

ENDOCRINE

**5th
GRADE**

**IMMUNE
SYSTEM**

AIDS

PUBERTY



The mission of Polk County Public Schools is to provide a high-quality education for all students.

CHAMPS EXPECTATIONS

- C** Conversation: Voice level 0
- H** Help: Raise your hand for help.
- A** Activity: Whole group instruction
- M** Movement: It is expected that you will remain in your seat. Please, raise your hand if you need an EMERGENCY bathroom break.
- P** Participation: I expect everyone to sit up, ask appropriate questions and raise your hand to answer questions.
- S** Success: Increased knowledge!!

ESSENTIAL QUESTIONS:

What are three communicable and three non-communicable diseases?

What are two parts of the immune system and their function?

What are three ways children can protect themselves from communicable diseases?

Immune System Vocabulary

TYPES OF GERMS

Germs – microscopic organisms which can enter the body and cause illness

Bacteria – one-celled living things that are the most common form of life on earth

Virus – life-like matter that is smaller than bacteria and can only live within other living cells

OTHER IMMUNE SYSTEM VOCABULARY

Antibiotics – medicine that will kill infections caused by bacteria

Communicable – capable of being spread from one person to another

Immune System – fights germs inside the body

Immunity – protection from getting certain diseases

Infection – invasion of the body by pathogens

Infectious Disease – a disease caused by pathogens

Noncommunicable – not capable of being spread from one person to another

Vaccination/Immunization – medicine which activates the immune system to produce antibodies to fight viruses inside the body



