

Introduction to Nanotechnology

Nanotechnology · Practice Test · 12 Questions

1. How small is a nanometre compared to a metre?

- A) One hundredth
- B) One thousandth
- C) One millionth
- D) One billionth

2. Which tool do scientists use to see objects at the nanoscale?

- A) Magnifying glass
- B) Electron microscope
- C) Standard telescope
- D) Pair of binoculars

3. What is the prefix 'nano-' derived from in Greek?

- A) Small
- B) Dwarf
- C) Invisible
- D) Particle

4. Which field of science does nanotechnology primarily work within?

- A) Astronomy
- B) Biology
- C) Physics and Chemistry
- D) History

5. What happens to the properties of some materials when they are made into nanoparticles?

- A) They stay exactly the same
- B) They change their behavior
- C) They turn into liquids
- D) They disappear

6. Which natural example shows nanotechnology in color, like on a butterfly wing?

- A) Structural color
- B) Chemical dye
- C) Paint
- D) Reflection

7. What is one common use of nanotechnology in modern sunscreen?

- A) Adding flavor
- B) Blocking UV rays
- C) Changing the color
- D) Making it waterproof

8. Nanotechnology involves manipulating matter at what level?

- A) Planetary
- B) Macroscopic
- C) Microscopic
- D) Atomic and molecular

9. Why are carbon nanotubes important in nanotechnology?

- A) They are very strong
- B) They are edible
- C) They are heavy
- D) They are magnetic

10. Which material is often studied in nanotechnology for its ability to conduct electricity?

- A) Wood
- B) Graphene
- C) Glass
- D) Plastic

11. How are nanoparticles usually measured?

- A) In metres
- B) In nanometres
- C) In kilometres
- D) In centimetres

12. What is the primary goal of nanotechnology?

- A) To build larger machines
- B) To study stars
- C) To engineer materials at the smallest scale
- D) To study ancient fossils