

# Helping and Hurting Our Immune Systems

**Directions:** Follow the steps below to become an expert on one of the following activities that help our immune system. Be prepared to dive into the data and share what you learn with your group!

## Circle the Activity That You Will Focus On:

Eating lots of fruits  
and vegetables

Exercise

Sleep

Being in the  
sunshine

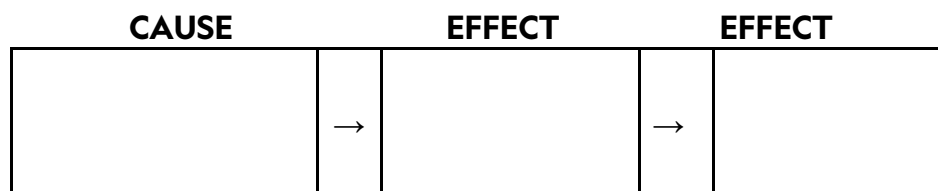
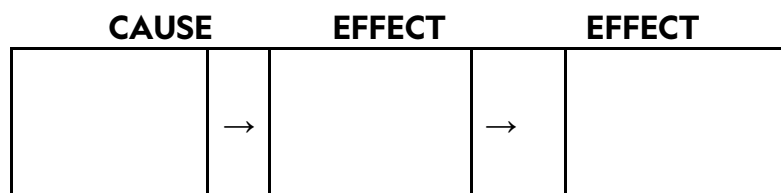
## My Seasonal Prediction:

I think that people will do more/less of this activity in the winter in comparison to the summer because \_\_\_\_\_

## Results Table for the Activity I'm Focusing On:

### Cause-and-Effect Pathways:

For each cause-and-effect pathway, write the activity that you're focusing on in the first box. Then fill in the effect boxes to show how this activity helps the immune system:



### **Understanding Seasonal Trends:**

Describe the **trend** you notice in the graph for this activity by answering the questions below:

What happens to the line in the winter months (November, December, January) of each year?

What happens to the line in the summer months (June, July, August) of each year?

What does this graph tell us about how the amount of time people spend doing this activity changes between winter and summer?

Was your original prediction supported by the data?

### **Making Sense of the Data:**

Why do you think people change the amount of time they spend on this activity between winter and summer?

How does the data help us understand why germs make us sick more often in the winter?

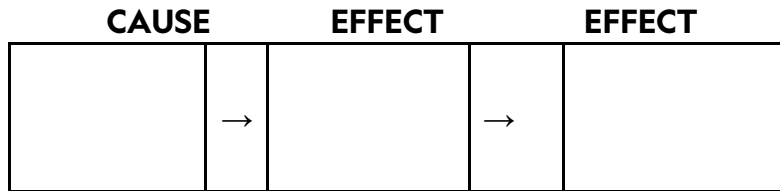
Your group members each learned about the other three activities. Use the table below to take notes on how each activity helps the immune system and seasonal trends.

<b>Activity:</b> _____										
<p style="text-align: center;"><b>Cause-and-Effect Pathway:</b> Fill in one pathway for how this activity helps the immune system:</p> <table border="1" style="margin-left: auto; margin-right: auto;"><thead><tr><th style="text-align: center;">CAUSE</th><th style="text-align: center;">→</th><th style="text-align: center;">EFFECT</th><th style="text-align: center;">→</th><th style="text-align: center;">EFFECT</th></tr></thead><tbody><tr><td style="height: 40px;"></td><td style="text-align: center;">→</td><td style="height: 40px;"></td><td style="text-align: center;">→</td><td style="height: 40px;"></td></tr></tbody></table>	CAUSE	→	EFFECT	→	EFFECT		→		→	
CAUSE	→	EFFECT	→	EFFECT						
	→		→							
<p style="text-align: center;"><b>Understanding Seasonal Trends:</b> What does the graph for this activity tell us about how the amount of time people spend doing this activity changes between winter and summer?</p>										
<p style="text-align: center;"><b>Making Sense of the Data:</b></p> <p><b>Discuss with your group:</b> Why do you think people change the amount of time they spend on this activity between winter and summer?</p> <p>How does the data help us understand why germs make us sick more often in the winter?</p>										

**Activity:** \_\_\_\_\_

**Cause-and-Effect Pathway:**

Fill in one pathway for how this activity helps the immune system:



**Understanding Seasonal Trends:**

What does the graph for this activity tell us about how the amount of time people spend doing this activity changes between winter and summer?

**Making Sense of the Data:**

**Discuss with your group:** Why do you think people change the amount of time they spend on this activity between winter and summer?

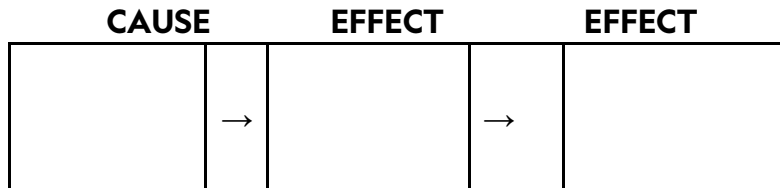
How does the data help us understand why germs make us sick more often in the winter?

## Results Table for Other Activities:

**Activity:** \_\_\_\_\_

### Cause-and-Effect Pathway:

Fill in one pathway for how this activity helps the immune system:



### Understanding Seasonal Trends:

What does the graph for this activity tell us about how the amount of time people spend doing this activity changes between winter and summer?

### Making Sense of the Data:

**Discuss with your group:** Why do you think people change the amount of time they spend on this activity between winter and summer?

How does the data help us understand why germs make us sick more often in the winter?