Become an atmosphere observer!

Join Anita, Simon, and Dennis as they study the colors in the sky and collect data about what they see.

“Did anyone see the sunset last night? The colors were awesome!” exclaimed Anita.

Dennis and Simon agreed.

“Remember that data collection sheet I created for our school project about aerosols? We could use it to learn more about colors in the sky,” Dennis replied.

“Great idea, Dennis,” Simon replied. “Let’s get started!”
“Ok, since the colors in the sky are different during the day and at sunset, we should make observations at different times of day,” Anita suggested.

“We should also make observations on more than one day so we can see if the colors change,” Simon added.

Dennis said, “We can do daytime observations at school and sunset observations at home.”

“Let’s remember to record the weather conditions because that might affect the colors we see. We’ll write precipitation, wind, and cloud information here,” Anita added.

“And we obviously can’t make any observations when the sky is completely cloudy,” said Simon. “We need to be able to see the sky, not just clouds!”
“Now that we’ve recorded the weather data, let’s make our sky observations,” suggested Dennis. “I know we’re never supposed to look directly at the Sun, and it’s also important to have the Sun behind us so we see the deepest color in the sky.”

“I think the sky looks light blue when I face away from the Sun,” Anita said.

“I agree,” Simon added. “Let’s mark that on our data sheet and draw a picture.”

“Now we need to record the visibility. What’s that?” Simon asked.

“Visibility is how clear the atmosphere is, so we can look at those trees and describe if they look clear or fuzzy. If the trees are fuzzy then the sky is hazy,” Anita explained.

Dennis added, “I think the trees are a little fuzzy and the sky is somewhat hazy today.”

Simon commented, “That’s a good description, let’s mark that on our sheets.”
Later on, the kids gathered at Anita’s house at sunset so they could observe the colors in the sky.

“Wow, it’s more colorful than last night!” Anita exclaimed, looking at the sunset.

“You’re right! Tonight I see deep orange and red,” Dennis said.

Simon added, “I see a little pink, too.”

“Let’s use our colored pencils to record this observation,” said Anita.

After making these observations for a few days, the kids compared their results.

“We saw such different colors and sky conditions! I wonder why the sky changes so much,” Simon asked.

Dennis replied, “We’ve been talking about the sky during science class, so let’s share this information back at school so we can talk about what this data means.”

“Good idea!” Anita exclaimed. “I can’t wait to figure this out with the help of the rest of our class!”