

## 25: 8th Science Tides MatInterview

Speaker 1: We started off this lesson, using our textbooks. Students were taking Cornell notes with either a partner or themselves. We use that information, we discussed it a little bit. We went into a graphic organizer, that I created. I call it Two Fold. There's basically two flaps that are comparing, contrasting two ideas. In the middle there's some encompassing or comprehensive idea that I want the students to grasp at the end of the lesson. After the Two Fold is completed, we're going to go into the tide calendar, which is a very valuable tool to wrap up the concepts being learned.

The textbook was used to gain the content, background knowledge, definitions. Learning the cycles, learning the differences between the two. From there we went into the graphic organizer, which allows them to put a little bit of their personality into it. They have a choice, they have some freedom, in what kind of pictures to draw. How can they paraphrase a definitions. It's not as much just copying straight from the book, or getting direct answers, a, b, c. It's more of, what they got to think of to get their answers. After they get the content from the textbook, and we discuss it. Make sure everybody understands, we'll move into the graphic organizer. Which then helps them to put a little more creativity into their work. After we've done all that, we'll do the application part. We'll bump up the rigger to get them thinking at a little higher level, where I'll bring in the tide calendar. It's something they might not be familiar with. They need to learn about it, [00:02:00] and then they look for patterns. Which is a little difficult because you need to understand the concepts before they can explain the patterns that they have seen in the tide calendar.

The tide calendar is a great tool that I thought of on my own. I like to fish and dive, and I was thinking one day, 'Wow. It actually shows a lot about the moon, the tides, the sunset, sunrise. It fit perfectly with what the students need to learn about the Earth, Moon, and Sun interactions. It all in one book. A lot of them are familiar with a monthly calendar and not a lot of them know about a tide calendar. They're all into apps nowadays, so I've been telling them, 'Download these tide apps. Just see what's going on ' Every year I buy new tide calendars, so that they can look at their birthday for the actual year. It's more of a personal connection to the lesson itself where they can go, 'Oh yeah, that's my birthday.' I already, the past few years, have been doing this I've been hearing them sharing their birthdays with their friend. Just that interest alone is what engages them.

I was recently given a Hawaiian lunar calendar, that's slightly different. It's not a monthly calendar, but it organizes by moon phases. Although it looks like a typical calendar, it's a lot different. The kids were surprised to see that, and they can clearly see the moon that's changing shape every day. We compared that to a typical twelve-month calendar, but I only have one. It would be cool if I had a whole class set of those two. Where they can actually look at them up close, and do a comparison between the two. They're going to find out that they're actually pretty similar.

The tide calendars are great tools, but the box that they have to look [00:04:00] in for they're specific date, is really tiny. For a middle school student, to look in a one and a half inch by one and a half inch box and read ten numbers from there, and look at a

graph, it's really difficult. I do project it on the board, but when they are actually doing the assignment in their groups, they're having to look at this tiny box. I think they're missing out on some key features in the box, just because of the fact that it's so tiny for them. They're not used to that. Maybe a bigger tide calendar. They could get a kid sized tide calendar that I could have a class set for, I think that would be a lot more meaningful. They would actually see the patterns better. A lot of times, I've heard them say, 'I can't see anything,' but once I tell them to zoom in on the day, look at what the numbers are telling them. Then, they can actually visualize the changes throughout the time.

This tide calendar is almost identical to a twelve-month calendar. They all know their birthdays. They like to share when their birthdays are with their friends. I just thought it was a good way to bring a personal touch to a maybe not so exciting topic to a lot of them. They can identify with their birthday, and talk story a little bit. Then bring them all back to what we're trying to learn. Which is how the patterns change throughout the years. How does that relate back to the movement of the Moon around the Earth, around the sun?