2026 AQA A-Level Physics Paper 2

Monday 1st June 2026 AM

Paper 1 collaborative ms ……. Here
Other resources …….……..... teaspilt.me/edu/p/postexam/

Some parts of questions haven't been found yet, pls dont just spectate. Anything highlighted orange may be incorrect (e.g. specific values or pieces of info that people have said may not be right). pls just put whatever you remember on doc in any format. It will be edited correctly later. **Please do not share personal details on this document until Tuesday 02/06/2026.** Guys we could estimate grade boundaries if people anonymously give a range that they think their score is in if people want to do that? Could be a good guideline? Vote for this: I

Document Overview

60/60 Section A Marks recorded here
24/25 Section B Marks recorded here

Section	Marks Available	Links
Component Boundaries for Previous Years		Jump to Here
Q1 – Kinetic Theory	[10 Marks] (3, 3, 4)	Jump to Here
Q2 – Thermal Physics (Ice Question)	[5 Marks] (5)	Jump to Here
Q3 – Electric fields on two spheres	[11 marks] (2, 2, 1, 2, 2, 2)	Jump to Here
Q4 – Grav Fields on Comet C	[11 marks] (2, 3, 1, 2, 1, 2)	Jump to Here
Q5 – Magnetic Fields & Oscilloscope	[14 Marks] (3, 2, 3, 3, 3)	Jump to Here
Q6 – Nuclear Decay	[9 marks] (2, 2, 1, 4)	Jump to Here

MCQ	[25 Marks]	Jump to Here
Comments & Discussion		Jump to Here

Component boundaries for previous years

Link to AQA Files

Year	Grade	Paper 1	Paper 2	Paper 3	Total
		Raw Mark /85	Raw Mark /85	Mean Raw Mark /80	Mean Raw Mark /250
2025	A*	63	61	59.4	184.4
	A	53	50	48.8	151.8
	B	44	41	40.2	126.2
2024	A*	60	55	58.0	173.0
	A	49	41	47.8	137.8
	B	41	33	38.2	114.2
2023	A*	59	54	52.0	165.0
	A	48	42	41.2	131.2
	B	40	34	33.6	108.6

Q1 Kinetic Theory [10 Marks]

Question	Marks	Answer
1.1. Moles of gas	3	60mol **Commentary** or 60.2mol(idk may be cooked for not using 2sf) Pretty sure I also gave to 3
1.2. Work done (cant use equation as pv wasn't constant, need area under the graph) *p*	3	This will require an answer within a range, as there was a curved part. Count squares under P/V graph. **Commentary** 78kJ (i got 83kJ i got this too) 3/2 x k x t x 60 x 6.02^{23} - PV 131.5kJ 84 kJ
1.3. The canoe is placed in water of 10ºc (it was previously at 21ºc). The student claims that air will need to be removed to maintain constant 230 kPa pressure in canoe. Do you agree with student?	4	Student wrong. pV=nRT, so if temperature decreases more air is needed to maintain 230kPa pressure You say that due to the pressure law ,a decrease in temp decreases pressure this means that mean ke of particles decreases leading to less frequent collisions and a smaller chnage in momentum which decreases pressure i agree student wrong, i forgot to explain with kinetic theory model tho.

Q2 Thermal physics (ice question) [5 Marks]

Question	Marks	Answer
2.1 Will the ice melt in the beaker with ethanol	5	The final temperature ignoring the latent energy gives you 284K, but with it gives 254K which is either side of the melting point. Therefore the ice cannot melt fully Energy of beaker + ethanol with temperature difference being 18K, as if any higher, then the ice cannot melt. 15kJ Energy to melt ice + energy to get ice there around 30kJ Therefore not enough energy to fully melt the ice I mean personally I calculated based on expected temperatures if the ice were to melt.

Q3 – Electric Fields on two spheres [11 marks]

Question	Marks	Answer
3.1 definition of electric field strength	2	The force exerted per unit charge on a small positive test charge at a point in an electric field.
3.2 Prove force on sphere is 4.4mN Q of each sphere = 59nC	2	Proof using $F = \frac{1}{4\pi\varepsilon_0} \times \frac{Q_1 Q_2}{r^2}$ Should find 4.41mN (3sf)
3.3 Draw forces acting on sphere	1	Weight down tension along the string Felectrostatic to left
3.4 weight of sphere	2	tan6 = w/4.4×10^{-10} 42mN **Commentary** i got this but /2

