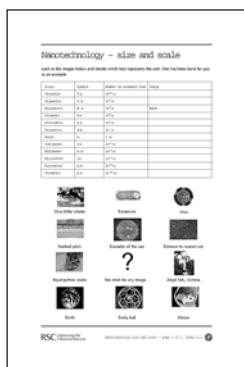


Nanotechnology size and scale



Index 5.1
1 sheet

Further activities on nanochemistry size and scale can be found in the RSC publication *Contemporary chemistry for schools and colleges*, London: Royal Society of Chemistry, 2004.

Name	Symbol	Number in standard form	Image
Terametre	Tm	10^{12} m	Bigger than the diameter of the solar system, less than the distance to the closest star
Gigametre	Gm	10^9 m	The sun is 1.5 Gm across.
Megametre	Mm	10^6 m	Earth
Kilometre	km	10^3 m	Angel Falls, Venezuela – 980 metres
Hectometre	hm	10^2 m	Football pitch
Decametre	dm	10 m	Orca
Metre	m	1 m	Royal Python snake
Centimetre	cm	10^{-2} m	Width of a fingernail
Millimetre	mm	10^{-3} m	Mite
Micrometre	μm	10^{-6} m	Bacterium
Nanometre	nm	10^{-9} m	Buckyball – approximately 1 nm
Picometre	pm	10^{-12} m	Atom diameters range from 30–600 pm

Nanotechnology – size and scale

Look at the images below and decide which best represents the unit. One has been done for you as an example.

Name	Symbol	Number in standard form	Image
Terametre	Tm	10^{12} m	
Gigametre	Gm	10^9 m	
Megametre	Mm	10^6 m	Earth
Kilometre	km	10^3 m	
Hectometre	hm	10^2 m	
Decametre	dm	10 m	
Metre	m	1 m	
Centimetre	cm	10^{-2} m	
Millimetre	mm	10^{-3} m	
Micrometre	μm	10^{-6} m	
Nanometre	nm	10^{-9} m	
Picometre	pm	10^{-12} m	



Orca (killer whale)



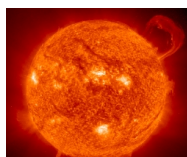
Bacterium



Insect mite



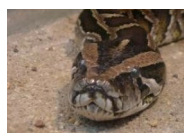
Football pitch



Diameter of the sun



Distance to nearest star



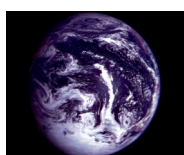
Royal python snake



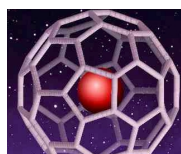
Too small for any image...



Angel falls, Victoria



Earth



Bucky ball



Width of a fingernail