

In-Class Activity (Machine Design): Artifact Box

Your name: _____ Date: _____

Object A: _____ (leave blank for now). **If you know what the object is, PLEASE DON'T TELL;** allow everyone to have their chance to actively learn. You can still actively participate by noticing and discussing various details or features as suggested below.

Sketches (overall and/or of interesting features) – spend 1-2 minutes sketching (helps you to see details)

The following questions are meant to help you think about the object – you do not need to answer all questions.

What material(s) is it made from?

What does this thing do, and/or what is the purpose or function of specific features (describe)

Any obvious design criteria the object was designed to meet such as: low cost, high strength, tight tolerances/precision, durable, operate in a corrosive environment, etc....what indicates this to you (for example, why do you think it is low cost)?

What market do you think it was made for: consumer, testing/laboratory, manufacturing, industry, etc.

How was it made (casting, machined, injection molding, welding, etc.).

What are some things an engineer may need to understand or know in order to design it? Anything you may be studying or have studied in a class?

Questions you may have about the object: