**Objective:** Child will understand that matter is made up of parts of things and that those parts can be disassembled to make something new. Child will be able to describe how they created something and then built something new using the same parts.

**Essential Question(s):** How does matter combine to make something new? How can it break apart and be rebuilt?

**Special Materials:** Paper and pencil for writing
**Bricks Required:** A handful of random pieces

**Project Structure:**
**Engage/Explore:**
1. Ask child if they know what matter is. If they don’t, explain that it is the scientific word for what everything is made of, and that some matter occurs naturally and some is manufactured.
2. Ask child if they can name some different types of matter, and then whether each type is natural or manufactured. Create a T-chart of the two types.

**Explain/Explore:**
1. Pass out about 20 or so bricks (a good handful, and can be fairly random) or a large pile, asking:
   a. What kind of matter (natural or manufactured) are the bricks?
   b. How do the bricks go together? Is there only one option, like a puzzle? (Answer: There are many ways to put them together, which is how matter works.)
   c. How do the bricks function if you make something flat? What about if you make something more three dimensional?
2. Ask child to build something with the 20 bricks.
   a. After building, child should write 3-4 sentences explaining what they built and how they chose their bricks. (Collect unused bricks while the child is writing.)
3. Child then takes apart their bricks, keeping the same pile, and builds something new.
   a. When completed, ask child to write 3-4 more sentences explaining how they used the same pieces to build something different.

**Images:**
Right: converting a container to a one-eyed “quadripus” (because there weren’t enough bricks for 8 legs)
Left: converting a guy coming out of a hole to a shadow of a tesseract