

Episode: Stuck in Clay

EXPLORING NORTH CAROLINA

Viewing Guide 13 FOR TEACHERS

USEFUL VOCABULARY

clay
earthenware
hematite
inorganic
kaolin
perc (percolate)
sheet silicates
stoneware
utilitarian

CHAPTER 2 (0:00–2:40)

1. Describe why the narrator may have said: “North Carolinians have a love/hate relationship with clay.”
Some negative aspects: Clay sticks on tires, shoes, etc. Some positive aspects: Clay may be used to make bricks, walls, schools, toilets, walkways, etc.
2. Where is clay found in North Carolina? What color is it?
Throughout the state; usually red, but can also be gray and white.
3. What is clay?
Inorganic mineral compounds.
4. What character traits does Ben Owen exemplify through his pottery?
Some possible answers: pride, humility.
5. Why did Ben Owen smash his pots?
He didn’t want to put his name on a product that he considered inferior.

CHAPTER 3 (2:40–4:55)

6. What did the narrator mean by the statement: “Clay has helped define civilization”?
Artistic and utilitarian objects baked from clay date back 5,000 years.
7. What does the word utilitarian mean?
Useful for many practical purposes.
8. Why is clay particularly significant in North Carolina?
Some possible answers: Clay is a part of North Carolina’s heritage; few places on Earth have more clay or more types of clay.
9. American Indians had what uses for clay?
Possible answers: cooking pots, vessels, art objects.

CHAPTER 4 (4:55–8:47)

10. How is clay formed in the earth?
Weathering turns rocks into clay.
11. What is different about the clay in Spruce Pine?
It contains white kaolin that can be used to make china.
12. What gives red clay, which is found throughout the Piedmont, its color?
Rust or hematite.
13. What is the texture of clay? What type of mineral is it?
Extremely fine particles: 1/50th the size of a grain of sand and less than 1/13,000th of an inch; it is part of a slippery family of minerals known as sheet silicates.
14. What makes clay plastic?
Clay particles are small, greasy and slick and stick together well.

North Carolina pottery photo courtesy of N.C. Division of Tourism, Film and Sports Development.

- 15.** What are some effects of clay's affinity for water?

Some possible answers: Clay expands when saturated; it can double in size when wet, but cracks when dry, such as in a cracked clay riverbed; walls built on clay soil can crack.

- 16.** How is clay important to agriculture?

A certain amount of clay is beneficial to crops because it retains water and ions that plants need. However, too much clay can prevent water from percolating and reaching plant roots.

- 17.** How were the most economically important clay deposits in North Carolina formed?

North America and Africa rifted apart 200 million years ago. Triassic basins formed, and shallow, clay-based lakes were created.

- 18.** Why was Research Triangle Park built in its location?

Durham Subbasin is a clay Triassic basin. Its soils don't perc well and so the area wasn't good for farming or development. Research Triangle Park and Raleigh-Durham International Airport are in the middle of the Triassic basin, making good use of land that wasn't practical for other purposes.

CHAPTER 5 (8:47-13:40)

- 19.** Why did settlers of Seagrove begin making pottery?

Some possible answers: They made pottery for storing farm supplies and trading with merchants and craftsmen; they made pots to store milk, whiskey, etc.

- 20.** Describe the differences in earthenware and stoneware.

Some possible answers: Earthenware is easier to fire because of the lower temperatures needed; it has a yellow tone; it is higher in iron content; it is used for baking and cooking. Stoneware is fired at higher temperatures; it is blue, blue-gray or white; it is more durable for storage.

- 21.** Describe the appearance of face jugs.

Some possible answers: Whimsical, large teeth and noses, some with horns or tears.

- 22.** What do you think the narrator meant in describing the process of throwing pots as "a symphony in clay"?

Some possible answers: Pieces must join together to create beauty; making pots is peaceful, much like listening to some symphonic music.

CHAPTER 7 (16:40-22:37)

- 23.** Describe the process of making clay bodies.

Some possible answers: Mix fine, medium and coarse clay; locate each type at different locations; dry, grind, mix and form.

- 24.** What happens to pottery off the wheel?

It dries for about a week, is bisque-fired to 1800 degrees and is fired again at higher temperatures after a glaze is applied.

- 25.** How does a salt glaze affect pottery?

It produces an "orange peel" design.

- 26.** What do you think is meant by the title of this video, "Stuck in Clay"?

Some possible answers: Clay is very plastic and sticky; once a person enjoys working with clay, he or she may be hooked or "stuck" in the process of making things with clay.