ENGLAND GCSE COMBINED SCIENCE OCR GATEWAY FOUNDATION · UNIT 18 · 25 QUESTIONS

# Global Challenges in Physics — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button so it can be fixed.

**1** **Fishing boats float on water. Why do they float?**

- A they have sails that catch the wind
- B they are made of metal, which floats
- C they displace enough water
- D they are heavy and sink slowly

Understand It with Pulse | Flag a mistake

**2** **A bicycle has brakes. What do the brakes do to kinetic energy?**

- A transfer it to heat
- B store it
- C destroy it
- D turn it into light and sound

Understand It with Pulse | Flag a mistake

3 **A red race car speeds up on a straight track. What is the resultant force doing?**

A doing nothing

B causing deceleration

C causing acceleration

D causing a turn

Understand It with Pulse | Flag a mistake

4 **A sailing ship uses the wind. What type of energy is wind?**

A kinetic energy

B thermal energy

C potential energy

D chemical energy

Understand It with Pulse | Flag a mistake

5 **A rocket is pushed up by hot gases. What is the upward force called?**

- A drag
- B thrust
- C weight
- D lift

Understand It with Pulse | Flag a mistake

6 **A passenger aeroplane cruises. Which force opposes its motion?**

- A drag
- B thrust
- C weight
- D lift

Understand It with Pulse | Flag a mistake

7 **Why do some people object to wind turbines?**

A they make carbon dioxide

B they stop the wind blowing

C they spoil the landscape

D they use up coal

Understand It with Pulse | Flag a mistake

8 **In a coal power station, what turns the turbine?**

A coal directly

B steam

C wind

D cold water

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9 **What is the stopping distance?**

A thinking distance plus braking distance

B thinking distance only

C braking distance only

D thinking distance minus braking distance

Understand It with Pulse | Flag a mistake

10 **Which energy resource uses moving air?**

A solar

B nuclear

C wind

D coal

Understand It with Pulse | Flag a mistake

**11** **Which of these reduces the force on a driver in a crash?**

- A a much heavier car body
- B a faster speed
- C a longer stopping time
- D a harder seat

Understand It with Pulse | Flag a mistake

**12** **A passenger train brakes. What force slows it down?**

- A lift
- B gravity, pulling it down
- C friction
- D thrust

Understand It with Pulse | Flag a mistake

13 **Which of these is a use of geothermal energy?**

A powering cars

B lighting homes

C making petrol for cars

D heating buildings

Understand It with Pulse | Flag a mistake

14 **A Ferris wheel turns slowly. A person on the wheel moves in a circle. What is the person's speed like?**

A decreasing speed

B steady speed

C increasing speed

D zero speed

Understand It with Pulse | Flag a mistake

15 **Which energy resource uses the tides?**

A tidal power

B solar power

C biomass

D geothermal power

Understand It with Pulse | Flag a mistake

16 **What is the braking distance?**

A the length of the road

B the distance travelled while the driver reacts

C the distance travelled while the brakes act

D the distance between two cars

Understand It with Pulse | Flag a mistake

17 **Why is solar power not used at night?**

A there is no sunlight

B the Sun is too far away

C the panels cool down

D the panels are switched off

Understand It with Pulse | Flag a mistake

18 **Why does a heavy lorry take longer to stop than a car at the same speed?**

A its engine is bigger

B its brakes work harder

C its tyres are wider

D it has more momentum

Understand It with Pulse | Flag a mistake

19 **Why is biofuel called renewable?**

A new plants can be grown

B it never runs out of plants

C it is free

D it makes no waste

Understand It with Pulse | Flag a mistake

20 **Which of these is a renewable energy resource?**

A oil

B natural gas

C wind

D coal

Understand It with Pulse | Flag a mistake

21 **Which of these makes no carbon dioxide while generating electricity?**

A natural gas

B coal

C nuclear

D oil

Understand It with Pulse | Flag a mistake

22 **Which of these increases the braking distance?**

A good brakes

B a dry road

C new tyres

D a wet road

Understand It with Pulse | Flag a mistake

**23** **Which energy resource is best for a windy island?**

- A solar
- B geothermal
- C wind
- D coal

Understand It with Pulse | Flag a mistake

**24** **Why do crash helmets have a soft lining?**

- A it lengthens the impact time
- B it makes the helmet lighter
- C it keeps the head warm
- D it makes the helmet stronger

Understand It with Pulse | Flag a mistake

25

## What are fossil fuels?

A wood, wind and water

B sunlight, wind and waves

C uranium, plutonium and thorium

D coal, oil and natural gas

Understand It with Pulse

Flag a mistake

# ANSWER KEY

| | | | | | |
|---|---|---|---|---|---|
| **1.** | C | **10.** | C | **19.** | A |
| **2.** | A | **11.** | C | **20.** | C |
| **3.** | C | **12.** | C | **21.** | C |
| **4.** | A | **13.** | D | **22.** | D |
| **5.** | B | **14.** | B | **23.** | C |
| **6.** | A | **15.** | A | **24.** | A |
| **7.** | C | **16.** | C | **25.** | D |
| **8.** | B | **17.** | A | | |
| **9.** | A | **18.** | D | | |

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