

## AP Physics 2

Past-Paper Exercise Sheets — Question Index

32 subtopics • 121 questions

### 9.1 Kinetic Theory of Temperature and Pressure

10 questions • calculation x8, short answer, data response

| Source | Q | Type          |
|--------|---|---------------|
| 2026   | 1 | calculation   |
| 2025   | 2 | calculation   |
| 2023   | 3 | calculation   |
| 2021   | 1 | calculation   |
| 2021   | 2 | short answer  |
| 2019   | 4 | calculation   |
| 2018   | 4 | calculation   |
| 2017   | 1 | calculation   |
| 2016   | 1 | calculation   |
| 2015   | 3 | data response |

### 9.2 The Ideal Gas Law

8 questions • calculation x5, data response x2, short answer

| Source | Q | Type          |
|--------|---|---------------|
| 2026   | 1 | calculation   |
| 2025   | 2 | calculation   |
| 2024   | 2 | data response |
| 2021   | 1 | calculation   |
| 2021   | 2 | short answer  |
| 2019   | 4 | calculation   |
| 2016   | 1 | calculation   |
| 2015   | 3 | data response |

### 9.3 Thermal Energy Transfer and Equilibrium

4 questions • calculation x3, data response

| Source | Q | Type          |
|--------|---|---------------|
| 2026   | 1 | calculation   |
| 2025   | 2 | calculation   |
| 2021   | 1 | calculation   |
| 2019   | 3 | data response |

### 9.4 The First Law of Thermodynamics

6 questions • calculation x5, data response

| Source | Q | Type          |
|--------|---|---------------|
| 2026   | 1 | calculation   |
| 2025   | 2 | calculation   |
| 2024   | 2 | data response |
| 2021   | 1 | calculation   |
| 2019   | 4 | calculation   |
| 2016   | 1 | calculation   |

### 9.5 Specific Heat and Thermal Conductivity

3 questions • data response x2, calculation

| Source | Q | Type          |
|--------|---|---------------|
| 2026   | 1 | calculation   |
| 2024   | 2 | data response |
| 2019   | 3 | data response |

### 10.1 Electric Charge and Electric Force

2 questions • calculation x2

| Source | Q | Type        |
|--------|---|-------------|
| 2017   | 4 | calculation |
| 2016   | 3 | calculation |

### 10.3 Electric Fields

8 questions • calculation x6, short answer x2

| Source | Q | Type         |
|--------|---|--------------|
| 2024   | 4 | calculation  |
| 2023   | 4 | calculation  |
| 2022   | 3 | calculation  |
| 2019   | 1 | short answer |
| 2018   | 1 | short answer |
| 2017   | 4 | calculation  |
| 2016   | 3 | calculation  |
| 2015   | 4 | calculation  |

## 10.4 Electric Potential Energy

6 questions • calculation x6

| Source | Q | Type        |
|--------|---|-------------|
| 2026   | 4 | calculation |
| 2024   | 4 | calculation |
| 2023   | 4 | calculation |
| 2022   | 3 | calculation |
| 2017   | 4 | calculation |
| 2016   | 3 | calculation |

## 10.5 Electric Potential

3 questions • calculation x3

| Source | Q | Type        |
|--------|---|-------------|
| 2023   | 4 | calculation |
| 2017   | 4 | calculation |
| 2016   | 3 | calculation |

## 10.6 Capacitors

5 questions • calculation x4, data response

| Source | Q | Type          |
|--------|---|---------------|
| 2025   | 3 | data response |
| 2023   | 2 | calculation   |
| 2022   | 2 | calculation   |
| 2016   | 4 | calculation   |
| 2015   | 4 | calculation   |

## 10.7 Conservation of Electric Energy

4 questions • calculation x4

| Source | Q | Type        |
|--------|---|-------------|
| 2026   | 4 | calculation |
| 2023   | 4 | calculation |
| 2017   | 4 | calculation |
| 2016   | 3 | calculation |

## 11.2 Simple Circuits

5 questions • calculation x4, data response

| Source | Q | Type          |
|--------|---|---------------|
| 2024   | 3 | calculation   |
| 2023   | 2 | calculation   |
| 2022   | 2 | calculation   |
| 2019   | 2 | calculation   |
| 2017   | 2 | data response |

## 11.3 Resistance, Resistivity, and Ohm's Law

3 questions • calculation x2, data response

| Source | Q | Type          |
|--------|---|---------------|
| 2019   | 2 | calculation   |
| 2018   | 2 | calculation   |
| 2017   | 2 | data response |

