

Tiny Tech Wonders

Nanotechnology · Practice Test · 18 Questions

1. How small is a nanometer compared to a meter?

- A) It is one thousandth
- B) It is one millionth
- C) It is one billionth
- D) It is one hundredth

2. Which tool do scientists use to see objects as small as atoms?

- A) A magnifying glass
- B) An electron microscope
- C) A pair of binoculars
- D) A standard camera

3. If you shrunk a marble to the size of a nanometer, how big would the Earth become?

- A) The size of a marble
- B) The size of a city
- C) The size of a house
- D) The size of a car

4. What is the material made of carbon atoms shaped like a tiny tube called?

- A) Carbon straw
- B) Carbon nanotube
- C) Carbon pipe
- D) Carbon fiber

5. Why do some materials change color when they are made into nanoparticles?

- A) They get dirty
- B) They interact with light differently
- C) They are painted
- D) They get hot

6. Which natural surface is famous for using nanostructures to stay dry and clean?

- A) A rose petal
- B) A lotus leaf
- C) An apple skin
- D) A blade of grass

7. What do scientists call a particle that is between 1 and 100 nanometers in size?

- A) A gigaparticle
- B) A megaparticle
- C) A nanoparticle
- D) A microparticle

8. Nanotechnology is used in some sunscreens to do what?

- A) Make them smell like flowers
- B) Help them absorb invisible UV rays
- C) Make them sparkle
- D) Make them taste sweet

9. What makes gold appear a different color at the nanoscale?

- A) It becomes magnetic
- B) It turns into liquid
- C) It changes how it reflects light
- D) It becomes radioactive

10. What part of a gecko's body uses nanotechnology to help it climb walls?

- A) Its sticky saliva
- B) Tiny hairs on its feet
- C) Its sharp claws
- D) Its suction cup tail

11. Which field of science does nanotechnology combine?

- A) Biology, physics, and chemistry
- B) Only math and art
- C) Only geography
- D) Only history

12. What is one way nanotechnology helps in medicine?

- A) It makes pills taste like chocolate
- B) It helps deliver medicine to specific cells
- C) It makes doctors see in the dark
- D) It allows pills to fly

13. What happens to the strength of some materials when they are made into nanomaterials?

- A) They become very weak
- B) They become much stronger
- C) They melt instantly
- D) They disappear

14. What are atoms, the building blocks of everything, often compared to in size?

- A) Boulders
- B) Grains of sand
- C) Invisible specks
- D) Tennis balls

15. Which invention allowed scientists to first 'see' atoms?

- A) The telescope
- B) The scanning tunneling microscope
- C) The kaleidoscope
- D) The periscope

16. How do we describe the size of things studied in nanotechnology?

- A) Macro
- B) Micro
- C) Nano
- D) Giga

17. What is a 'nanobot' intended to be?

- A) A very large robot for construction
- B) A robot the size of a car
- C) A robot that is incredibly tiny
- D) A robot that only plays games

18. What do we call the study of the very, very small?

- A) Nanotechnology
- B) Astronomy
- C) Geology
- D) Botany