ENGLAND GCSE COMBINED SCIENCE EDEXCEL FOUNDATION · UNIT 24 · 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 so it can be fixed.

1 **A car leaves a roundabout. What happens to its direction?**

- A it changes
- B it stays the same
- C it disappears
- D it reverses

Understand It with Pulse | Flag a mistake

2 **A cardboard box is pushed across a floor. What opposes the push?**

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

Understand It with Pulse | Flag a mistake

3 **A wristwatch measures time. What is the unit of time?**

- A the day
- B the minute
- C the hour
- D the second

Understand It with Pulse | Flag a mistake

4 **Hardcover books have mass. What is mass measured in?**

- A watts
- B newtons, the unit of force
- C joules
- D kilograms

Understand It with Pulse | Flag a mistake

5 **A ladder is used to reach a roof. What is the ladder an example of?**

- A a power source
- B a simple machine
- C a lever only
- D a complex machine

Understand It with Pulse | Flag a mistake

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

- A increasing speed
- B decreasing speed
- C zero speed
- D steady speed

Understand It with Pulse | Flag a mistake

7 **A small gear drives a large gear. What happens to the turning force?**

- A it falls and the speed rises
- B it stays the same
- C it disappears
- D force up, speed down

Understand It with Pulse | Flag a mistake

8 **A force of 200 N acts on an area of 5 square metres. What is the pressure?**

- A 40 Pa
- B 80 Pa
- C 20 Pa
- D 45 Pa

Understand It with Pulse | Flag a mistake

9 **A force of 25 N acts 2 m from a pivot. What is the moment of the force?**

- A 60 Nm
- B 100 Nm
- C 25 Nm
- D 50 Nm

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

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

Understand It with Pulse | Flag a mistake

11 **A force of 1000 N acts on an area of 5 square metres. Calculate the pressure in pascals.**

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

Understand It with Pulse | Flag a mistake

12 **A force of 500 N acts on an area of 2 square metres. What is the pressure?**

- A 500 Pa
- B 250 Pa
- C 125 Pa
- D 255 Pa

Understand It with Pulse | Flag a mistake

13 **A force of 50 N acts 4 m from a pivot. Calculate the moment in Nm.**

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

Understand It with Pulse | Flag a mistake

14 **Why does a long spanner undo a tight nut more easily?**

- A the spanner is heavier
- B the nut gets hotter
- C the force is smaller
- D the moment is bigger

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

16 **A force of 25 N acts 4 m from a pivot. What is the moment of the force?**

- A 50 Nm
- B 100 Nm
- C 110 Nm
- D 200 Nm

Understand It with Pulse | Flag a mistake

17 **A force of 400 N acts on an area of 2 square metres. What is the pressure?**

- A 800 Pa
- B 200 Pa
- C 100 Pa
- D 400 Pa

Understand It with Pulse | Flag a mistake

18 **A force of 100 N acts on an area of 5 square metres. Calculate the pressure in pascals.**

- A 10
- B 20
- C 35
- D 40

Understand It with Pulse | Flag a mistake

19 **A force of 100 N acts on an area of 4 square metres. What is the pressure?**

- A 50 Pa
- B 12 Pa
- C 30 Pa
- D 25 Pa

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

A the hinges push back harder

B the door is heavier near the hinges

C the handle is too far away

D the moment is small

Understand It with Pulse | Flag a mistake

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

A 10 Pa

B 25 Pa

C 40 Pa

D 20 Pa

Understand It with Pulse | Flag a mistake

23 **A force of 20 N acts 2 m from a pivot. What is the moment of the force?**

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

Understand It with Pulse | Flag a mistake

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

- A 50 Pa
- B 100 Pa
- C 800 Pa
- D 25 Pa

Understand It with Pulse | Flag a mistake

25 **A force of 10 N acts 1 m from a pivot. Calculate the moment in Nm.**

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

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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