## STEM ACTIVITY JEREMIAH

## Clay Vessels

Total Time: Approx. 20-40 min
In Class Time: 15 min
You will need:

- Air dry or oven bake clay (each child will need a ball the size of plum)
- Foam or paper plates
- Permanent marker
- Scratch tools (forks, toothpicks, etc.)

- Containers for student vessels

Note to teachers: Make a decision ahead of time on what type of clay you will use. Air dry clay vessels may be sent home with children the same day. Oven baked clay vessels should be held back, baked, and returned to children the following week. Be sure to let children know what the expectations will be to avoid disappointment if they need to wait to take their craft home.

STEP 1: Cover table surfaces with newspaper or plastic tablecloths.
STEP 2: Pass out plates and clay balls - one per child.
STEP 3: Label each plate with child's name using a marker.
STEP 4: Have children roll the clay between their hands to form a solid ball, avoiding air pockets.

STEP 5: Have children place the ball in one hand. Gently press thumb of opposite hand into center of ball to create an opening. Caution children not to press thumb all the way through. Leave about one-half inch on the bottom of the ball to give the vessel a base.

STEP 6: Begin pinching the sides of the vessel, moving from the base of the vessel, working around in a circle and moving up the sides. Thinning the walls too much may cause the vessel to collapse. Encourage children to keep the walls one-eighth to one-fourth inch thick.

STEP 7: When children are satisfied with vessels, they can gently use scratch tools to add decorative lines to the outside of the vessel. Suggest they lightly scratch their name or the words "listen to God" in the side of the vessel.

STEP 8: TEACH: In our lesson, the Lord said, "As the clay is in the potter's hand, so are you in my hand." God loves us so much! Just like you are shaping this vessel, God wants to shape and form us into His image, to be more like Him.

STEP 9: Air dry clay can be sent home. Be sure to relay manufacturer's drying instructions to children and parents. Oven baked clay should be kept, allowed to dry, and baked according to manufacturer's directions.

## EXPLAINING THE SCIENCE:

 WHAT IS CLAY?
## What is clay?

Clay is a key ingredient in the world. It is used as a building material, in pottery, and in industry. Did you know that clay is also used in paper making and often used to clean dirty water? (Clay particles absorb a wide variety of contaminants and encapsulate suspended solids.)

Where does clay come from?
Clay comes from the earth, but it's not just dirt or soil. Clay is made from tiny, compacted particles of stone. It is a result of the weathering and erosion of rocks containing a mineral known as feldspar. Clay can be found all over the world. It's usually found deep under layers of topsoil as well as near riverbanks. New Zealand has especially large deposits of naturally occurring clay which they export to over twenty countries around the world. White clays, like porcelain are formed from volcanic rock.