CONTAGIOUS

COMMUNICABLE

**COLD, FLU, CHICKENPOX,
STREP THROAT**

**DISEASE
or
SICKNESS**



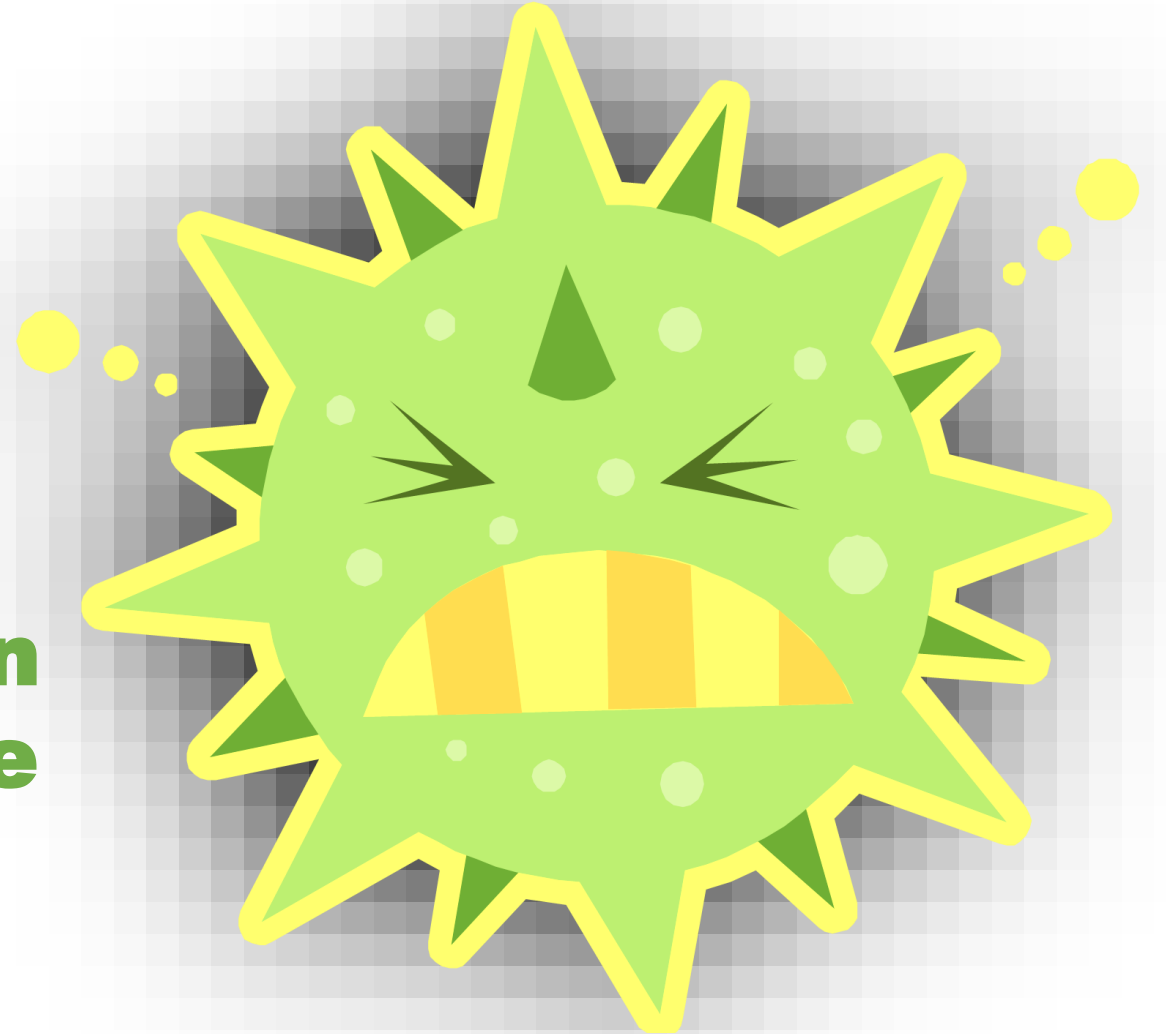
NOT CONTAGIOUS

NONCOMMUNICABLE

**ASTHMA, CANCER,
DIABETES, HEART DISEASE**



Microorganisms that can enter the body and make you sick.



Immune System Vocabulary

TYPES OF GERMS

CAUSE DISEASE OR SICKNESS

Germs – microscopic organisms which can enter the body and cause illness

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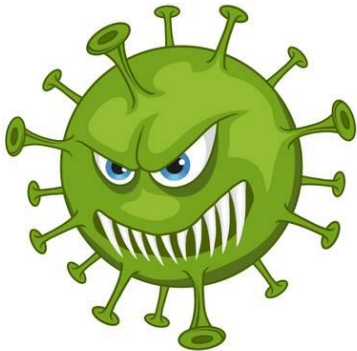
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GERMS



BACTERIA

MOST COMMON
FORM OF
LIFE

ANTIBIOTIC

VIRUS

MULTIPLIES IN
CELLS

NO CURE





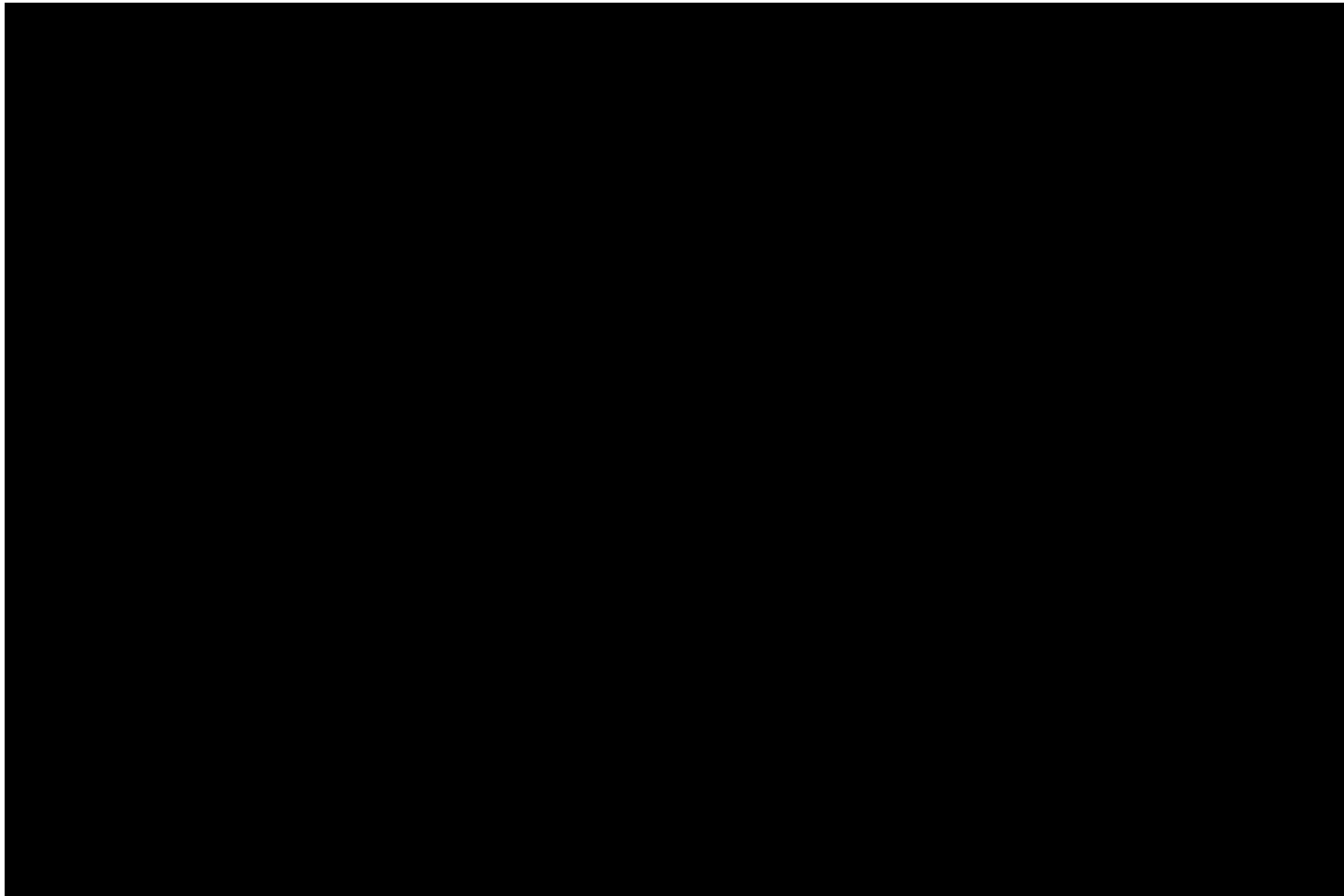
HOW ARE GERMS SPREAD?



