Communicable and non communicable disease

LT: I will be able to list and explain the difference between communicable and non communicable

I will be able to explain how people get sick.

I will explain the four ways that germs are spread

I will identify common communicable diseases.

I will demonstrate healthful behaviors that limit the spread of pathogens
Think about the last time you missed school because of an illness. Can you think of anything you could have done to avoid getting sick?
<table>
<thead>
<tr>
<th>Communicable</th>
<th>Non Communicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the difference between communicable and non communicable?</td>
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6th grade brief overview of communicable and non communicable disease

Disease: an unhealthy condition of the body or mind

Communicable Disease: a disease that can be spread

Non Communicable Disease: a disease that does not spread

Infection: The result of pathogens invading the body, multiplying, and harming some of your body's cells.
Brainstorm a list

<table>
<thead>
<tr>
<th>Communicable</th>
<th>Non communicable</th>
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<tbody>
<tr>
<td>Cold</td>
<td>cancer</td>
</tr>
<tr>
<td>flu</td>
<td>diabetes</td>
</tr>
<tr>
<td>mono</td>
<td>bone disease</td>
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<tr>
<td>Hepatitis</td>
<td>heart</td>
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<tr>
<td>Strep throat</td>
<td>high blood</td>
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<tr>
<td>Tuberculosis</td>
<td>allergy</td>
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<tr>
<td>Chicken Pox</td>
<td>tendonities</td>
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<tr>
<td>Scabies</td>
<td>arthritis</td>
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<tr>
<td>Crabs</td>
<td></td>
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</tbody>
</table>

Sexual communicable Disease include
- HIV/AIDS
- herpes (some forms)
Contagious:

When one can spread a virus to others by direct or indirect contact
Chicken Pox

The Flu
Scabies

The Cold
4 Common Disease Causing Germs

1. **Viruses**: The smallest, examples: colds, flu, measles, hepatitis, AIDS, (Vaccines)

2. **Protozoa**: One celled organism more complex than bacteria: parasites are one type of a protozoa. Examples: Malaria, amebic dysentery

3. **Bacteria**: One celled organism larger than viruses: Strep throat, gonorrhea, whooping cough (antibiotics)

4. **Fungi**: One or many celled organism such as molds and yeasts. Disease they cause: Athletes foot, jock itch, ring worm
**Immune System**: a group of cells, tissues, and organs that fights disease

**Lymphocytes**: white blood cells that attack pathogens

**Antibodies**: chemicals produced specifically to fight a particular invading substance

**Immunity**: resistance to infection

**Contagious**: able to spread to others by direct contact

**Vaccines**: preparations of killed or weakened germs
Sneezing without covering your mouth or nose spreads thousands of Pathogens

To recover from the common cold, you should rest and drink plenty of water

A person gets hepatitis A from contaminated food or water

Skin is the body's largest organ and first line of defense against germs

When pathogens invade the body and harm the body's cells, you have an infection
Your immune system is your body's second line of defense against pathogens.

Washing your hands is an important practice for keeping germs out of your body.

When symptoms first appear, you are contagious.
6 communicable diseases discussed in class

1. Common cold: most common communicable disease. Symptoms are congestion, sore throat and cough

2. Influenza: Symptoms high fever, fatigue, muscle and joint aches: Vaccines available.

4. Hepatitis: Spread by consuming food or water contain viruses and through direct contact with infected persons blood. Treatment rest. Vaccine available for A and B

5. Tuberculosis: Symptoms are cough, fatigue, persistent fever, night sweats and weight lose. Spread by coughs and sneezes. Treated with antibiotics

6. Strep Throat: Symptoms include sore throat, fever and chills, body aches, lose of appetite. Spread by infected droplets in air from coughs and sneezes. Treat with antibiotics and soft food and liquids
4 Non communicable disease **discussed** in class

1. Heart Disease: #1 cause of death in US

2. Diabetes: a disease that prevents the body from using the sugars and starches in the food for energy

3. Cancer: a disease caused by abnormal cells that grow out of control. Cancer is the 2nd leading cause of death in the US

4. Allergies: The body's sensitivity to certain substances.
List 3 ways to get a non communicable disease

1. Diseases present at birth
2. Lifestyle disease
3. Environmental diseases

Heart disease is the #1 cause of death in the US

List 4 types of Heart disease

1. Heart attack
2. High blood pressure
3. Stroke
4. Arteriolosclerosis
Heart Disease Overview

Heart disease includes conditions affecting the heart, such as coronary heart disease, heart attack, congestive heart failure, and congenital heart disease.

Heart diseases leading cause of death for men and women in the U.S.

