

Marcus, Class: Period 7

Hey Marcus,

So happy to write to you this year! How is class going? What are some of the cool things you've learned about? I'd love to hear all about it!

A little about me: I'm a computer scientist and UI/UX (User Interface / User Experience) designer. This means I study both how computers solve problems and how people interact with machines. It seems like two very different things but I'm passionate about how technology can improve people's lives. I use my work with software to do just that!

I see you're in Colorado: I LOVE your state! I live just outside Washington DC but I fly to Denver every year to ski the snow and explore the amazing national parks you have. A few months ago, I visited Great Dunes National Park. It was so much fun! Have you ever been there? The sand dunes are HUGE! You can even ride them if you bring equipment... Here's a picture of me:



By the way, I heard you liked studying energy. It's such an interesting topic. I like to study it too: I'm currently doing a project with solar power. Over last summer, I traveled to the Amazon rainforest in Brazil and I lived on a research base by the river Araguaia. I volunteered there for a month to help the resident scientists with technology. I worked with computers, drones, radio antenna... but the most interesting work was actually with the base solar panels. What was cool about it is we did **everything** through the power we got from the sun.

For instance, we used a cluster of 12 solar panels to charge batteries that would power our lights, laptops, cameras, water pumps and even our boats. There are no roads deep in the jungle, so if you need to travel on land, you need to hike, which takes a lot of time. However, we would use the river as a highway: the boats would travel much faster across the rivers and could transport equipment much more quickly than we ever could on land.



I was also there to study endangered species like pink river dolphins and giant otters. They would get frightened by the noise from gas-powered boats. Instead, we used the solar panels to charge batteries, which would power electric motors on our boats. This let us drive near-silent electric boats up the river and get very close to the wildlife. It was a great experience and it showed me that you can power an entire research operation with just sunlight! That's part of what I'm working on now: how to use solar power here, in the US.

Anyway, I want to hear all about you! Do you have any pets? I have a Chihuahua named Elf. My wife Amy and I rescued him when he was just a puppy. He loves to explore and find new places to walk around Maryland. (Check out the last page for a big picture of him!) Can't wait to get your next letter!

Hey Marcus!

Check out Elf doing his
best Lion King impression!
This was on his 6th birthday!

-Nad