WHAT DO GERMS FEAR?



SOAP AND WATER



Immune System Vocabulary

FIRST LINE OF DEFENSE

KEEPS GERMS OUT

Cilia – tiny hairs that line the nose, ears, and lungs and filter out dust and germs

Cough/Sneeze – helps the body get rid of germs

Mucus – sticky substance that traps germs

Mucous membrane – lining of the body openings

Skin – when unbroken, it acts as a barrier

Stomach Acids – liquids found in the stomach which help digest food and kill germs

Tears – liquid made by the eyes which washes them and protects them from germs

Wax in Ears – helps trap germs

SECOND LINE OF DEFENSE

KILLS GERMS

Antibodies – substances that attach themselves to germs and kill them—there are different antibodies for each germ that enters the body.

B-Cells – white blood cells that team up with T-Cells to make antibodies

Helper T-Cells – white blood cells that team up with B-Cells to make antibodies

Killer T-Cells – white blood cells that help destroy viruses

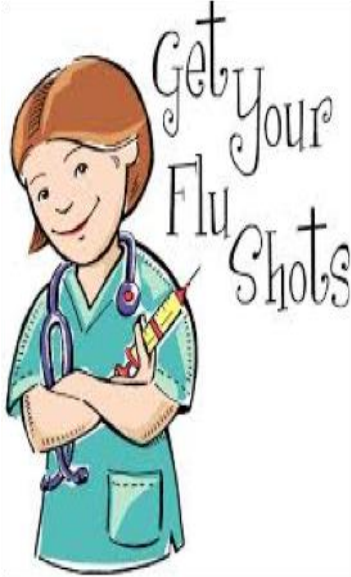
Macrophages – white blood cells that eat germs and dead matter

White Blood Cells – cells that surround and destroy germs

VACCINE

IMMUNE SYSTEM
BUILDS ANTIBODIES

PROTECTED FROM
DISEASE =
IMMUNITY



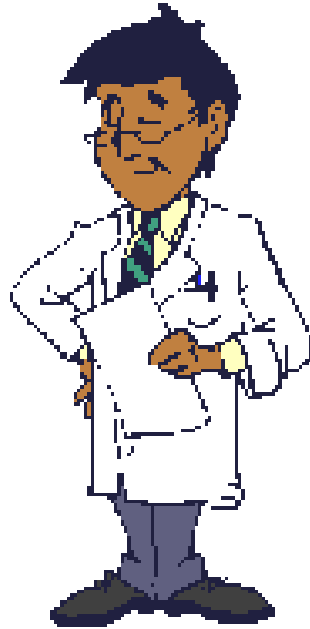
Thanks to vaccines, children are protected from these diseases:



- Chickenpox
- Diphtheria
- Flu
- Hepatitis A and B
- Hib (Haemophilus Influenzae)
- HBV (Human Papilloma Virus)
- Measles
- Meningococcal Disease
- Mumps
- Polio
- Pneumococcal Disease
- Rotavirus
- Rubella
- Tetanus
- Pertussis (Whooping cough)

How can you
protect
yourself from
Communicable
Diseases?





Cover Coughs and Sneezes



Disease: Prevention and Control

On the line to the left, write the letter of the best choice to complete the statement.

- A** 1. The most common forms of life on earth are _____.
(a) bacteria (b) viruses (c) antibodies (d) people
- C** 2. _____ can only grow within other living cells.
(a) bacteria (b) germs (c) viruses (d) antibodies
- C** 3. Substances in the blood that fight germs are _____.
(a) bacteria (b) viruses (c) antibodies (d) germs
- C** 4. Antibodies are produced in the _____.
(a) brain (b) stomach (c) blood (d) pituitary gland
- A** 5. A vaccine causes your body to make _____.
(a) antibodies (b) bacteria (c) viruses (d) germs
- C** 6. Being immune to something means to be _____.
(a) sick (b) injured (c) protected (d) healthy
- A** 7. Diseases that are passed from one person to another are called _____.
(a) communicable (b) antibodies (c) noncommunicable (d) public
- A** 8. When germs make you sick, you are said to have _____.
(a) a disease (b) a bacteria (c) viruses (d) immunity
- D** 9. A sticky liquid that lines the nose and throat is _____.
(a) villi (b) skin (c) hair (d) mucus
- B** 10. A healthy body can _____ germs better than an unhealthy body.
(a) catch (b) fight (c) attract (d) spread

Can you answer the following questions?

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