

<u>April 4:</u>  Modern Examples of Evolution	<u>April 5:</u>  The Evolution of Bacteria Lab	<u>April 6:</u>  <b>Of Spice and Men:</b> Introduction	<u>April 7:</u>  <b>Of Spice and Men:</b> Hypotheses & Agar Plates	<u>April 8:</u>  <b>Of Spice and Men:</b> Add Germs and Spices
H.W. Peppered Moth Sim	H.W. Finish Post-Lab	H.W. None	H.W. None	H.W. None
<u>April 11:</u>  The Seven Skulls Lab	<u>April 12:</u>  <b>Of Spice and Men:</b> Observe Results, Write Conclusions	<u>April 13:</u>  <b>Of Spice and Men:</b> Finish Lab Reports	<u>April 14:</u>  Review Day (Mr. A absent)	<u>April 15:</u>  Unit 6 Test (Coast Guard visit)
H.W. None	H.W. None	H.W. Finish Lab Report	H.W. None	H.W. None

**Why do humans prefer  
the tastes of some  
plants over others?**



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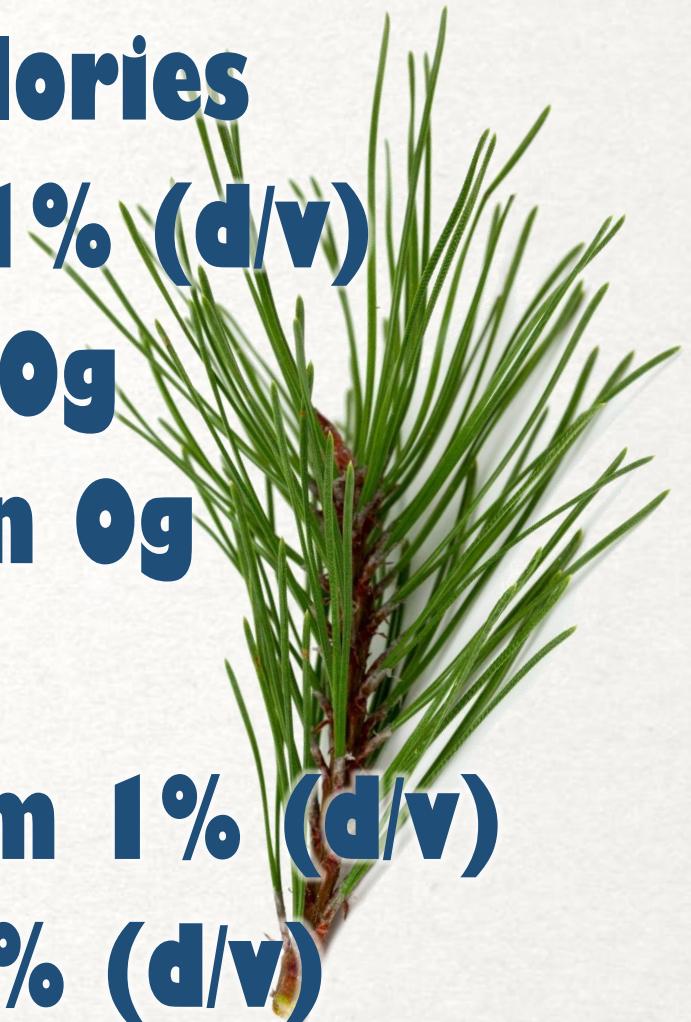
## Mint Leaves

- **1.3 calories**
- **Fiber 1% (d/v)**
- **Sugar 0g**
- **Protein 0g**
- **Fat 0g**
- **Calcium 1% (d/v)**
- **Iron 2% (d/v)**



## Pine Needles

- **1.4 calories**
- **Fiber 1% (d/v)**
- **Sugar 0g**
- **Protein 0g**
- **Fat 0g**
- **Calcium 1% (d/v)**
- **Iron 1% (d/v)**



