Physics revision for Year 9 (Topics P1 – P3)

**The content of your year 9 test will be:**

**P1: Energy – Part 1**

**P2: Electricity – Part 1**

**P3: Particle model of matter**

Suggested revision schedule:

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| --- | --- |
| **GCSE Science - Physics:****REVISION for Topics P1a, P2a & P3** |  |
| **P1a – Part 1** | **P2a - Part 1** | **P3** | **Recap P1a, P2a & P3** | **Tests this week** |  |

Step 1: Read your revision guide/ watch the videos/ pause the video and make notes

Step 2: Make flash cards/ summary notes on each topic using the key term sheets, your revision guide and the videos.

Step 3: Attempt the exam questions (at least 4 from each section) and self-assess

Step 4: Go back over steps 2 and 3, choosing different exam questions to re-assess your understanding

Note: Please remember the Revision mats on the VLE

Note: If you are confident on a topic - you may not need to watch the video!

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| Topic | Further details and links | Exam questions  |
| P1a Energy – Part 1 | The videos below are very short and are mainly from cognito: * Energy stores and energy systems: <https://www.youtube.com/watch?v=JGwcDCeYRYo&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7>
* Kinetic energy <https://www.youtube.com/watch?v=WrFCHt21kVA&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7&index=2>
* Gravitational Potential energy
* <https://www.youtube.com/watch?v=rNS-W7k0jts&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7&index=3>
* Conservation of energy
* <https://www.youtube.com/watch?v=H6D_ViW0Ch4&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7&index=4>
* Introduction to energy resources:
* <https://www.youtube.com/watch?v=AOhQ4gj4Ng8&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7&index=9>
* Wind and Solar:
* <https://www.youtube.com/watch?v=loJjcGutYZg&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7&index=10>
* Biofuels
* <https://www.youtube.com/watch?v=DsCCM6JSmaA&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7&index=12>
* Hydroelectricity and Tidal Barrage
* <https://www.youtube.com/watch?v=oRFZvbHl4Ck&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7&index=13>

The videos below are ones we made in school, they are slightly longer you do not need to watch both* P1-01 National and global energy resources <http://youtu.be/oT9leZrq-LI?hd=1>
* P1-02 Renewable Energy Resources <http://youtu.be/vecBS1wUM6A?hd=1>
* P1-03 Non-renewable Energy Resources <http://youtu.be/BmV-_kP9sSI?hd=1>
* Pl-04 Renewable Energy Resources <http://youtu.be/ijvUEil4TXc?hd=1>
* P1-05 Energy Changes <http://youtu.be/-PdAp6zqLNg?hd=1>
* P1-06 Calculating Gravitational potential energy <http://youtu.be/d066YFhIyik?hd=1>
* P1-07 Calculating Kinetic energy <http://youtu.be/dxVfuWI45Dk?hd=1>
* P1-07 (2) Linking Kinetic energy (Ek) and Ep <http://youtu.be/2dpIIy9DPdQ?hd=1>
* P1-08 Calculating Elastic potential energy <http://youtu.be/m6vE7EHyw3U?hd=1>

The videos below are from Isaac Physics and can be quite challenging : Energy summary : <https://youtu.be/T5pqmsjMbZk> | **P1 Energy foundation questions**<https://cidivux.exampro.net/>**P1 Energy Higher questions**<https://cugupul.exampro.net/>**P1 Energy Triple questions**<https://nuzokun.exampro.net/> |
| P2a Electricity – Part 1 | * Introduction to circuits <https://www.youtube.com/watch?v=R3hdaLpq2AA>
* V = IR Equation & Current/Potential Difference Graphs <https://www.youtube.com/watch?v=hRojfU77c38>
* Series Circuits<https://www.youtube.com/watch?v=ZQurBlu35Fo>
* Parallel circuits <https://www.youtube.com/watch?v=jNFXtjt5muI>
* Components: <https://www.youtube.com/watch?v=AQawCNla5Fg>
* Charge <https://www.youtube.com/watch?v=TIHW5hEoaAw>

Resistors in Series & Parallel - GCSE Science Required Practical<https://www.youtube.com/watch?v=51mSWRfAsAw&list=PLGvD8d3gDHUWvqi07g1Fa9f0LmvveiGzt&index=33>The videos below are from Isaac Physics and can be quite challenging:This is a summary video from Isaac Physics : <https://youtu.be/N9Tb013DQqQ>Circuit practice questions : <https://youtu.be/nDk6QIgGpw8>Circuit practice questions 2 <https://youtu.be/-HPV4lkWD60>Parallel circuit practice : <https://youtu.be/GbCxepCCqrs> | **P2 Electricity Foundation questions**<https://bokodow.exampro.net/>**P2 Electricity Higher questions**<https://nabonih.exampro.net/>**P2 Electricity Triple questions**<https://leqacux.exampro.net/> |
| P3 Particle model of matter | * P3 Part 1 ( Calculating density) <https://www.youtube.com/watch?v=SQ9k6976XjA>
* Specific heat capacity : <https://youtu.be/EexkJIqB-X0>
* Specific latent heat : <https://youtu.be/ByaCI5uWUe0>
* Particle motion in gases: <https://www.youtube.com/watch?v=hKO3DpgiISk>
* Pressure of gases : <https://www.youtube.com/watch?v=9PwzPDJ7GYc>
* Particle model of matter : <https://www.youtube.com/watch?v=OTksau0_VoI>

Density - GCSE Science Required Practical<https://www.youtube.com/watch?v=lvqu6JAbaKc&list=PLGvD8d3gDHUWvqi07g1Fa9f0LmvveiGzt&index=29> | **P3 Particle model of matter Foundation questions**<https://huxatos.exampro.net/>**P3 Particle model of matter Higher questions**<https://qoiojog.exampro.net/>**P3 Particle model of matter Triple questions**<https://wexoeoz.exampro.net/> |