Keys to prevent include quitting smoking, lowering cholesterol, controlling high blood pressure, maintaining a healthy weight, and exercising.
What is a Heart Attack?

A heart attack occurs if the flow of oxygen-rich blood to a section of heart muscle suddenly becomes blocked. If blood flow isn't restored quickly, the section of heart muscle begins to die.

Heart attacks are a leading killer of both men and women in the United States. The good news is excellent treatments are available for heart attacks.

Heart attack treatment works best when it's given right after symptoms occur. If you think you or someone else is having a heart attack, call 9-1-1 right away.
What is blood pressure?

Blood pressure is the force of blood pushing against the walls of your arteries. **High blood pressure means that your blood is moving through your arteries with a pressure higher than normal.** The higher the pressure inside your arteries, the higher your blood pressure numbers may be.

Silent and Serious

Most of the time, high blood pressure is "silent" - which means you may feel no symptoms. That's why people can have high blood pressure and not even know it. In fact one in three Americans has high blood pressure. It's a common health problem. And it's important to know that uncontrolled high blood pressure can lead to other serious health problems.
What is a Stroke?

Brain cell function requires a constant delivery of oxygen and glucose from the bloodstream. A stroke, or cardiovascular accident (CVA), occurs when blood supply to part of the brain is disturbed, causing brain cells to die. Blood flow can compromised by variety mechanisms.
Stroke Symptoms
Stroke symptoms and signs

A stroke results from impaired oxygen delivery to brain cells via the bloodstream. According to the U.S. National Institute of Neurological Disorders and Stroke, the five major signs of stroke are the sudden onset of:

1. Numbness or weakness of the face, arm or leg, especially on one side of the body. The loss of voluntary movement and/or sensation may be complete or partial. There may also be an associated tingling sensation in the affected area.

2. Confusion, trouble speaking or understanding. Sometimes weakness in the muscles of the face can cause drooling.

3. Trouble seeing in one or both eyes

4. Trouble walking, dizziness, loss of balance or coordination

5. Severe headache with no known cause

Reference: U.S. National Institute of Neurological Disorders and Stroke
Arteriosclerosis

A chronic disease in which thickening, hardening, and loss of elasticity of the arterial walls result in impaired blood circulation. It develops with aging, and in hypertension, diabetes and other conditions.
Cancer: a disease caused by abnormal cells that grow out of control

2nd most common cause of death: Cancer

Tumors: masses of abnormal cells

7 warning signs of cancer

1. Change in bowel or bladder habits
2. A sore that does not heal
3. Unusual bleeding or discharge
4. Thickening or lump in the breast or elsewhere.
5. Indigestion or difficulty swallowing.
6. Obvious change in a wart or mole
7. Nagging cough or hoarseness
Three common treatments for cancer are
1. Surgery
2. Radiation
3. Chemotherapy
4. Holistic
5. DO nothing
**Allergy:** the body's sensitivity to certain substances

**Asthma:** a chronic breathing disease caused by allergies, physical exertion, air pollution or other factors.

**Diabetes:** a disease that prevents the body from using the sugars and starches in food for energy.

**Insulin:** a hormone produced by the pancreas

*Type 1:* Diabetes the body does not produce insulin  
*Type 2:* diabetes prevents the body from using insulin effectively.  
Being over weight can contribute to type 2
Type 1 Diabetes

They body does not produce insulin. Some people may refer to this type as insulin-dependent diabetes, juvenile diabetes or early onset diabetes. People usually develop type 1 diabetes before their 40th year, often in early adulthood or teenage years.

Type 1 diabetes is nowhere near as common as type 2 diabetes. Only about 10% of all diabetes cases are type 1.

Patients with type 1 diabetes will need to take insulin injections for the rest of their life.
Type 2 Diabetes

The body does not produce enough insulin for proper function, or the cells in the body do not react to insulin.

Approximately 90% of all cases of diabetes worldwide are of this type.

Some people may be able to control their type 2 diabetes symptoms by losing weight, following a healthy diet, doing plenty of exercise, and monitoring their blood glucose levels. However, type 2 diabetes is typically a progressive disease - it gradually gets worse - and patient will probably end of having to take insulin, usually in tablet form.
Overweight and obese people have a much higher risk of developing type 2 diabetes.

The risk of developing type 2 diabetes is also greater as we get older.
Hide and Seek: 8 Strategies to prevent the spread of infection

H: Hand washing
I: Immunity (immunize)
D: Drug Safety
E: Eating Safely

S: Safe personal practices
E: Environment (clean and disinfect)
E: Elderly care (need extra care)
K: Kids: need extra care