

## 1.3 Activity: Engineering Notebook

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** Why are page numbers so important in an engineering notebook?

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**Question 2** What is the difference between the engineering notebook and the robotics binder?

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## 1.6 Activity: Vex Components

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** Have you ever built a something using Legos or an Erector set? If so, how are these components different?

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**Question 2** How are these components similar?

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**Question 3** Which component would you like to know more about and why?

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## 1.8 Activity: Chassis Construction

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** Which tools did you use to assemble the chassis?

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**Question 2** Why do you think the chassis is the first part to be assembled?

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**Question 3** Why do you think it is important for all the chassis components to be aligned with each other and straight?

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## 1.10 Activity: Drive Train Construction

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** What factors could cause your drive train to bind or perform poorly?

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**Question 2** What steps could you take to prevent these factors from affecting your robot?

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## 1.12 Activity: Wiring the Vex Controller and Battery

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** What design advantages can you identify in the location of the battery?

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**Question 2** What design advantages can you identify in the location of the controller?

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## 1.14 Activity: Using Radio Control

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** Which channel on the transmitter controlled the left drive motor on the BaseBot ?

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**Question 2** What was the range of your robot with the antenna fully retracted?

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## 1.16 Activity: Tank Control

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** After some practice driving tank style, did your time improve or get worse? Why?

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**Question 2** What was the hardest maneuver for you to make with the BaseBot?

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## 1.18 Activity: Arcade Control - Fundamental

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Question Sheet

**Question 1** How did your arcade control times compare with your tank control times?

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**Question 2** Which did you prefer and why?

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**Question 3** After some practice driving arcade style, did your time improve or get worse? Why?

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**Question 4** What was the hardest maneuver for you to make with the BaseBot driving arcade style?

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**Question 5** Which maneuvers were easier with tank control?

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**Question 6** Which maneuvers were easier with arcade control?

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**1.20 Activity: Adding Components - Fundamental**

Name: \_\_\_\_\_ Class/Period: \_\_\_\_\_ Date: \_\_\_\_\_

**Question Sheet**

**Question 1** Which was the hardest shape to draw? Why?

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**Question 2** Which driving style did you like better, Tank or Arcade? Why?

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