

Name \_\_\_\_\_ Date \_\_\_\_\_

## **zBot Challenge Worksheet**

1. You have a blank breadboard. Your challenge is to create a robot! Continue to the next question to see the expectations.
  
2. Your robot should include the following parts:
  - 2 - 4 motors (to represent wheels or legs)
  - 2 LEDs (to represent eyes)
  - 1 or more on/off switch(es)Continue to the next question to see more expectations for your robot.
  
3. Expectations for your robot:
  - All components (lights and motors) should be able to turn on and work properly at the same time
  - The motors should turn in different directions (at least one clockwise and one counterclockwise)
  - The LEDs should be obviously lit (the brighter the better!)
  - No components should burn out when turned onBuild your robot, then continue to the next question.
  
4. Take a photo of your working robot.

5. Because of zBot's motors, zBot would theoretically be able to move like a car. zBot's LEDs would allow him to "open or close his eyes," or to "blink" if programmed to do so. His switches could turn his circuits on or off. What tasks can your robot perform?