Thursday, April 18

Bell Work:
What causes you to become sick?
MAIN IDEA: Germ theory states that microscopic particles cause certain diseases.

Diseases can either be infectious or noninfectious. What is the difference between these two terms? Give examples of each.

Infectious can be passed from person to person—they are caused by germs. Examples: flu and polio. Noninfectious cannot be passed—caused by a person’s lifestyle or genetics. Examples: cancer and heart disease.
MAIN IDEA: There are different types of pathogens.

Directions: fill in the chart to take notes on the different types of pathogens.

<table>
<thead>
<tr>
<th>Pathogen</th>
<th>Causes Disease By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td>releasing toxic chemicals</td>
</tr>
<tr>
<td>Viruses</td>
<td>reproducing in body cells, causing them to stop their activities</td>
</tr>
<tr>
<td>Fungi</td>
<td>taking nutrients from body cells, occurs in warm/damp places</td>
</tr>
<tr>
<td>Protozoa</td>
<td>taking nutrients from body cells</td>
</tr>
<tr>
<td>Parasites</td>
<td>taking nutrients from body cells</td>
</tr>
</tbody>
</table>

Though each pathogen attacks differently, in what way are they the same?

They all attack healthy cells
MAIN IDEA: Pathogens can enter the body in different ways.

- **direct touch**
  - spread by
  - examples
  - *rabies by a bite*
  - *HIV by exchange of body fluids during sexual intercourse, sharing needles*
  - *vectors such as insects*
  - *food: mad cow disease, salmonella from pig intestines, even food poisoning is caused by bacteria or fungi*

- **indirect contact**
  - spread by
  - examples
  - *can survive on nonliving surfaces (tables, door knobs, etc.)*
  - *parasitic worms enter through bare feet*
  - *spread through the air (cough, sneeze, etc.)*
    - Examples: Tuberculosis and SARS
Directions: Answer the following questions.

Something that causes disease is called a Pathogen.

A vector is something that anything that carries a pathogen and transmits it into healthy cells.