I don’t know how vaccines work, but I’m pretty sure that means I never have to get tested again!

VACCINES ARE AMAZING! BUT...

hmmm...
...even people who are vaccinated might still need to get tested sometimes, Brody. Testing is still part of the toolbox!
Well... getting tested is **QUICK & EASY** so that's no BIG DEAL! But I'm still wondering...
WHAT MAKES
VACCINES
SO AMAZING?

HOW DO THEY EVEN WORK?
Oh boy! I love this topic! First of all thank you, Swab! Vaccines are amazing (if I do say so myself)!

Brody—there is definitely a short answer to your question... but it wouldn’t be as much fun as this...
Clearly, we've been waiting for someone to ask!

MASKY!
Take it away!

OK!
To understand how a vaccine works, we must first understand how a virus works!
1. **Virus** enters the body

The SARS-CoV-2 virus is spread through droplets that enter through the mouth, nose, or eyes.
2. **Virus** infects the healthy cells.

A virus infects a healthy host cell by latching on with spikey surface proteins that burst into healthy cells.
The healthy cell

Viral RNA

Hijacking & making copies

The virus hijacks the cell so it can make as many copies as possible!

The virus also works hard to hide from your immune system.
The pesky VIRUS SPREADS!

The host cell often dies and the virus multiplies and moves into more and more cells. This is when people feel sick.
YOUR IMMUNE SYSTEM CAN FIGHT OFF WEAKER VIRUSES without help. But for STRONGER VIRUSES, like COVID-19, your IMMUNE SYSTEM NEEDS BACKUP SUPPORT. And that's why we need...
So a **VIRUS** enters your body without asking, takes over cells, replicates over & over & over and then tries to invade your whole body! ?!?!!??!??!
WHOA. Viruses are pretty smart!

And pretty mean!

Yep!
They aren't the nicest

But LUCKILY we have VACCINES! You can get your vaccine at a doctor's office, clinic, or at a school-based vaccination event.
Hi, gang! We’re meeting our parents at the school-based vaccination event right now.
I'm not 5 until next week...

I'm meeting my mom!

Oh whoops!

I forgot that I'm supposed to meet my dad there, too!

What are we waiting for...
LET'S GO!
And while we walk, I can (finally) explain how vaccines work and why they are so amazing next time!