

The Layers of the Earth Curriculum-Based Readers Theatre Script

Developed by Dr. Rosalind M. Flynn with Teachers at the
2008 Alabama Institute for Arts in Education

1	Turn off your video games!	All	The crust can be only three miles
2	Grab your popcorn!		wide under the ocean...
3	And settle down in front of your	20	Ohhhh.
	TV to watch...	All	...and 25 miles wide under the
All	“Science in Action!” [gesture]		mountains!
	[sound effect]	20	Ahhhh.
4	Tonight’s program takes you on	14	So it is like a pizza crust—you
	an incredible journey into...		can have it thick or thin!
All	The Center of the Earth! [gesture]	All	Rock on! [gesture]
5	We’ll travel through the Earth’s	1	Yes, it’s thin.
All	Four different layers! [gesture]	2	It’s rocky.
6	What are the four layers?	3	It’s the Earth’s skin!
7	Like an everlasting gobstopper,	4	You mean the Crust really covers
	the Earth’s top layer is		all of the Earth?
All	The Crust! [gesture]	All	All of it! [gesture]
8	What layer is under the crust?	5	From the top of the mountains...
All	The Mantle! [gesture]	6	through the desert sands...
9	And below that—the third layer is	7	to the bottom of the oceans...
All	The Outer Core! [gesture]	All	...where the crust is the thinnest
10	And last, but not least...	8	...and the rock is
11	We’ll arrive at the inner-most	All	Dense! [gesture][sound effect]
	layer—	9	And the floor is
All	The Inner Core! [gesture]	All	Heavy! [gesture] [sound effect]
12	Let’s start back at the top.	10	But the land is
13	What was the top layer?	All	Lighter! [gesture][sound effect]
All	The Crust! [gesture]	11	Wow, that’s cool!
14	I love a light flakey crust!	12	But here’s something that’s not:
15	The crust is the layer of the Earth	All	The Mantle—the second layer—is
	we live on.		steaming hot! [gesture][sound
16	And it’s not flakey—it’s made of		effect]
	rock.	13	You wouldn’t want to get trapped
17	Rock? I love rock! Rock on dude!		in there!
All	Not that kind of rock! [gesture]	11	Why not?
18	The two main types of rock are	All	Because the Mantle is 1800 miles
All	Basalts and Granite! [gesture]		of hot flowing asphalt!
19	But the crust is not the Earth’s		[gesture][sound effect]
	thickest layer.	14	Isn’t asphalt what’s on the road?
20	How thick is it?	15	I have trouble walking barefoot
			across a road in the summer.

16	Just think about how long a walk through the Mantle would take!	All	That's about 400 laps around Talladega Super Speedway!
17	Why?		[gesture][sound effect]
All	Because the Mantle is the largest layer of the Earth! [gesture]	13	That's all very interesting, but what do we call the science and study of Earth's solid matter?
18	How hot is the Mantle?	All	Hmmm, Geology!
19	The upper part is cooler than the deep Mantle.	14	Who studies the physical structure and processes of the Earth?
All	The deep Mantle sits on top of the Outer Core! [gesture]	All	Duh! Geologists! [sound effect][gesture]
20	This makes the Mantle and Crust move slowly.	15	I was told that geologists believe that as the Earth cooled...
1	What is the Mantle made of?	16	Heavier and denser metals sank to the center of the Earth...
All	Many different rocky materials! [gesture] [sound effect]	All	Sank! [gesture]
2	Did someone say Outer Core? What state is that in?	17	And the lighter materials rose to the top.
3	Alabama!	All	Rose! [gesture]
All	[gesture][sound effect] Not! The Outer Core is iron and nickel in the liquid state. [gesture]	18	What is hot, hot, hotter than the Mantle?
4	The Earth's Outer Core is extremely hot.	All	The Outer and Inner Cores!
All	Hot! [gesture] [sound effect]	19	Would you like to visit the Outer and Inner Cores?
5	And fluid!	All	No way! [gesture]
All	Fluid! [gesture][sound effect]	20	The pressures are so great there that you would be squeezed into a ball
6	How thick is it?	1	smaller than a marble! [gesture]
All	The Outer Core is 1400 miles thick! [gesture]	All	So everyone, what are the four layers of the Earth?
7	And what about the Inner Core?	All	Crust, Mantle, Outer Core, Inner Core!
8	The Inner Core is made of...	3	What an amazing journey we have had
All	Nickel and iron. [gesture]	4	traveling through the four layers of the Earth!
9	And...like AC/DC,	5	See you next time on...
10	Nickel and iron are both	All	"Science in Action!"
All	Heavy Metals! [gesture][sound effect]		
11	In the Inner Core, nickel and iron are in their		
All	solid states! [gesture][sound effect]		
12	The Inner Core is 800 miles thick.		