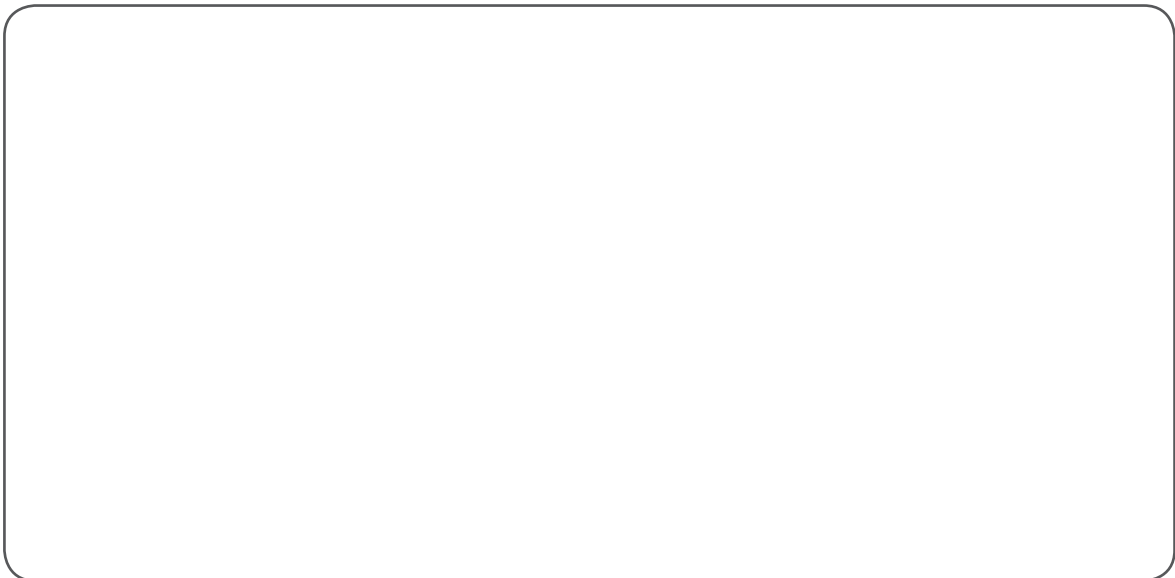
Name(s): \_\_\_\_\_ Date: \_\_\_\_\_

Coding Level: \_\_\_\_\_ Card #: \_\_\_\_\_

1. What did Dash and/or Dot do when you ran your program?



2. Did you make any mistakes? If so, how did you fix them?



# Advanced Reflection Worksheet

Write a reflection entry in your Wonder Journal. Try to answer these questions as part of your reflection:

## Results

- What did Dash and Dot do when you ran your program?
- Did you make any mistakes? If so, how did you fix them?

## Connections

- What did you like the most about this challenge? Why?
- What was the most difficult part of the challenge? What did you learn from it?

## Next Steps

- If you had more time, how would you change or add to your code?
- What are you planning to do next? Will you try another Challenge Card or start a new coding project?

# Problem Solving & Debugging

## Break down the challenge

- What do you need for the challenge? Which robots? Which materials and/or accessories?
- What are Dash and/or Dot supposed to do?
- Have you solved similar challenges to this one?
- Focus on one step at a time.

## Plan your solution

- Draw a picture or make a list of what you want Dash or Dot to do.
- What blocks will you need to complete the challenge?
- Are there any hints on the card that can help?
- Use tape to mark Dash's starting point.
- Use tape to mark each obstacle's location.

## Test Your Code

- Does your code complete the challenge?
- If not, play your code again. Watch as the program goes through each block. Do you notice any mistakes?
- Do you need to change, delete, or add more blocks?
- Are your blocks telling Dash to do something when you actually want Dot to do something?

## Improve your work

- Ask another student or group to check your program.
- Is there an easier way to complete the challenge? Can you use fewer blocks?
- How can you improve your program? Could you add more lights, sounds, or other customizations?

# Evaluation Rubric

	Programming	Reflection & Documentation	Collaboration & Communication	Creativity
1 Novice	Completed part of the activity and needed assistance throughout the process.	Use a journal, worksheets, and/or multimedia tools (such as video and images) to document some of the activity results.	Participated little or not at all in classroom discussions. Demonstrated little to no cooperation with group members during the activity.	Demonstrated limited creativity in developing ways to complete the activity.
2 Developing	Used the targeted coding concept(s) to complete the activity with some assistance.	Incorporated some target vocabulary and some thoughtful reflection on the coding process while documenting activity results using journal entries and multimedia tools.	Occasionally participated in classroom discussions and cooperated somewhat with group members.	Developed a few different ways to complete the activity, but the solution was not particularly creative.
3 Proficient	Used the targeted coding concept(s) to complete the activity without assistance.	Incorporated target vocabulary and reflection on the coding process. Clearly documented activity results using journal entries and multimedia tools.	Actively participated in classroom discussions. Answered questions and cooperated with group members during the activity.	Applied the iterative process to develop creative and unexpected solutions for the activity.
4 Exemplary	Used the targeted coding concept(s) to complete the activity without assistance. Enhanced the solution with more efficient (e.g., fewer blocks) and/or advanced features (e.g., lights, sounds) in the code.	Incorporated advanced target vocabulary and in-depth reflection on the coding process. Thoroughly and clearly documented and presented activity results.	Actively participated in classroom discussions and cooperated with group members. Gave constructive feedback to others and effectively incorporated feedback from others.	Went above and beyond to develop, revise, and execute imaginative solutions for the activity.