

Microbes on My Mind: A Glimpse into NC 4-H's Microbiology Curriculum

Attachment #8

Presenters:

Sara Drake - Rowan County

Tracy LeCompte - Cabarrus County

Microbiology Curriculum History:

- Developed in Partnership with the Prestage Poultry Science Department and the Kenan Fellows
- 3 vertically aligned curriculum
 - Elementary (5th grade)
 - Middle School (8th grade)
 - High School (Biology)

Curricula

Each contains:

- 6 lessons which include:

- Key Teaching Points
- Learn Outcomes List
- Essential Standards Size
- Success Indicators
- Life Skills Lesson

- Time Needed

- Materials

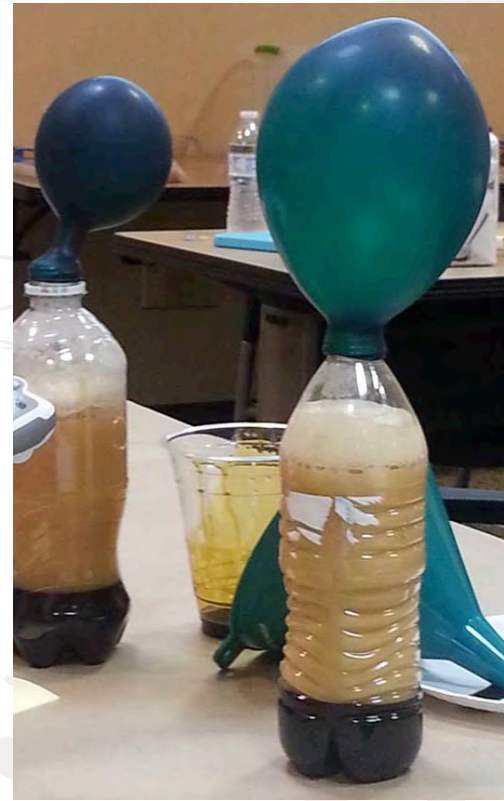
- Suggested Group

- Introduction

-

Elementary - I am an Ecosystem

- Explore myths & facts surrounding microbes.
- Examine where microbes grow in the environment.
- Discover the role of microbes in a healthy ecosystem.
- Explore the negative effects of microbes.

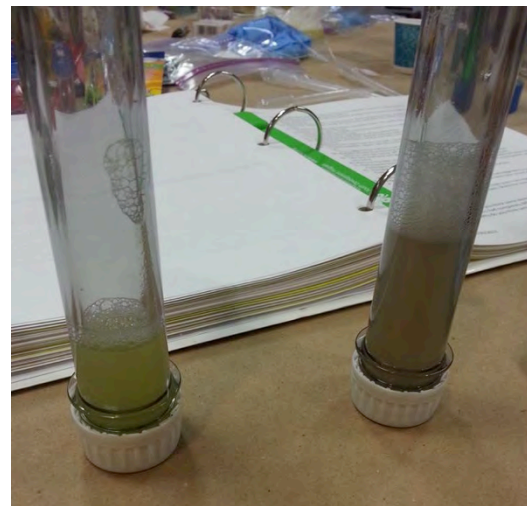
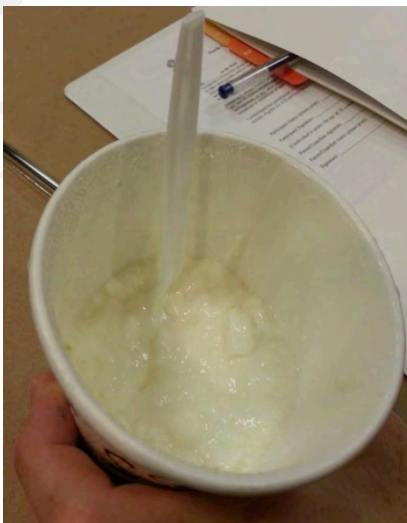


Elementary Pilot Counties

- Cabarrus
- Johnston
- Jones
- Pasquotank
- Rowan
- Wayne

Middle School - Microbes on My Mind

- Discover the role microbes play in our bodies, the ecosystem, and our food.
- Deepen understanding of food safety, different aspects of microbiology, and careers associated with microbiology.



