**Project 12**  
**Bricks By Design**

**Essential Question(s):** How do you determine what features are necessary for a functional design?

**Special Materials:** Supplementary materials for extending the project, if desired.  
**Bricks Required:** Plates, 1xn bricks, tiles

**Engage/Explore:**
1. Ask what strategies child uses to keep their dresser organized. Have they noticed how the adults in their lives keep their dressers (or similar places) organized? Encourage child to think about using a caddy for that purpose.

**Explain/Explore:**
2. Ask child what kinds of objects go in a caddy and make a list.  
   a. As the list is made, ask about attributes of the different objects (tall, short, wide, narrow).  
   b. Ask child to make their own list of what they need to organize, which may not include everything on the list.  
   c. Ask child to consider the attributes of their own lists.

**Elaborate:**
1. Have child plan their own caddies. They may want to begin with a rough sketch, or to outline with bricks on a plate, creating 2 or 3 different compartments. Child should be encouraged to try fitting the objects in before they get too far (for example, is the caddy the right size for an eraser? How tall does it need to be to keep pencils from falling out?)  
2. Child then writes a paragraph explaining the features of their caddy and why they included them.