3.5 charge of P < Q	2	Student wrong. Total force decreases however force split evenly between spheres so displaced same amount **I agree that the student is wrong completely.** $F = \frac{1}{4\pi\varepsilon_0} \times \frac{Q_1 Q_2}{r^2}$ electrostatic force acting on each sphere is the same
3.6 potential at mid point	2	i did potential due to one at 4cm then multiplied by 2. However i did see in the question they provided radius and i didnt use this i put 0 as a positive test charge would be equally repelled in both direction. there is still work being done on it tho because it will be held in place no there is not as work done = fd and if f =0 no work is done. That isn't right. potential is a scalar value, you add the left and right hand side potentials and i got 25200V? same you are right I just multiplied x2 my answer for just one of the balls

Q4 – Grav Fields on Comet C [11 marks]

Question	**Marks**	**Answer**
4.1. Define gravitational potential	2	Work done per unit mass to bring from infinity to a point **Commentary** (you might lose a mark because that is negative and you haven't stated it is done by the point mass bc work done is negative) energy required per unit mass to move an object from a point

		in a gravitational field to infinity
4.2. Find the resultant field strength	3	pythagorous ~1.24×10^{-4} =sqrt(g_a^2+g_b^2)
4.3. Prove equation of Escape velocity	2	$\sqrt[2]{-2V}$ $0.5mv^2$=KE $GPE = \frac{Gm_1m_2}{}$ rearrange and sub 2gm/r= 2V
4.4. Escape velocity	1	0.60 ms^{-1} **Commentary** root 2x0.18=0.66x i did (2x0.2)^½=0.63 I got 0.60 ms-1
4.5. Draw field lines	1	Should be a curved line going perpendicular to the field lines with an arrow towards comet C. Must enter surface of C at normal to surface.
4.6. Explain why an unpowered satellite cannot orbit with CIRCULAR motion in the scene/area shown in the figure. CX	2	As the gravitational force is not enough to provide a large enough centripetal force for circular motion of a satellite to occur, as a speed of greater than 0.6m/s is enough to escape the gravitational field. Therefore it would need to provide its own centripetal force. i also said Fc not constant due to irregular density of comet C and constant Fc needed for circular motion centripetal force not constant therefore gravitational force not constant f=gmm/r^2 therefore r changes since mm is constant What about the idea that the equipotential lines were not circular? +1 What about as it's moving across the surfaces ,the gravitational field strength varies causing its velocity to not be constant ?

		1. Equipotential lines are not circular 2. Equipotential line requires no work done to travel along 3. Satellite must cross equipotential lines (change in potential) 4. Satellite must do work (W=MΔV)
# Q5 - Magnetic Fields & Oscilloscope [14 Marks]		
5.1. Magnetic fields (coil with motor and generator effects), moment of couple, width = 11cm	3	F=BILN then * width for moment I got like 0.112N i think method:[F=BILN BILN X 11/2=ANS its not over two as there is a contribution on both sides it doesnt matter if 11/2 because i adding,it twice again. and u get sme answer w my method its just longer and easier to see but they added ans in the end so still same answer then why even divide by 2.when u draw it out its easier to aproach my opionon ANS+ANS=FINAL ANS
5.2. Why there is emf induced when the coil is rotating	2	what was this q? i dont know what it was asking i cant remember Change in magnetic flux linkage. hence emf induced due to faradays equation
5.3. Graph of V-t on oscilliscope. 2V/vertical div 2ms/horizontal div What is the frequency	3	170Hz (2.s.f)
5.4. Vrms	3 was the	It was not centered, peak to peak was 12.4V → 4.4V r

	vrms and frequency in separate questions	i got 4.7 I got 4.3 V
5.5. A wire is placed across the ends of the coil, why does this lead to the coil slowing.	3	I wrote: As the wire adds resistance to the circuit, which reduces the induced current on the circuit. As the moment is dependant on F=BILN, this reduces the maximum force, and so the maximum constant speed reached is lower. I i think the ends were outside the magnetic field though I wrote : As their is a change in magnetic flux linkage an emf is induced due to faradways law eqaution. then i said lenz law acts in oppoiste direction hence speeed decreases ^ i also said this i said that it would complete the circuit, so the emf makes a current flow. this would induce a magnetic field that opposes the existing one, therefore energy is expended (kinetic energy is lost).