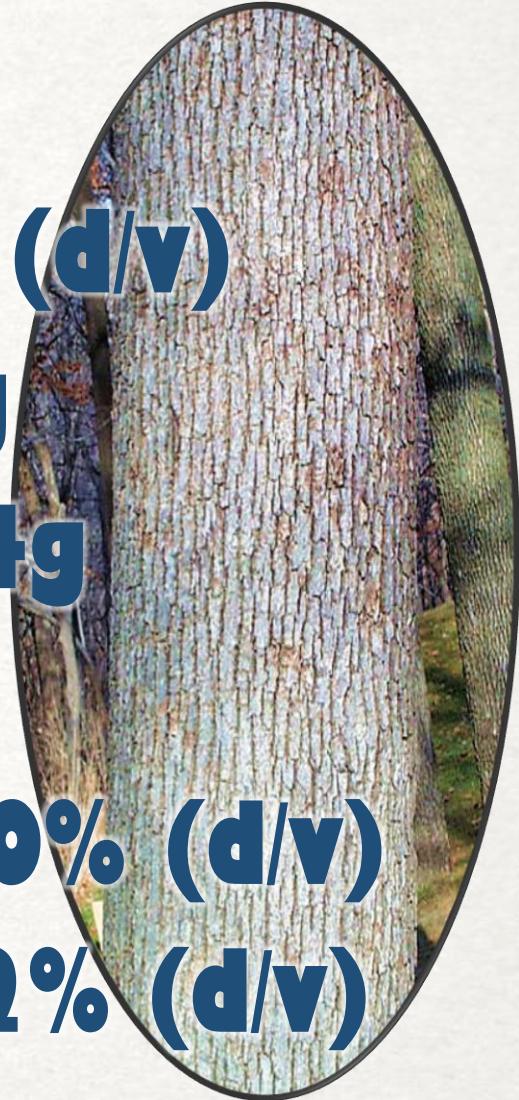
## Cinnamon Tree

- **4 calories**
- **Fiber 15% (d/v)**
- **Sugar 0.2g**
- **Protein 0.3g**
- **Fat 0.2g**
- **Vitamin-A 0% (d/v)**
- **Vitamin-C 3% (d/v)**



## Oak Tree

- **3 calories**
- **Fiber 15% (d/v)**
- **Sugar 0.1g**
- **Protein 0.4g**
- **Fat 0.2g**
- **Vitamin-A 0% (d/v)**
- **Vitamin-C 2% (d/v)**



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**Take out a blank sheet of paper,  
label it **Page 613: Of Spice and Men Notes****

EASTERN 6th Edition HEMISPHERE

ed by Will' Pa  
uth 9 o P.M.

Did you know that nutmeg was once worth more, by weight, than gold? That in the 16th century, London dockworkers were paid their bonuses in cloves? And that in 410 AD, when the Visigoths captured Rome, they demanded 3,000 pounds of pepper as a ransom?

In its day, the spice trade was the world's biggest industry: it established empires, led to the discovery of new continents, and helped lay the foundation for the modern world.

Spices, which today are inexpensive and widely available, were once very tightly guarded and generated immense wealth for those who controlled them. The spice trade began in the Middle East over 4,000 years ago. Arabic spice merchants would create a sense of mystery by withholding the origins of their goods, and would ensure high prices by telling fantastic tales about fighting off fierce winged creatures to reach spices growing high on cliff walls.

Initially, the spice trade was conducted mostly by camel caravans over land routes. The Silk Road was one important route connecting Asia, Africa, and Europe. Later, spices were transported by ship.

In another example of the historical value of now-common spices, Roman soldiers of the time were frequently paid in salt, a practice that led to the word “salary” and the phrase “worth his salt.”

In the 1400s, the spice trade was transformed by the discovery of the New World. When Christopher Columbus set out in search of India, he found America instead, and brought back many fruits and vegetables he found, including chiles.

