Non-Negotiables: Physics Paper 2

1. What is a force?
Answer:
A push or pull that can change an object's motion.

2. What is the unit of force?
Answer:
Newtons (N).

3. What does speed measure?
Answer:
The distance travelled per unit time.

4. Write the equation for speed.
Answer:
Speed = distance ÷ time

5. What happens to an object if the resultant force is zero?
Answer:
It stays at rest or moves at a constant speed in a straight line.

6. What is stopping distance?
Answer:
The distance travelled after the brakes are applied until the car stops.

7. What is a wave?
Answer:
A transfer of energy through vibrations from one place to another.

8. Name one type of electromagnetic wave.
Answer:
Visible light (also: radio waves, microwaves, X-rays, gamma rays).

9. What is the equation linking wave speed, frequency and wavelength?
Answer:
Wave speed = frequency × wavelength

10. What happens to light when it passes from air into glass?
Answer:
It slows down and changes direction (refraction).

11. What are the two poles of a magnet?
Answer:
North and South.

12. What happens when two like poles are brought together?
Answer:
They repel each other.

13. What is an electromagnet?
Answer:
A magnet created by passing an electric current through a coil of wire.

14. How can you increase the strength of an electromagnet?
Answer:
Increase the current or add more coils of wire (or use an iron core).

15. What effect does a current-carrying wire have when placed in a magnetic field?
Answer:
It experiences a force (motor effect).