“Dig It!” Exhibition

Follow the directions to navigate your way through the online exhibition of “Dig It!” put together by the Smithsonian. **The bold text mean you need to answer a question or write something down.**

Go to this web site: [http://forces.si.edu/soils/02_00_00.html](http://forces.si.edu/soils/02_00_00.html)

Read the introduction titled “Sizing Up Soils”

Click on “The Big Picture” and take the Quiz, if you miss a question click on the “Learn More” and learn about the topic.

**What is one interesting fact about soil that you learned from the quiz?**

Click on “State Soil Monoliths” click on Texas then choose 2 other states and read about their soil. **What is a Fun Fact about Texas soil?**

**What is in the soil of one other state? Tell me the name of the state.**

**What is so special about the soil of one other state? Tell me the name of the state, it needs to be different from Texas, and the state in the question above.**

Click on “What is Soil” read through all 5 pages and answer these questions.

A teaspoon of good farm soil contains up to _____________ bacteria in more than 4000 species.

Soil is the _____________ of the earth. Soils are ________________, they are born, they age, they breathe.

**What are the ingredients of soil?**
On page 3 watch the “Chef’s Challenge” video.

What is the today’s secret ingredient?

Who are the judges?

On page 4 click on the “Recipe Book” read some of the different soil recipes. Then click on the “Soil ingredients” take the quiz to see if you can determine the makeup of different types of soils.

What % of ingredients make up Desert Soil?

Loamy Soil?

Peaty Bog?

Read page 5. What does CLORPT stand for?

Click on “Chip off the Old Block” read through all 6 pages.

95% of the earth’s crust is made of just eight elements. What are they?

Texture influences a soil’s capacity to ________________________________

On page 6 play the Color Matching game.

Gray.Blue.Green =

Red.Yellow.Orange =
Click on “Soil Forming Factors” read through all 6 pages. On page 2 play the Hidden Horizons game.

**Describe the A horizon.**

**What is a monolith?**

On page 4 click on the “Earth Skin Types”. **Describe Ultisols.**

**What type of soil is in our area?**

On page 6 click play the “Where in the Soil World are You”.

The flip flop is in the ______________________________ soil type.

The spur is in the ______________________________ soil type.

The mammoth tusk is in the ______________________________ soil type.

Click on “Matters of Life and Death”, read through all 6 pages.

**Not all forms of life need oxygen to breathe. What other things can microorganisms use?**

**Describe some of the characteristics of Lichens.**

Click on “Underneath it All”, read through all 5 pages. On page 1 click on the “Underneath it All” link to dig deep and examine the effects our choices have on soil.

**What are some of the things that you may find in the Washington, D.C. soil sample?**
What are some of the things that you may find in the Terra Preta Soil of the Amazon?

On page 3. **What is an increasing problem caused by global warming?**

On page 4. **What was wrong with the soil in Fredericksburg, Virginia?**

Click on “Wise Choices” read through all 7 pages.

**Soils are renewable but...**

Describe some of the new technology that helps manage soil fertility.

**How is the Millennium Villages Project restoring soil fertility?**

Click on “A World of Soils”, read through all 6 pages. On page 1 watch the “Soil: The secret Ingredient” video.

On page 3. **Define loess:**

“The secrets of soils are the secrets of our lives.”