Q6 - Nuclear Decay [9 Marks]

Question	**Marks**	**Answer**
6.1. Uranium 238 decays to Lead 206 via beta minus and alpha decay. How many of each occurs in the decay chain?	2	8 alpha + 6 beta minus
6.2. explain why a gamma photon is released when an alpha particle is released.	2	-Change in mass e=mc^2 -resultant nucleus has excess energy that it needs to release to turn into a more stable configuration Binding energy increases towards iron, meaning that daughter nucleus

		I think this was about nuclear energy levels After the nucleus emits an alpha particle it is excited De-excites by losing energy by emitting a gamma photon
6.3. What effect would heating the crystal have on an estimate for the age?	1	underestimate? +1 Because uranium turns to lead as it decays, and in the beginning there is no lead, that means a rock with less lead will be perceived to be younger.,
6.4. Age of crystals	4	Age for one was 3.025x10^9, the other was 2.999x10^9. This means that they are roughly the same, so the zircon was NOT heated.

Discussion Area

one of the easier papers imo, what years do you guys think were easier/harder? this will help work out boundaries.

maybe 65 a* 56a?

no way 65 for an A* is too high lol not sure its even been that high for an A*? It was an okay paper a lot of confusing stuff esp in the mcq but it deffo could have been way worse

one year it was 69 for paper 2 A*

i mean for 2019 you needed 199/250 for A*, thats 79.6%, which is 68/85 per paper. Ive been preparing for 200/250, or 68/85, for an A*, since both paper 1 and paper 2 were on the easier side imo.

weren't the papers historically much easier than the ones now? especially for paper 1?

I think AQA screwed up 2023, 2024, 2025 by making the papers harder, the entire team was sacked. I think this was their attempt at a normal difficulty paper

. Sacked rightfully so, but don't the team of writers get switched up every once in a while? Maybe my teacher was making stuff up about that

apparently not, my teacher claimed to know the person who writes the paper for AQA physics, he said it was one old guy who had been writing papers for our lifetime
My prediction is that 60 +-2 marks A*
Also, the papers are written a Year in advance, so this summer, they write the 2027 paper

60 seems realistic. I guess we'll have to wait and see until paper 3. What option module are you guys doing?

- im doing astro, feeling confident about it – teaspilt me im also doing astro.
- Engineering, GB def high asf
- Turning points,

Guys i think i did well but now that i look at ms i dropped so many marks and i cant even work out my total because we dont have enough qs yet. A* is not happening icl. ← updated, we are missing ONE mark, so could probably find a total now.

how did u get 4.2??? I cant remember what value i got
bro i made so many bad mistakes, especially with the frequency, i somehow got 125hz and 4.2v, others got 1
70 and 4.7hz

How much for a B? At most i got 43 haha i reckon B 48, could well be lower tho

48 for B would be a huge jump in terms of component boundaries though. like i know this paper was probably easier than 2024 2025 but the B was 33 and 41 respectively in those years. probably like a couple higher marks than normal
You mean compared to last 3 yesrs?. guys look below for previous notional component boundaries
guys i'm getting a U it's cuz im not jewish 😔 lmaooo
aqa has to be a designated organisation

𝑠𝑜𝑛 literally pride month gangt get a job brochacho

you know aqa come to manchester pride every year. like they have a group that walks up and down in the parade with a sign saying aqa. I can confirm that the pride people walk by my house routinely every single year and they are smack in the front 🙂

Year	Grade	Paper 2
		Raw Mark /85
2025	A*	61
	A	50
	B	41
2024	A*	55
	A	41
	B	33
2023	A*	54

	A	42
	B	34

^theyre the component notional grade boundaries by aqa

what are we predicting the A boundary to be (out of the 3 papers)
- im thinking its gonna be 150 +- 2
teaspilt me 150 is pretty high for A?? I mean thats closer to last years but before then it was lower Component boundaries for previous years
i think that is quite low tbh for an A, i got so cooked from paper 1, i think it might could be like 160 for an A tbh damn you think it would increase that much you know I REALLY hope it doesn tlik eim praying to god but like eevryone found those paprs so easy and i abso FUCKED them , need an A for imperail gonna kms! gl gang, dw paper 3 lock in thanks what do u need? how did they go fir u thought the paper was okay, kinda mid but compared to 2024 and 2023 i thought it was easier, need an A asw

came out of the exam thinking it was calm but realised lost so many marks - going to a grammar school doest help
^no thats so real thats literally me
if you thought it was waiser than 2024 and 2023 then gb would defo be higher than 150 cos it was like 148 for my option last yr
good luck gng
was 10 not when they were moved a distnace 2d apart of something

Unknown 2. X is 8 metres from a charge. Y has 75% field strength of X. How far away is Y. was this how far sqay from X or how far from the charge	1	1.2m (9.2m total)