Physics in Nature and Animals

Physics · Practice Test · 20 Questions

1. Which physical property allows a water strider to walk on the surface of a pond?

A) Surface tension
B) Gravity
C) Magnetism
D) Buoyancy

2. What type of energy do plants primarily convert from sunlight during photosynthesis?

A) Nuclear energy
B) Radiant energy
C) Sound energy
D) Geothermal energy

3. Which force keeps birds and airplanes on the ground when they are not flying?

A) Friction
B) Magnetism
C) Gravity
D) Static electricity

4. What is the primary method of heat transfer from the Sun to the Earth?

A) Conduction
B) Convection
C) Radiation
D) Insulation

5. Which state of matter is common in clouds and fog?

A) Solid
B) Liquid
C) Plasma
D) Gas

6. What physical phenomenon causes a rainbow to appear in the sky?

A) Reflection of light
B) Refraction of light
C) Magnetic pull
D) Sound waves

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

7. Why do large animals like elephants have thick legs to support their weight against gravity?

A) To increase surface area
B) To lower their density
C) To distribute pressure
D) To create electricity

8. Which property of sound allows bats to use echolocation to navigate?

A) Reflection
B) Absorption
C) Refraction
D) Magnetism

9. What force acts between two surfaces in contact that slows down a sliding animal?

A) Gravity
B) Friction
C) Inertia
D) Acceleration

10. Which of these objects acts like a convex lens in nature to focus sunlight?

A) A flat leaf
B) A dewdrop
C) A rock
D) A blade of grass

11. What do we call the change of state from liquid water to water vapour?

A) Freezing
B) Condensation
C) Evaporation
D) Sublimation

12. Which form of energy is stored in a compressed spring or a stretched rubber band?

A) Kinetic energy
B) Potential energy
C) Thermal energy
D) Chemical energy

13. What causes a compass needle to point toward the North Pole?

A) Gravity
B) Earth's magnetic field
C) Wind resistance
D) Static charge

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

14. How is heat transferred through the metal handle of a pot on a fire?

A) Conduction
B) Convection
C) Radiation
D) Evaporation

15. What is the unit used to measure the intensity of sound, like a lion's roar?

A) Joules
B) Decibels
C) Watts
D) Newtons

16. Which physical process allows a fish to float at a specific depth in water?

A) Neutral buoyancy
B) Magnetic repulsion
C) Thermal expansion
D) Surface tension

17. What is the name for the natural movement of heat in the atmosphere, creating wind?

A) Conduction
B) Convection
C) Radiation
D) Friction

18. Which colour of clothing would absorb the most solar radiation on a sunny day?

A) White
B) Yellow
C) Black
D) Silver

19. What does the 'pitch' of a bird's song depend on?

A) Frequency of sound waves
B) Light intensity
C) Air pressure
D) Magnetic field

20. Which phenomenon makes it easier to lift an object underwater than in the air?

A) Friction
B) Buoyancy
C) Gravity
D) Magnetism

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.