

Planning Sheet

Name: _____

1

Date: _____

1 What problem are you solving?

Ozobot is at its Locker and needs to get to the Lunch Room

2 Criteria and Constraints

Define criteria: _____ requirements of a design

Define constraints: _____ limitations on a design such as cost, amount of time allotted, etc

Solution criteria for your design:

a) _____ Ozobot has to get from Locker to Lunch Room

b) _____ User 5 Color Codes

Solution constraints for your design:

a) _____ one piece of paper

b) _____ can't cross the dotted line

c) _____ Color Codes must be ample distance from intersections

d) _____ Evo must travel on a line

3 Brainstorm

Use the back of this sheet to write all the ideas no matter how crazy, complicated, or simple they seem.

4 Select a Solution

The solution I chose is: _____ A line directly from the Locker to the Lunch Room with three speed codes and two trick codes.

Engineering Design Process

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5 Develop your engineering model

The simple plan for my model is: Starting with pencil, draw a line from the Locker to the Lunch Room. Add speed codes where the line is shorter, add trick codes where the line is longer.

6 Test the Model

When I tested my model, I found that: The speed codes worked well, but the trick codes didn't work so well.

7 Modify the Model

I will modify my model by: Leaving more space between a trick code and a corner

8 Communicate the results of your engineering design

My Evo successfully got from the Locker to the Lunch Room after I modified the placement of my trick codes to leave more room for Evo to execute the codes.

