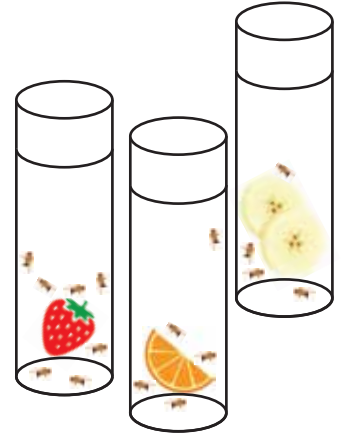


Think Like a Scientist!

Experiment 1: Favorite Food

Question: Which fruit attracts the most fruit flies?



1. MAKE A HYPOTHESIS

I hypothesize that _____ will attract the most fruit flies.

2. EXPERIMENTAL SETUP

Set up identical traps with a different piece of fruit in each trap. Make sure to use the same trap size and amount of fruit for each trap.

3. DATA COLLECTION

Wait 72 hours, then carefully count the fruit flies in each trap.

Fruit	Flies counted	Rank (1-4)	Notes/Observations
Banana			
Orange			
Choose your own!			

4. GRAPH AND COMPARE YOUR RESULTS

Draw a bar that represents the number of flies you counted for each fruit. Taller bar = more fruit flies!

Flies counted			
	Banana	Orange	Choose your own

5. SUMMARIZE YOUR FINDINGS

Was your hypothesis correct? Can you go back and modify your experiment to test another hypothesis?

Think Like a Scientist!

Experiment 2: Engineering Challenge

Your mission is to design an improved fruit fly trap. Change one thing at a time so you can tell what caused the difference.

THINGS YOU CAN MODIFY

Trap shape	Entry hole size	Bait type
Trap location	Funnel color	My own idea: _____

1. CHOOSE YOUR VARIABLE

The ONE thing I will change is _____. Everything else I will keep the same.

2. MAKE A HYPOTHESIS

I predict this version will catch the most flies: _____
because _____.

3. EXPERIMENTAL SETUP

Put identical traps in different places around your home. Label every trap so you know which is which.

Trap/version	Where?	Prediction
Example Location 1	living room	least amount of flies found here
Location 2		
Location 3		

4. DATA COLLECTION

Wait 72 hours, then carefully count the fruit flies in each trap.

Trap/version	Flies counted	Rank (1-4)
Location 1		
Location 2		
Location 3		

5. GRAPH AND COMPARE YOUR RESULTS

Draw a bar that represents the number of flies you counted for each trap location.



6. CHANGE IT AND TEST AGAIN!

Great scientists repeat experiments and ask new questions. Pick another modification to test and try again.

My next thing to modify: _____

My new hypothesis: _____

Repeat steps 3-5 for each new modification you decide to test.

SCIENTIST’S REFLECTION

I learned...	
I was surprised by...	
A question I still have...	
If I were doing this again, I would...	

SCIENCE SUPERPOWER: A good experiment does not have to give you the result you expected. Unexpected results are clues! Use your data to ask another question and test again.

Fruit flies are tiny, but they can help us practice BIG scientific skills: predicting, experimenting, measuring, graphing, and revising our ideas!