He called them “peppers,” perhaps to soothe his disappointment at not finding peppercorns; and the term “chile pepper” persists to this day.

As spices became more common, their value began to fall. Trade routes were wide open, people had figured out how to transplant spice plants to other parts of the world, and the spice trade began to crumble.

Pepper and cinnamon are no longer luxuries for most of us, and spices have lost the status and allure that once placed them alongside jewels and precious metals as the world's most valuable items.

Spices	Today's Price	Price in 1439 (today's dollars)
Cinnamon	\$10 per lb.	\$510 per lb.
Pepper	\$27 per lb.	\$340 per lb.
Cloves	\$26 per lb.	\$765 per lb.

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

**Design Your Own Lab:  
Of Spice and Men**

**Goal:**

The goal of this lab is to measure the human preference for different plants and compare it to each plant's germ-killing effects.

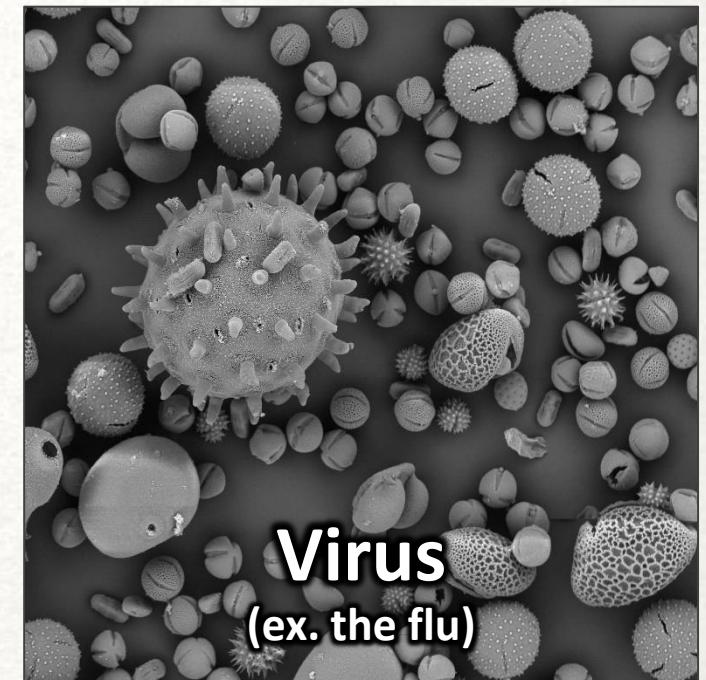
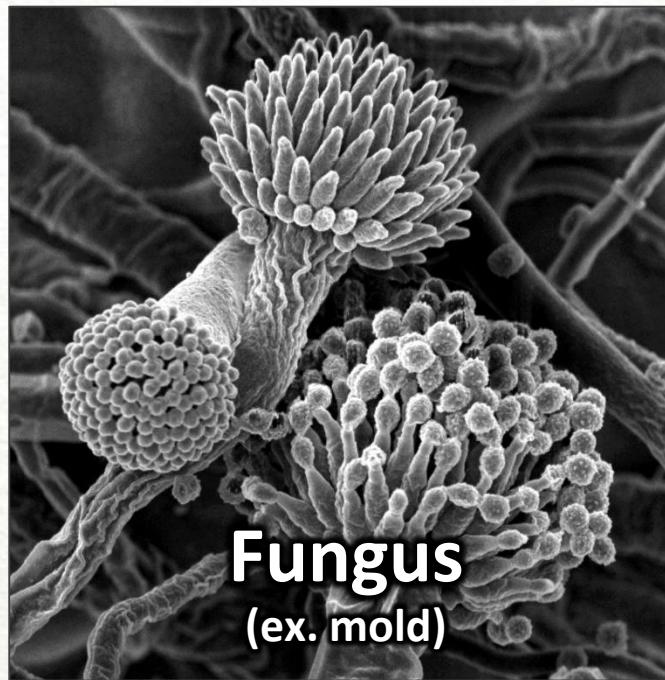
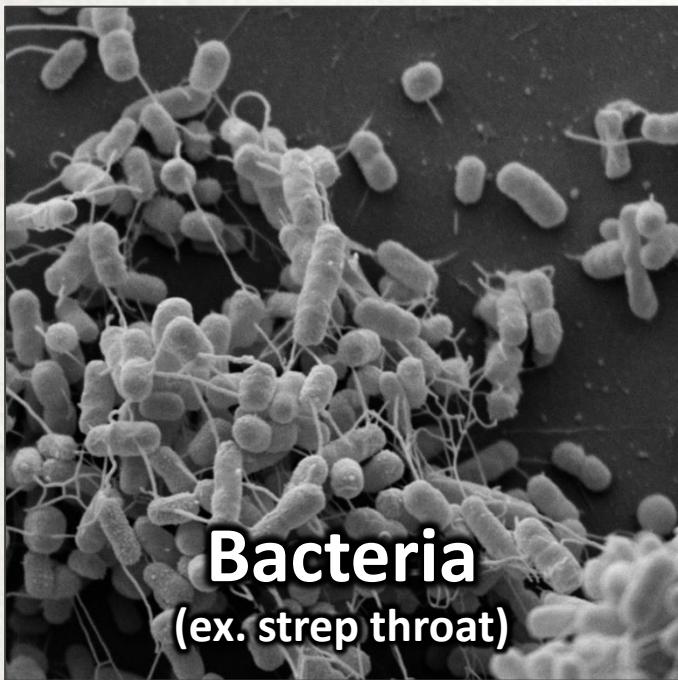
**Survey:**

