

# VACCINES WORK

Here Are the Facts

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

Read the text and complete the exercises

Medical technology has advanced further in the last 100 years than it has throughout history.

What's the matter?  
Doc, it's my leg.

We live our lives relatively disease-free...

...and we owe so much of that to vaccines.

Despite the overwhelming evidence, people still have questions and concerns.

Polio? Smallpox?  
They're going to inject what?  
Which is okay.

In 1798, smallpox was killing **hundreds of thousands** of people every year.

Until Edward Jenner noticed that milkmaids who had contracted cowpox, a less deadly form of the disease, didn't get smallpox.

This was the first vaccine.

Vaccines are like a training exercise for your body. They use dead or damaged viruses to provoke an immune response, without having to get sick.

DEAD PATHOGENS  
IMMUNE CELLS

From there, your body has time to develop the proper antibodies and form an immunity.

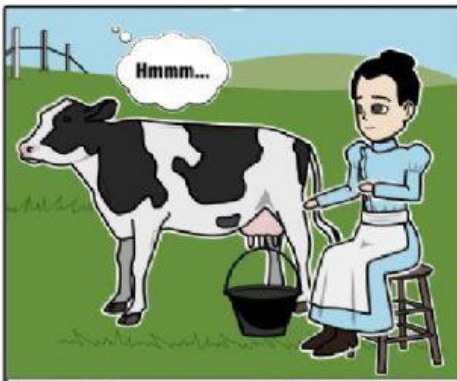
Ahhh...

Since their implementation, smallpox has been eradicated, and diseases like polio, measles, mumps, and rubella are on their way out.

Disease	Reduction
Whooping Cough	Down 81%
Measles	Down 99%
Mumps	Down 99%



## NOW A SHORT HISTORY OF THE FIRST VACCINE



Edward Jenner **was** a scientist and he **wanted** to conquer the deadly smallpox. One day, he **observed** Sarah Nelmes, an ordinary milkmaid who **got infected** by cow



Noting the common observation that milkmaids **were** generally immune to smallpox, Jenner **suggested** that the pus in the blisters that milkmaids **received** from cowpox **protected** them from smallpox



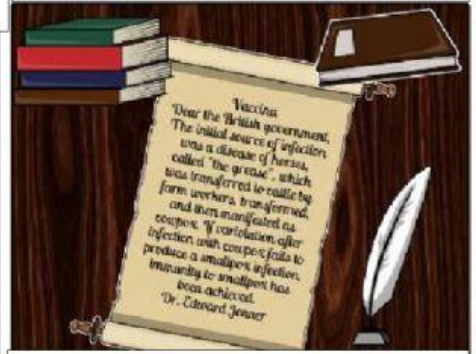
Jenner **tested** his hypothesis by inoculating James Phipps, and eight-year-old boy. He **scraped** pus from cowpox blisters on the hands of Sara Nelmes



Jenner **inoculated** Phipps in both arms that day, subsequently producing in Phipps a fever and some uneasiness, but no full-blown infection



Later, he **injected** Phipps with variolous material, but no disease **followed**. The boy **was** later challenged with variolous material and again **showed** no sign of infection



Eventually, vaccination **was** accepted, and in 1840, the British government **banned** variolation-the use of smallpox to induce immunity-and **provided** vaccination using cowpox free charge

## Time to Check your Understanding

- **Read the text again and answer the questions**

1. Who invented the first vaccine? \_\_\_\_\_
2. Who was Sarah Nelmes? \_\_\_\_\_
3. What did Jenner suggest about the pus in the blisters?  
\_\_\_\_\_
4. How did Jenner test his hypothesis?  
\_\_\_\_\_

- **Complete the next sentences with the ideas from the story boards**

1. Medical technology has advanced further in the last \_\_\_\_\_
2. In 1798, \_\_\_\_\_ was killing hundreds of thousands of people
3. Vaccines are like a \_\_\_\_\_ for your body.
4. Vaccines used dead virus to provoke an \_\_\_\_\_

- **Match the words with the definitions. Write the correct number in front of the letters**

1. Milkmaid		a) an acute contagious viral disease, with fever and pustules usually leaving permanent scars. It was effectively eradicated through vaccination by 1979.
2. Immunity		b) also called vaccinia, mildly eruptive disease of cows that when transmitted to otherwise healthy humans produces immunity to smallpox.
3. Blister		c) a girl or woman who milks cows or does other work in a dairy.
4. Cowpox		d) a small bubble on the skin filled with serum and caused by friction, burning, or other damage.
5. Smallpox		e) the ability of an organism to resist a particular infection or toxin by the action of specific antibodies or sensitized white blood cells.

- **Complete the dialogue with the correct past simple form of the verb in parenthesis**

**Anita:** Hi my friend. **Did you get** the **Pfizer vaccine** against covid-19 yesterday? (get)

**Carina:** Hey! No, I \_\_\_\_\_. I **got** the **AstraZeneca vaccine**.

**Anita:** That's great, both are good to protect us

**Carina:** Yes, they are good. What about you? **Did you** \_\_\_\_\_ (inoculate). **Did it hurt** you?

**Anita:** Yes, I \_\_\_\_\_ (be) inoculated and it didn't hurt at all. The nurse \_\_\_\_\_ (inject) me very gently.

**Carina:** I'm glad you have got the vaccine already. It is important to be protected.

**Anita:** Did you \_\_\_\_\_ (have) any effects after getting the vaccine?

**Carina:** Yes, I \_\_\_\_\_. I had a little headache. But, the nurse \_\_\_\_\_ (suggest) me to take an aspirin if that happens.

**Anita:** I had a little pain in my arm, so I \_\_\_\_\_ (not/play) for 2 days.

**Carina:** I hope you feel fine now.

**Anita:** Yes, I feel ok. I gotta go. It was nice to see you.

**Carina:** Take care my friend, see you soon