

18 | It's a Disaster!

"Those people had no chance!" Tom exclaimed. "That earthquake hit without warning." He waved the paper's headline about a damaging tremor near a sizable town on the other side of the country.

"Why didn't those scientists – wotchacallem, who study earthquakes – tell them it was going to happen?" asked Greta.

"Seismologists," offered Tom, who always seemed to know these things. "They didn't because no-one can predict earthquakes. They just happen at random."

"Come on," interjected Alex, "we learned about how earthquakes come from all that pressure in the rocks building up, then they just crack. So if they measure the pressure, surely they can predict the earthquake."

"I guess they try," replied Tom, "but it's too complicated. They might be able to tell something's gonna happen sometime in the next few years, but they can't tell exactly when."

"I heard that seismologists in China look at animals – when dogs get frightened, they know the earthquake is about to happen," said Wai Ling, "but it doesn't always work."

"It's like that flood we had," Conchita asserted. "The weatherman said it would rain, but they never told us we'd get washed out."

"Well, the weather's complex too," Alex pointed out. "It's hard to predict precisely."

"In our science lessons, all our experiments are meant to be precise, aren't they?" mused Wai Ling. "How come those experts with all their training can't get it right?"

"How do they try to predict earthquakes and weather and climate and stuff like that anyway?"

"Models," explained Alex. "They use a computer to make like a pretend earth – a bit like SimCity® or SimEarth® or something – and then they run it to see what happens in the future."

"How do they know their model acts like a the real world?" Conchita asked.

"Gee, I don't know ... I guess they don't really," conceded Alex.

"I reckon they're biased," Greta stated. "Look at all those scientists going on about global warming – they're just trying to scare us, so they can make more money from their work. They predict what suits them."

"Huh," snorted Tom, "it's the other way around. All those scientists who reckon it isn't happening make their money from the oil industry. They're the ones who are biased."

"Yeah – it's just like research funded by the dairy industry tells you how much better butter is for your health than margarine, and the margarine manufacturers get research done that proves the opposite," added Alex.

"Every scientist has to raise money from somewhere," Emma reasoned. "Does that mean they are all biased?"

"They shouldn't be," Wai Ling stated. "Science is meant to be unbiased. Anybody researching the same stuff should get the same answer, just like Mr Carey says we should all get the same answer in class."

"Well, they don't," complained Conchita. "I just don't know who to believe on global warming. How can you work out who's telling the truth?"