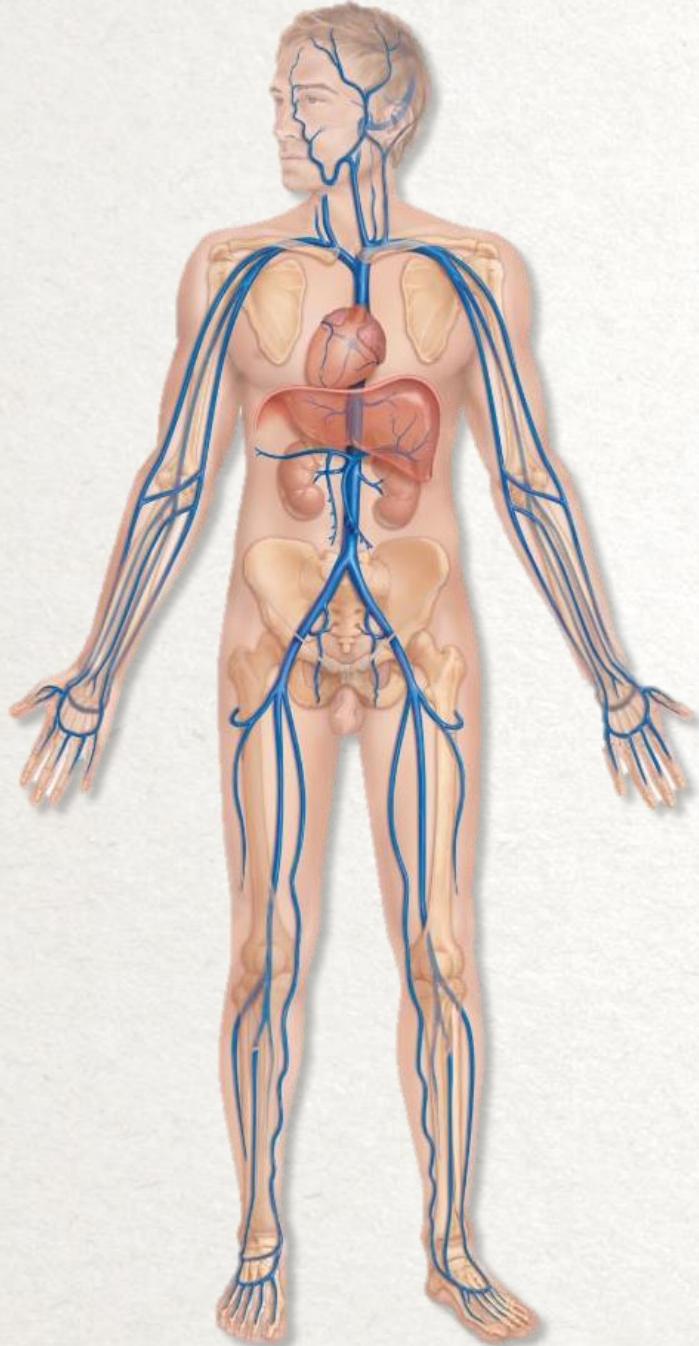
Select at 3-6 different plants to test (ex. cinnamon, grass, etc.). Then record the results of Wednesday's survey from the posters hanging in the back of the classroom.



