

Intro to Nanotechnology



Summary

The *Intro to Nanotechnology* exhibition introduces the basics of nanoscience through four interactive exhibit components.

Learning Goals

- Things at the nanoscale are super small.
- Super small nanoparticles can have very unexpected properties.
- Scientists are figuring out how to create and manipulate materials at the nanoscale through self-assembly.

Components Included:

Introductory Video

An engaging video *Nanotechnology: What's the Big Deal?* gives a broad overview of the nanoscale and nanosciences.

At the Nanoscale

Through the activity called "A Billion Beads," visitors explore the concept of scale and can see for themselves how much a billion of something is.

Unexpected Properties

Visitors alter the size of a magnified "Quantum Dot" and watch the light that it emits shift from red to blue as it shrinks to a fraction of a nanometer.

Creating Nanomaterials

Visitors watch as floating "molecules" move themselves into an orderly pattern on an air hockey table in the interactive "Self-Assembly."

Exhibit Details

Audience: All ages.

Exhibit Format: Exhibition with four components.

Exhibit Dimensions: 450 Square feet (15' x 15' exhibit space surrounded by a 3' walkway).