## 11.4 Electric Power

3 questions • calculation x2, short answer

| Source | Q | Type         |
|--------|---|--------------|
| 2024   | 3 | calculation  |
| 2021   | 3 | short answer |
| 2015   | 2 | calculation  |

## 11.5 Compound DC Circuits

4 questions • calculation x4

| Source | Q | Type        |
|--------|---|-------------|
| 2024   | 3 | calculation |
| 2023   | 2 | calculation |
| 2018   | 2 | calculation |
| 2015   | 2 | calculation |

## 11.6 Kirchhoff's Loop Rule

3 questions • calculation x3

| Source | Q | Type        |
|--------|---|-------------|
| 2024   | 3 | calculation |
| 2023   | 2 | calculation |
| 2019   | 2 | calculation |

## 11.8 RC Circuits

5 questions • calculation  $x_4$ , data response

| Source | Q | Type          |
|--------|---|---------------|
| 2025   | 3 | data response |
| 2023   | 2 | calculation   |
| 2018   | 2 | calculation   |
| 2016   | 4 | calculation   |
| 2015   | 2 | calculation   |

## 12.1 Magnetic Fields

1 question • data response

| Source | Q | Type          |
|--------|---|---------------|
| 2026   | 3 | data response |

## 12.2 Magnetism and Moving Charges

7 questions • calculation  $x_3$ , short answer  $x_3$ , data response

| Source | Q | Type          |
|--------|---|---------------|
| 2026   | 3 | data response |
| 2024   | 4 | calculation   |
| 2022   | 4 | calculation   |
| 2021   | 3 | short answer  |
| 2019   | 1 | short answer  |
| 2018   | 1 | short answer  |
| 2015   | 4 | calculation   |

## 12.3 Magnetism and Current-Carrying Wires

2 questions • calculation  $x_2$

| Source | Q | Type        |
|--------|---|-------------|
| 2025   | 1 | calculation |
| 2022   | 4 | calculation |

## 12.4 Electromagnetic Induction and Faraday's Law

4 questions • calculation  $x_2$ , short answer  $x_2$

| Source | Q | Type         |
|--------|---|--------------|
| 2025   | 1 | calculation  |
| 2022   | 4 | calculation  |
| 2021   | 3 | short answer |
| 2018   | 1 | short answer |

## 13.1 Reflection

1 question • calculation

| Source | Q | Type        |
|--------|---|-------------|
| 2023   | 1 | calculation |

## 13.3 Refraction

6 questions • calculation  $x_4$ , short answer  $x_2$

| Source | Q | Type         |
|--------|---|--------------|
| 2023   | 1 | calculation  |
| 2022   | 1 | calculation  |
| 2019   | 4 | calculation  |
| 2017   | 3 | calculation  |
| 2016   | 2 | short answer |
| 2015   | 1 | short answer |

## 13.4 Images Formed by Lenses

1 question • calculation

| Source | Q | Type        |
|--------|---|-------------|
| 2017   | 3 | calculation |

## 14.8 Double-Slit Interference and Diffraction Gratings

2 questions • calculation  $x_2$

| Source | Q | Type        |
|--------|---|-------------|
| 2025   | 4 | calculation |
| 2022   | 1 | calculation |

### 14.9 Thin-Film Interference

1 question • calculation

| Source | Q | Type        |
|--------|---|-------------|
| 2018   | 4 | calculation |

### 15.1 Quantum Theory and Wave-Particle Duality

4 questions • calculation x4

| Source | Q | Type        |
|--------|---|-------------|
| 2026   | 2 | calculation |
| 2024   | 1 | calculation |
| 2022   | 3 | calculation |
| 2021   | 4 | calculation |

### 15.2 The Bohr Model of Atomic Structure

3 questions • calculation x2, short answer

| Source | Q | Type         |
|--------|---|--------------|
| 2026   | 2 | calculation  |
| 2022   | 3 | calculation  |
| 2016   | 2 | short answer |

### 15.3 Emission and Absorption Spectra

3 questions • calculation x2, short answer

| Source | Q | Type         |
|--------|---|--------------|
| 2026   | 2 | calculation  |
| 2022   | 3 | calculation  |
| 2016   | 2 | short answer |

### 15.5 The Photoelectric Effect

2 questions • calculation, short answer

| Source | Q | Type         |
|--------|---|--------------|
| 2024   | 1 | calculation  |
| 2018   | 3 | short answer |

### 15.6 Compton Scattering

1 question • calculation

| Source | Q | Type        |
|--------|---|-------------|
| 2021   | 4 | calculation |

### 15.7 Fission, Fusion, and Nuclear Decay

1 question • calculation

| Source | Q | Type        |
|--------|---|-------------|
| 2022   | 3 | calculation |