# What are Germs?

germ - a non-scientific term for a microorganism, especially when disease-producing





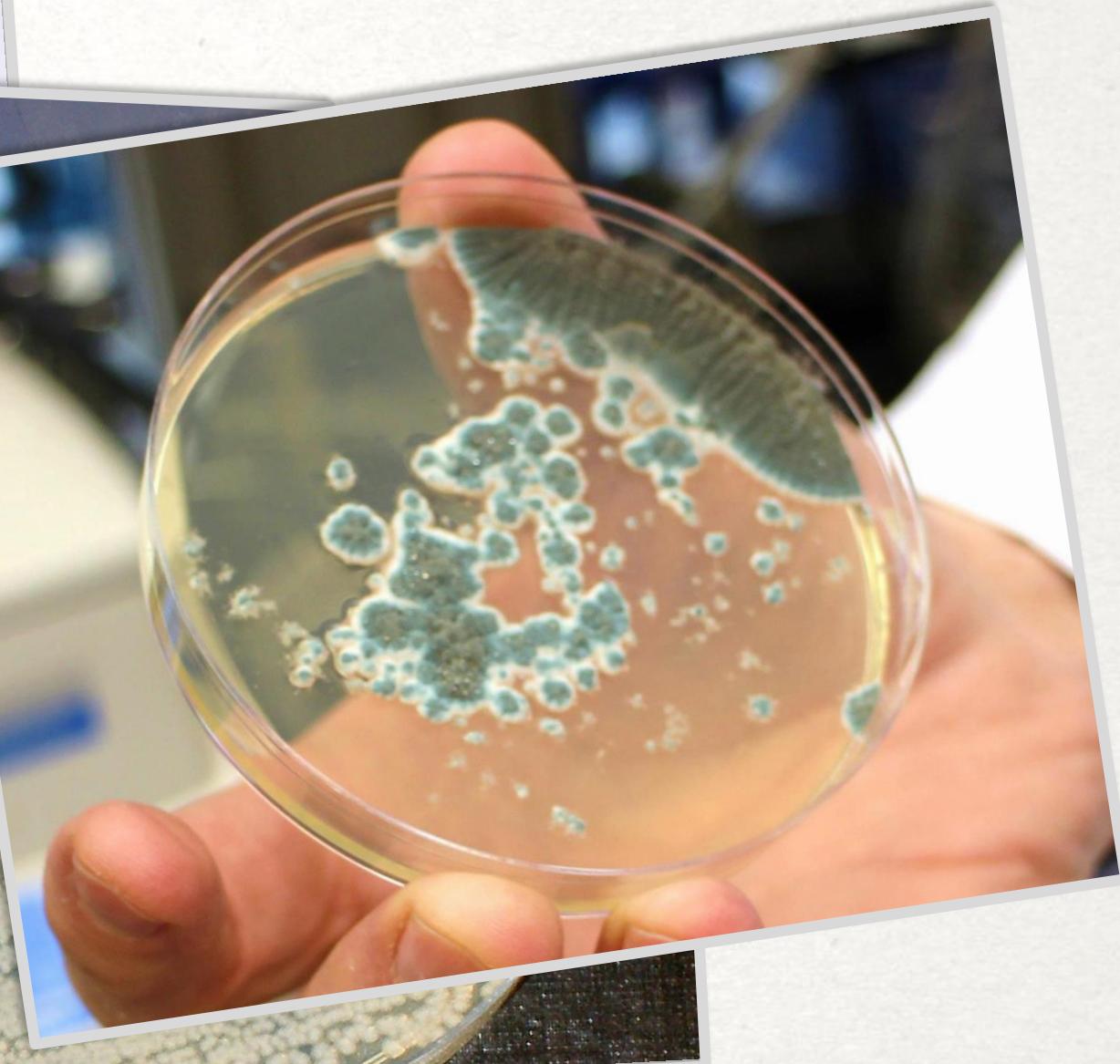
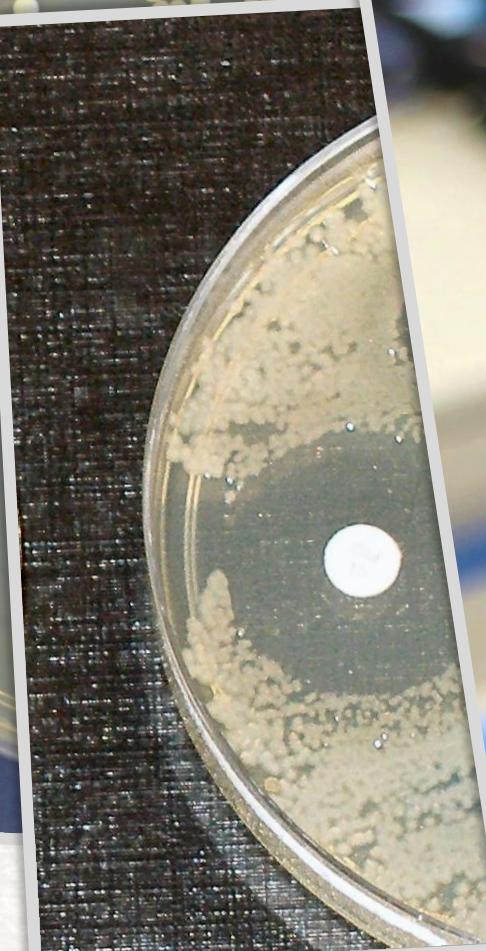
# Germs Around Us

