What is Nanotechnology?

Nanotechnology is the science of the small; the very small. It is the use and manipulation of matter at a tiny scale. At this size, atoms and molecules **work differently**, and provide a variety of surprising and **interesting uses**.

The prefix of nanotechnology derives from ‘nanos’ – the Greek word for dwarf. A nanometre is a billionth of a metre, or to put it comparatively, about 1/80,000 of the diameter of a human hair. The image below shows a further size comparison.

Nanotechnology should not be viewed as a single technique that only affects specific areas. It is more of a ‘catch-all’ term for a science which is benefiting a **whole array of areas**, from the environment, to healthcare, to hundreds of commercial products. You can discover these areas, and what nanotechnology is doing to improve them, by navigating through the rest of the tree.

Although often referred to as the 'tiny science', nanotechnology **does not simply mean very small structures** and products. Nanoscale features are often incorporated into bulk materials and large surfaces.

Okänd källa