

1. Which of the following statements is always true:
 - Objects with greater acceleration are moving faster than objects with less acceleration
 - **Heavier objects experience less acceleration than lighter objects during a collision**
 - To drive a car around a corner you must be accelerating
 - Acceleration means gaining speed

2. What is the acceleration of a 70 kg object at terminal speed?
 - **0 m/s/s**
 - 9.8 m/s/s
 - 7.1 m/s/s
 - Depends how fast it is going

3. What is the force of friction on a 70 kg object at terminal speed?
 - 0 N
 - 9.8 N
 - **690 N**
 - Depends how fast it is going

4. When you kick a ball, it moves away from you but you stay where you are. This is because:
 - You exert more force on the ball than it exerts on you.
 - The ball's mass is smaller than your mass so it doesn't push you back
 - **You push against the ground but the ball has nothing to stop it**
 - There are no forces pushing you therefore you have zero acceleration

5. If a negative charge is on the left and a positive charge is on the right, what is the direction of the force between them?
 - No force
 - To the left
 - To the right
 - Repulsion
 - **Attraction**

6. If a negative charge is on the left and a positive charge is on the right, what is the direction of the electric field between them?
 - No electric field
 - **To the left**
 - To the right
 - Repulsion
 - Attraction

7. If a positive charge is on the left and a positive charge is on the right, what is the direction of the force between them?
 - No force
 - To the left
 - To the right
 - **Repulsion**
 - Attraction

8. If a positive charge is on the left and a positive charge is on the right, what is the direction of the electric field between them?
- **No electric field**
 - To the left
 - To the right
 - Repulsion
 - Attraction
9. What is the direction of force on a positive charge in an electric field if the charge is not moving and the electric field direction is to the right?
- No force
 - **To the right**
 - Towards the top of the page
 - Into the page
 - Out of the page
10. What is the direction of force on a positive charge in a magnetic field if the charge is not moving and the magnetic field direction is to the right?
- **No force**
 - To the right
 - Towards the top of the page
 - Into the page
 - Out of the page
11. What is the direction of force on a negative charge in an electric field if the charge is moving into the page and the electric field direction is to the right?
- No force
 - **To the left**
 - Towards the top of the page
 - Into the page
 - Out of the page
12. What is the direction of force on a negative charge in a magnetic field if the charge is moving into the page and the magnetic field direction is to the right?
- No force
 - To the left
 - **Towards the top of the page**
 - Into the page
 - Out of the page
13. Which property of a sound wave determines its volume?
- Pitch
 - Frequency
 - **Amplitude**
 - Wavelength

14. Which property of a light wave is determined by its frequency?
- Brightness
 - **Colour**
 - Volume
 - Intensity
15. One water wave has a frequency of 2 Hz, a wavelength of 1 m and a speed of 2 m/s. What will be the speed of a water wave with 1 Hz frequency?
- 0.5 m/s
 - 1 m/s
 - **2 m/s**
 - 4 m/s
16. What is specular reflection?
- Reflection which bends the light according to Snell's Law
 - Reflection which mixes up the light so you can't see your reflection.
 - **Reflection of smooth, shiny objects.**
 - Reflection where some light is transmitted and some is absorbed.
17. Which of the following is definitely true for an experiment in which a measurement is repeated and the measurements are similar each time?
- **The measurements are precise**
 - The measurements are accurate
 - There is not much systematic error
 - The equipment is correctly calibrated
18. Which of the following is definitely true if an experiment has high accuracy results?
- The measurements are precise
 - **There is not much systematic error**
 - There is not much scatter in the results
 - The equipment is of high resolution