Powers of Ten Protocol

Goal
To help designers understand the **larger context** in which a challenge exists and develop **non-obvious insights**.

Duration
5-50 min depending on the depth and breadth of the exercise

Group Size
Can be done in small groups or as a large class

What is it?
Powers of Ten is a reframing technique that can be used as a synthesis or ideation method. It allows the design team to use an intentional approach to considering the problem at varied magnitudes of framing.

Why use powers of ten?
This is powerful exercise for generating a large number of ideas during the empathy building process. It helps designers understand the larger context in which their users exist. By developing a broader understanding of the context designers are able to develop deeper, non-obvious insights.

How to use powers of ten?
The concept of Powers of Ten is to consider one aspect over increasing and decreasing magnitudes of context. Let's take two examples to illustrate how Powers of Ten could be used during a design process:

POWERS OF TEN FOR INSIGHT DEVELOPMENT: In this example, imagine you are designing a checkout experience, and you are trying to understand a user's motivation and approach to an aspect of her life. You are thinking about how she makes buying decisions. We made the observation that she read a number of customer reviews before making a purchase and are developing an insight that she values her peers' opinions when making purchases. Consider what her behavior might be for buying various items over a wide range of costs, from a pack of gum, to a pair of shoes, to a couch, to a car, to a house. Capture this in writing.Probe for nuances in your insight and see where it breaks down. Perhaps this could develop into a framework, such as a 2x2.

POWERS OF TEN FOR IDEATION: During brainstorming groups idea generation lulls from time to time. One way to facilitate new energy is to use Powers of Ten. Continue with your brainstorming topic, but add a constraint that changes the magnitude of the solution space. "What if it had to cost more than a million dollars to implement?", "What about under 25 cents?", "What it was physically larger than this room?, "Smaller than deck of cards", "Had no physical presence", "What if our school served 1000 students?," "What if our school only had ten students?" More power to you.

From d.School, Stanford; found in d.School Bootcamp Bootleg document