mystery science

Grades K-5
Mini-Lesson: “How does mail get delivered?”

VIDEO TRANSCRIPT

VIDEO 1

Hi, it's Jay! When I was in second grade, my class got pen pals, far away friends you write letters to. Each student in our class was paired with a student in China. I wrote a letter to my pen pal introducing myself and sent it. Weeks later, I got a letter in the mail. My pen pal wrote back. It was so cool to hold a letter in my hands knowing it had traveled from my new friend's home halfway around the world. Someone named Violet has a question about this. Let's call Violet now.

[Video Call]

- Hi, Jay.
- Hi, Violet.
- I have a question for you. How does mail get delivered?
- That's a great question.

Think of all the things that people send by mail. We send Valentine's, holiday presents, birthday cards, postcards. Some people vote or even receive medicines by mail. People can and do send almost anything through the mail, from bathtubs to bugs. It's easy to think that delivering mail is simple as someone looking at a letter, reading the address, and then taking the mail to that address. And that might work if a mail carrier only had one letter to deliver, but these days, way more than one letter gets delivered every day. In the US, an average of 420 million pieces

of mail are delivered every single day. So how does mail get from one mailbox to another mailbox?

VIDEO 2

Delivering millions of pieces of mail daily isn't easy. And a lot of this mail isn't going around the block either. It might be traveling to another city or even another country. Most mail makes at least four stops along its journey. It might go something like this. First, a person puts mail in a mailbox. That's stop one. From there, it goes to a processing center. That's stop two. From the processing center, it goes to a delivery center. Stop three. Then finally, it arrives in the mailbox of the person it was sent to. Stop four. Getting mail from one stop to another takes work. Let's imagine I wrote you a letter. To send it, I put the letter in an envelope, write your address on the front, add a stamp, and drop it in a mailbox. Stop one. After that, a postal worker empties the mailbox and gets the mail to a processing center. Stop two. A processing center can contain thousands of pieces of mail and each piece needs to go to a different place. My letter to you might be piled next to a birthday present that needs to get to New York City, an important medicine that needs to get to Northern Alaska, a Valentine headed to the coast of New Zealand, and more. Here at the processing center, each piece of mail is sorted into a different bin depending on where it needs to go. If you had to sort all these letters by hand, it would take forever. Luckily, the workers here have the help of some speedy machines. As each letter whizzes through the machine, a camera takes a picture of the address so fast you can hardly see it happen. From the picture, a computer identifies where that address is. The machine then sorts each letter into the right bin. A machine can do this for thousands of letters per hour. Even so, sometimes these machines need human help. Like, what if the computer can't read the address on my letter to you? What if I wrote messy, or accidentally left something out? In these

cases, it's time to call in the experts. When the computer can't read the address, a photo of the letter is sent to special office, where specially trained postal workers carefully read each address in person. Try it out for yourself. I'll give you five seconds to study each address. This letter writer wrote in really fancy, swirly writing. Can you figure out what the name of this tree is? It's Springfield. This letter got wet. Can you tell what number this is? It's a seven. This address includes the city Albuquerque, but not the state. Do you know where it is? It's in New Mexico. Not easy, right? Once a postal worker figures it out, they type the address into the computer by hand. And the computer sorts the letter into the right bin. Once all the letters have been sorted, workers can pack each bin of mail into a truck or plane to send it to a delivery center closer to where it needs to go. This delivery center is stop three. When the mail arrives, it gets sorted again. This time, the mail gets sorted by individual address. Sometimes with the machine, sometimes by hand. This can take hours. Then a postal worker takes the day's mail and sets out to deliver it. Depending on where you live, your mail carrier might travel their daily route in a truck, on foot, even by bicycle. In Arizona, some mail is even delivered by mule to get mail to people living at the bottom of the Grand Canyon. No matter what it takes to get there, finally, the mail carrier drops mail off at its final destination. Stop four. You. So, in summary, it takes a lot of work to deliver mail. Many people and machines have to work together to get a letter from the sender to a mailbox, to a processing center, to a delivery center, and finally to the destination. Each part of the process depends on all the others. It's a system. If just one part of the system broke, the mail wouldn't arrive. And yet billions of pieces of mail are delivered in the US each year. Next time you pick up a piece of mail, take a second to think about the epic journey it's been on, and all the people and technology that helped get it into your hands. That's all for this week's question. Thanks for asking it, Violet.