ENGLAND GCSE PHYSICS EDEXCEL HIGHER · UNIT 9 · 25 QUESTIONS

Forces and Their Effects — 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 Ferris wheel is at the top. What is the person's height like?**

- A at zero
- B at its greatest
- C at its smallest
- D unchanged

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2 **A wristwatch ticks every second. How many ticks in a minute?**

- A 100
- B 12
- C 30
- D 60

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3 **A ladder is climbed. Which energy store increases?**

- A thermal energy from friction
- B kinetic energy of motion
- C elastic potential energy
- D gravitational potential

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4 **A car goes around a roundabout at a steady speed. Is the car accelerating?**

- A yes, its speed is increasing quickly
- B no, its speed is steady and unchanging
- C yes, its direction is changing
- D no, it is not moving at all

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5 **Hardcover books are stacked on a table. What force pulls them down?**

- A tension
- B friction
- C air resistance
- D gravity

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6 **A cardboard box sits on a floor. What is the force between the box and the floor?**

- A the friction between the surfaces
- B the upthrust from the floor
- C the weight of the box
- D the air pressure all around it

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7 **A force of 100 N acts on an area of 10 square metres. Calculate the pressure in pascals.**

- A 25
- B 10
- C 20
- D 5

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8 **A force of 400 N acts on an area of 10 square metres. What is the pressure?**

- A 4000 Pa
- B 20 Pa
- C 80 Pa
- D 40 Pa

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9 **A force of 20 N acts 2 m from a pivot. Calculate the moment in Nm.**

- A 40
- B 55
- C 20
- D 80

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10 **What is the pressure in a liquid caused by?**

- A the speed of the liquid
- B the temperature of the liquid, which is hot
- C the liquid above weighs on it
- D the colour of the liquid

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11 **What does a gear do in a bicycle?**

A it changes force and speed

B it stores energy

C it makes the wheels bigger and heavier

D it stops the bike

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12 **A force of 50 N acts 4 m from a pivot. What is the moment of the force?**

A 400 Nm

B 200 Nm

C 100 Nm

D 210 Nm

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13 **A force of 500 N acts on an area of 10 square metres. What is the pressure?**

- A 55 Pa
- B 100 Pa
- C 25 Pa
- D 50 Pa

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14 **A force of 100 N acts on an area of 20 square metres. Calculate the pressure in pascals.**

- A 10
- B 5
- C 2
- D 20

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15 **A force of 200 N acts on an area of 2 square metres. What is the pressure?**

- A 200 Pa
- B 50 Pa
- C 100 Pa
- D 400 Pa

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16 **A force of 50 N acts 2 m from a pivot. Calculate the moment in Nm.**

- A 200
- B 115
- C 100
- D 50

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17 **A see-saw balances when the moments on each side are what?**

- A doubled on the left side
- B bigger on the heavy side
- C zero on both sides
- D equal

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18 **A force of 10 N acts 4 m from a pivot. What is the moment of the force?**

- A 80 Nm
- B 40 Nm
- C 20 Nm
- D 50 Nm

Understand It with Pulse | Flag a mistake

19 **A force of 100 N acts on an area of 2 square metres. What is the pressure?**

- A 55 Pa
- B 100 Pa
- C 50 Pa
- D 25 Pa

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20 **A force of 400 N acts on an area of 2 square metres. Calculate the pressure in pascals.**

- A 100
- B 200
- C 400
- D 215

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21 **A force of 100 N acts on an area of 5 square metres. What is the pressure?**

- A 40 Pa
- B 10 Pa
- C 20 Pa
- D 500 Pa

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22 **A force of 50 N acts 1 m from a pivot. Calculate the moment in Nm.**

- A 100
- B 65
- C 50
- D 25

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23 **A door is hard to push open near its hinges. Why?**

- A the handle is too far away
- B the moment is small
- C the hinges push back harder
- D the door is heavier near the hinges

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24 **A force of 25 N acts 5 m from a pivot. What is the moment of the force?**

- A 135 Nm
- B 125 Nm
- C 62 Nm
- D 250 Nm

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25 **A force of 200 N acts on an area of 4 square metres. What is the pressure?**

A 100 Pa

B 50 Pa

C 55 Pa

D 25 Pa

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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