

C4.1 How is data used to choose a material for a particular use?

brittle

electrical conductivity

malleable

melting point

ceramic

flexible

material

nanoparticle

clay

glass

matrix

polymer

composite

hard

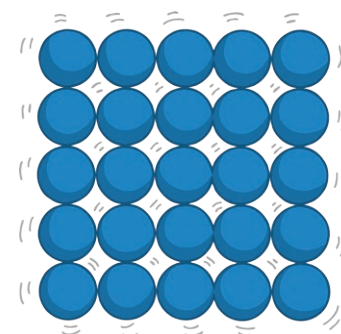
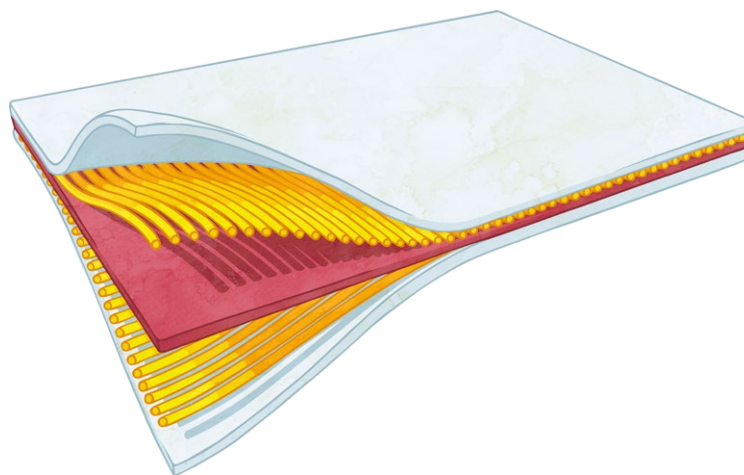
strength

compression

temperature

density

tension



C4.2 What are the different types of polymers?

addition polymerisation

alcohol

alkene

amine

amino acid

carbohydrate

carboxylic acid

cellulose

condensation
polymerisation

crude oil

dna

double bond

functional group

monomer

nucleotide

plastic

polyamide

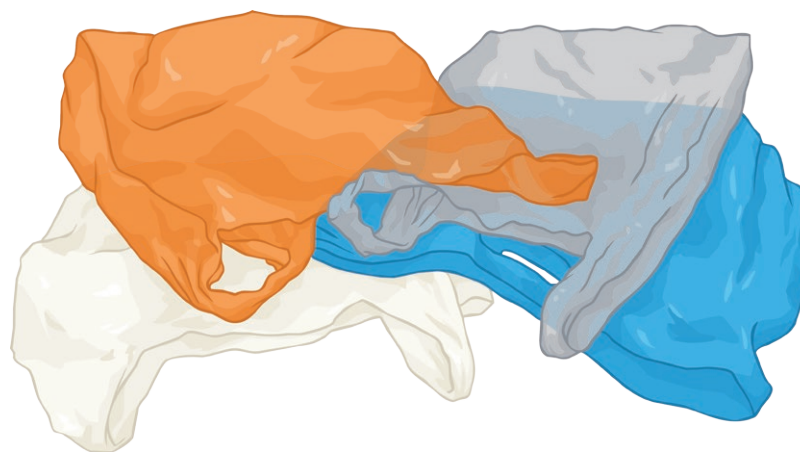
polyester

protein

starch

sugar

polymer



C4.3 How do bonding and structure affect properties of materials?

