ENGLAND GCSE PHYSICS OCR GATEWAY HIGHER · UNIT 8 · 25 QUESTIONS

Global Challenges — 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 to let Brett know so he can fix it.

1 **A bicycle freewheels downhill. What happens to its speed?**

- A it becomes zero
- B it stays the same
- C it increases
- D it decreases

Understand It with Pulse | Flag a mistake

2 **A red race car brakes hard. What happens to its kinetic energy?**

- A it increases
- B it is transferred to heat
- C it becomes sound only, nothing else
- D it disappears

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

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

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4 **A passenger aeroplane flies at a steady speed and height. What is the resultant force on the aeroplane?**

- A 0 N
- B 5000 N
- C 1000 N
- D 10000 N

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

A they have sails that catch the wind

B they displace enough water

C they are made of metal, which floats

D they are heavy and sink slowly

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

A zero speed

B increasing speed

C decreasing speed

D steady speed

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7 **What is the frequency of mains electricity in the UK?**

- A 60 Hz
- B 230 Hz
- C 50 Hz
- D 5 Hz

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8 **What is a neutron star?**

- A a dense neutron star
- B a star made of iron
- C a planet around a dead star
- D a star that is still burning

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9 **Why does a star stay the same size on the main sequence?**

A gravity disappears

B it cools down

C forces balance

D it stops making energy

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10 **What provides the force that keeps the Moon in orbit around the Earth?**

A the tides

B the wind

C gravity

D magnetism

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

- A kinetic energy
- B thermal energy
- C chemical energy
- D potential energy

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

- A they spoil the landscape
- B they stop the wind blowing
- C they make carbon dioxide
- D they use up coal

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13 **Why is the light from a moving-away galaxy red-shifted?**

A the waves are stretched

B the light slows down

C the galaxy turns red

D the waves are squashed up

Understand It with Pulse | Flag a mistake

14 **What is a geostationary satellite?**

A one that falls to Earth

B one that orbits the Sun

C it stays over one spot

D one that stays still in space

Understand It with Pulse | Flag a mistake

15 **What force pulls the gas together to form a star?**

A pressure from light

B gravity

C magnetism

D friction

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16 **What is biofuel made from?**

A sunlight

B plants or animal waste

C rocks and minerals from the ground

D sea water

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17 **What does red-shift from distant galaxies tell us about the Universe?**

A it is getting smaller

B it is shrinking

C it is not changing

D it is expanding

Understand It with Pulse | Flag a mistake

18 **Which of these is a fossil fuel?**

A sunlight

B oil

C wood

D wind

Understand It with Pulse | Flag a mistake

19 **A rocket in space has no air around it. What happens to air resistance?**

A there is none

B it increases

C it stays the same

D it becomes gravity

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

A good brakes

B new tyres

C a dry road

D a wet road

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21 **What happens to the intensity of radiation from a black body as the temperature rises?**

A it falls at all wavelengths

B it only rises in the red

C it stays the same

D it increases everywhere

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22 **Which planet is the largest in the Solar System?**

A Neptune, the far planet

B Earth

C Jupiter

D Saturn, the ringed planet

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23 **About how far away is the nearest star after the Sun?**

- A about 4 kilometres
- B about 4 light-years
- C about 400 light-years
- D about 4 million kilometres

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24 **What does a power station do?**

- A it makes water
- B it makes fuel
- C it generates electricity
- D it stores electricity for later use

Understand It with Pulse | Flag a mistake

25

What does a crumple zone do in a crash?

A it stops the wheels turning

B it protects the paintwork

C it absorbs energy

D it makes the car faster

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

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