

Crowdsource Science: Science Education for Elementary Students with Learning Disabilities CROWDSOURCE SCIENCE OBSERVATION (CSO) CALIBRATION PRACTICE 3

## Lesson Transcript CP3

Teacher: "Good morning, class! Today, we'll explore how the Earth's surface moves and changes over time. Let's start with a story." [She opens the book and begins reading. While most students are engrossed, a few appear distracted.] Teacher: "...and that's why continents look like they fit together like puzzle pieces!" [She closes the book.] Teacher: "So, can anyone explain to me what plate tectonics is?" [Many hands rise, but one student, Timmy (Target Student), is poking his neighbor.] Teacher: "Timmy, please have a seat." [Timmy sits down, looking a bit embarrassed.] Teacher: [Pointing to a non-target student] "Yes, Jenny?" Jenny (non-target student): "It's like pieces of Earth's crust that move around on the molten rock below?" Teacher: "Good job, Jenny! That's correct. The Earth's crust is broken into pieces called tectonic plates, and they float and move on the semi-fluid layer underneath called the mantle." Teacher: "Now, when these plates move, what do you think happens?" [A few hands shoot up.] Teacher: [Pointing to another student] "Jason?" Jason (non-target student): "Um, they can crash into each other or move away?" Teacher: "Excellent response, Jason! When plates move towards each other, it's called a convergent boundary; when they move apart, it's a divergent boundary." Teacher: "Alright, let's watch a short film to see this in action." [The lights dim, and a captivating animation about plate tectonics begins. The students are visually drawn to the movements and collisions of the plates.] Teacher: "Timmy, remember to pay attention. This will help with our next activity." [The video ends and the lights come back on.] Teacher: "Now, I'd like you all to open your science journals and write down three things you've learned about plate tectonics." [The sound of pens and pencils moving fills the room. Timmy is writing too.] **Timmy:** "Can I go to the bathroom?" Teacher: "Ok but go quick and remember to wash your hands." [Timmy leaves] Teacher: "Who would like to share something they wrote?" [A few hands go up.] Teacher: [Pointing to a student named Ana] "Ana, what did you write?"



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Ana (non-target student): "I wrote that when two plates push against each other, they can form mountains!"

**Teacher:** "Exactly, Ana! When two plates converge or come together, they can push the Earth's crust up to form mountain ranges. Great observation!"

**Teacher:** [Looking around the room and pointing to another student] "And Carlos, what about you?" **Carlos (non-target student):** "When plates move apart, like in the middle of the ocean, new crust can form?"

**Teacher:** "Absolutely right, Carlos! At divergent boundaries, especially at mid-ocean ridges, molten rock or magma rises from the mantle to form new crust as it cools. Well done!"

[There's a slight pause, and then the door quietly opens as Timmy returns.]

Teacher: "Welcome back, Timmy. Did you catch what Carlos just shared?"

Timmy: "Um, something about new crust forming in the ocean?"

**Teacher:** "Yes, exactly! I'm glad you caught that."

[After the brief discussion, the bell rings]

**Teacher:** "Great job today, class! We'll be ending a bit early for lunch today. Remember to think about how our Earth moves beneath our feet!"