Middle School Pilot Counties

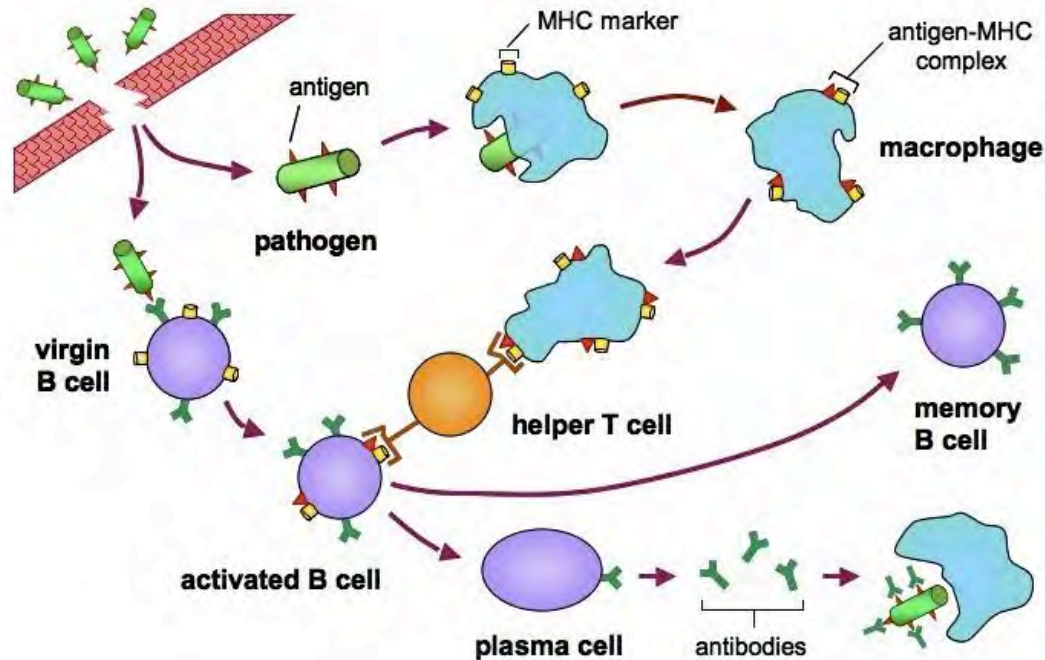
- Cabarrus
- Bladen
- Iredell
- Johnston
- Rowan
- Sampson

High School - Microbes: The World Within

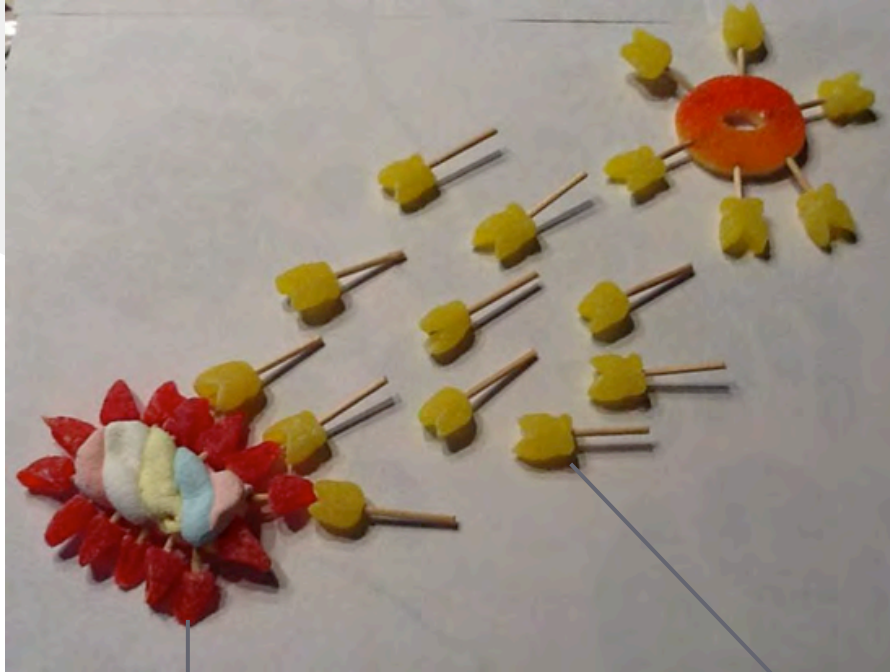
- Understand the diversity of microbial organisms.
- Increase understanding of the body's immune system.
- Learn about DNA and DNA sequencing.
- Understand how bacterial populations grow.
- Learn serial dilution lab techniques.

Activity - Code Red

- Modeling our body's Third Line of Defense



Activity - Code Red



Antigens

Antibodies



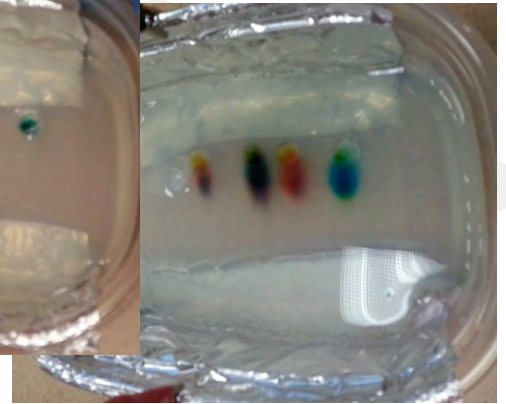
Bacteria



T-Cells



B-Cells



High School Pilot Counties

- Cabarrus
- Cherokee
- Johnston
- Rowan
- Sampson
- Wilson

How can we become involved?

Next phase:

- Implement the elementary & middle school curricula in to camp and special interest settings.
- Tentative dates for training: April 29-30
- Target goal for counties - reach 50 youth and complete evaluations

For Additional Information, Contact:

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