allotrope

graphite

material

natural

atom

hardness

melting point

polymer

bonding

intermolecular force

metal

properties

carbon

lubrication

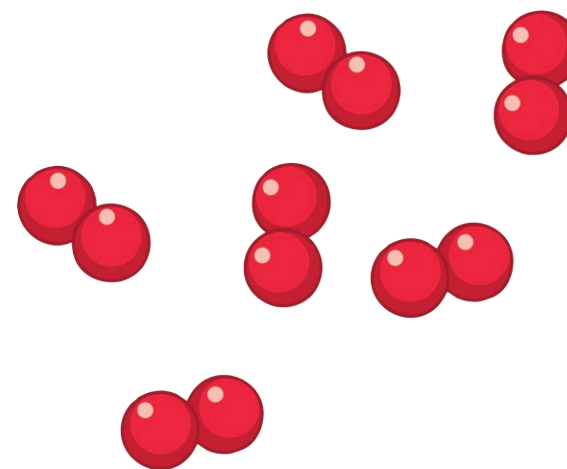
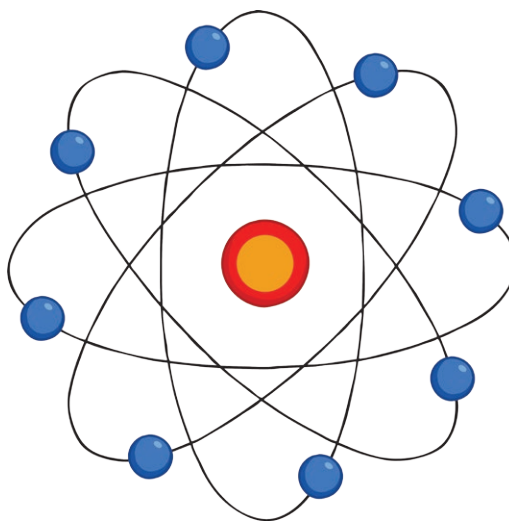
synthetic

conductivity

covalent bond

diamond

element



C4.4 Why are nanoparticles so useful?

benefit

nanoparticle

surface area

electrical conductivity

nanotechnology

thermal conductivity

fullerenes

nanotube

volume

graphene

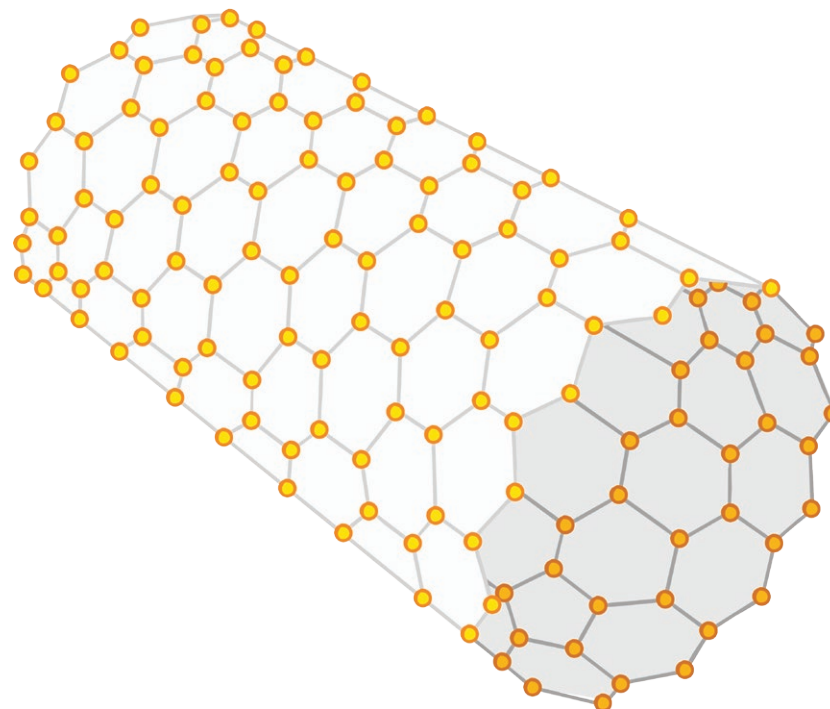
particle

health

properties

molecule

risk



C4.5 What happens to products at the end of their useful life?

biodegradable

environment

metal ore

resources

corrosion

incineration

non-biodegradable

reusing

crude oil

iron

oxidation

disposal

landfill

oxygen

electricity generation

life cycle assessment
(LCA)

recycling

electron

reduction

