

Review for Final Exam, Part 2

For each of the following physical quantities, principles, or phenomena, think of a short phrase of *no more than five words* that conveys the essence of the idea as well as you can. For example, if the idea were Newton's second law, you might write "Forces cause change in motion," while if the idea were energy, you might write "Takes many forms, always conserved." Obviously there is no single correct response for each item, so use your poetic creativity (even as you try to keep the physics reasonably accurate).

1. Electric charge
2. Electric field
3. Coulomb's law
4. Principle of superposition
5. Gauss's law
6. Electric potential

7. Laplace's equation

8. Electric dipole

9. Bound charge

10. **D** field

11. Electric current

12. Magnetic field

13. Biot-Savart law

14. Ampere's law

15. Magnetic dipole

16. Paramagnetism

17. Diamagnetism

18. Ferromagnetism

19. Bound current

20. **H** field

21. Ohm's law

22. Flux rule

23. Faraday's law

24. Displacement current

25. Poynting vector

26. Gauge invariance