Unit 2 GeoMation: Baja

So we're going to slice our way through the earth. We're gonna drive off of Baja, California, down undersea, and across. And out in the middle, we find this big bridge. And then sitting out there is Death Valley. And then we're going to come on across and back up onto the coast of Mexico.

And just to make sure it's clear, this is all under water. So here's the waves of Baja. If you're really keen about SCUBA diving, this is a good place to go. And there's birds flying over the top, and there's little boats that are floating in the water, so you can see what the thing is.

Now, if you were to measure the motion of this stuff, we're going to find that it's doing what we've seen elsewhere, which is, there's a motion going away from this ridge. If we could look very carefully, we would find that there is a volcano underneath this, and so material is leaking up into the cracks and making little volcanoes. And as it comes up in the cracks here, it hardens.

Looking at what's undersea, you find that there are lots of rocks that hardened in the cracks. And so the whole seafloor is made of these rocks that hardened in the cracks, and the oldest ones are farthest away from the center. So they get older if you go out on either side.

If you were interested in fish poop and wind-blown dust, and things of that sort, you'd find there's almost none of them on the seafloor very close to the center. And then as you go away, they become more and more common. And that's because there's been more time for them to pile up, and very close to the center of the ridge, they just have not had very much time to pile up at all.

Now, you might imagine that this is related to other things. Then you remember that way down in the earth, one finds convection cells. And so you get the convection cells coming up and then spreading aside, and a little bit of leakage is coming up into the crack that it makes, making seafloor. And all of the world's sea floors are made in this way.