- The vast majority aren't harmful
- The human body has more non-human cells (bacteria) inside it than human ones
- Regular yogurt contains five different species of bacteria
- Your mouth contains 600+ different species of germs (bacteria and fungi)









Name: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

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**Survey:**

Select at 3-6 different plants to test (ex. cinnamon, grass, etc.). Then record the results of Wednesday's survey from the posters hanging in the back of the classroom.



Name: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_



## Design Your Own Lab: **Of Spice and Men**

**Goal:**

The goal of this lab is to measure the human preference for different plants and compare it to each plant's germ-killing effects.

**s** measure the human preference for different plants

Select at 3-6 different plants to test (ex. cinnamon, grass, etc.). Then record the results of Wednesday's survey from the posters hanging in the back of the classroom.

# Spices Survey

1. Make your way to the center table.
2. Smell each plant sample  
(tasting would be more reliable, but is unsanitary)
3. Rate the taste from 1 to 5.  
(1 = worst, 5 = best)
4. Write rating on brown chart.
5. Record ratings in your notes.



# What Are They?

Plant A = Grass

Plant B = Pine Bark

Plant C = Cinnamon

Plant D = Leaves (*dracaena*)

Plant E = Pine Needles

Plant F = Oak Bark

Plant G = Nutmeg

Plant H = Mint Leaves

