

Course Mapping Guide

Science - Cambridge IGCSE

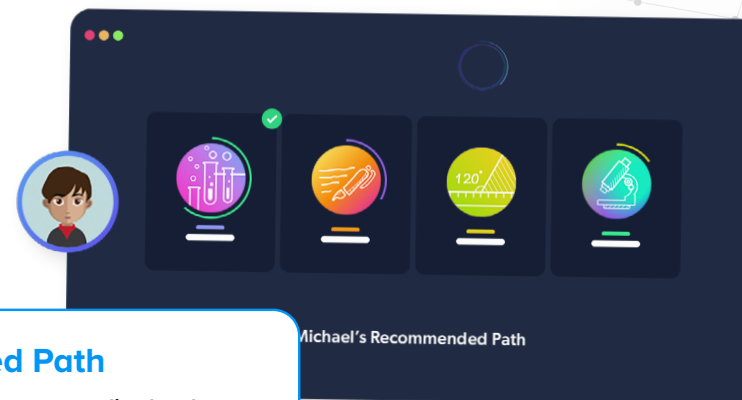
About CENTURY

CENTURY is a learning platform that uses artificial intelligence to personalise learning for every learner. Our team of experienced teachers have created all of our content for English, maths and science from years 2 to 11, as well as functional skills content for post-16 learners. All courses are aligned to the national curriculum and national standards.

- ✓ Learning materials and questions for primary, secondary and post-16 learners
- ✓ Tailored to each learner's skills and knowledge
- ✓ Powered by the world's leading adaptive learning platform
- ✓ Web-based learning for tablets, laptops and desktops



How does **CENTURY** work?



Diagnostics

Learners begin by completing diagnostics that quickly identify knowledge gaps and misconceptions, and help CENTURY recommend the best learning materials for each individual learner.

Recommended Path

This constantly adapting personalised pathway contains micro-lessons designed to address gaps in knowledge, provide stretch and challenge and promote long-term memory retention.

Leadership Dashboard

Senior and middle leaders get an overview of performance and engagement on a subject, class and learner level.

Achievements

Learners get rewarded with badges and streaks for completing micro-lessons or using CENTURY over a certain period of time to increase their motivation and engagement.

Automated Marking

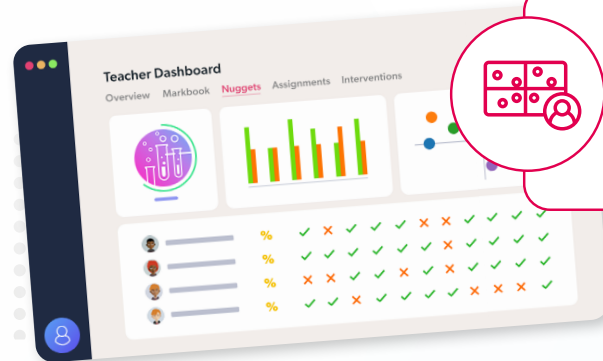
Teachers can view data in real time, to help you quickly identify which learners require additional support or further stretch.

Teacher Dashboard

Use the markbook to monitor individual learners and whole-class trends with a range of dashboards.

Learner Dashboard & Guardian Portal

Learners can identify their strengths and areas for improvement. Parents and guardians can monitor their learner's progress, completed work, and see work set.



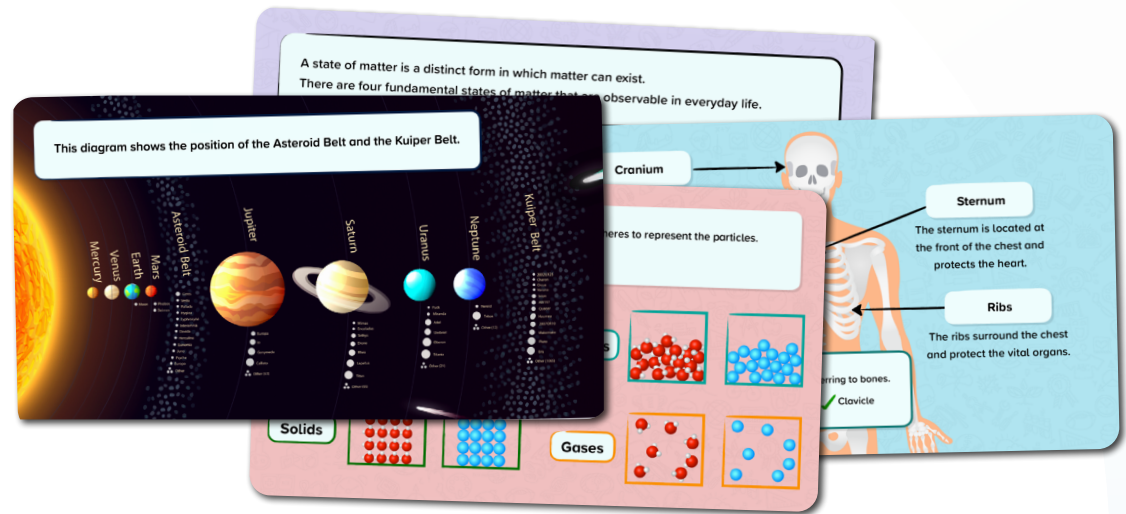
Want to see this in action?

Watch a CENTURY platform walkthrough

Science Courses

KS3

This map show how our KS3 Biology, Chemistry and Physics courses are aligned to the Cambridge scheme. You can edit each of these courses to match your KS3 schemes of work.



Science – Stage 7: Cambridge University Press Aligned



Science – Stage 7: Cambridge Framework Aligned



Science – Stage 8: Cambridge University Press Aligned



Science – Stage 8: Cambridge Framework Aligned



Science – Stage 9: Cambridge University Press Aligned



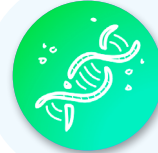
Science – Stage 9: Cambridge Framework Aligned

[Download course content](#)

Science Courses

IGCSE Cambridge

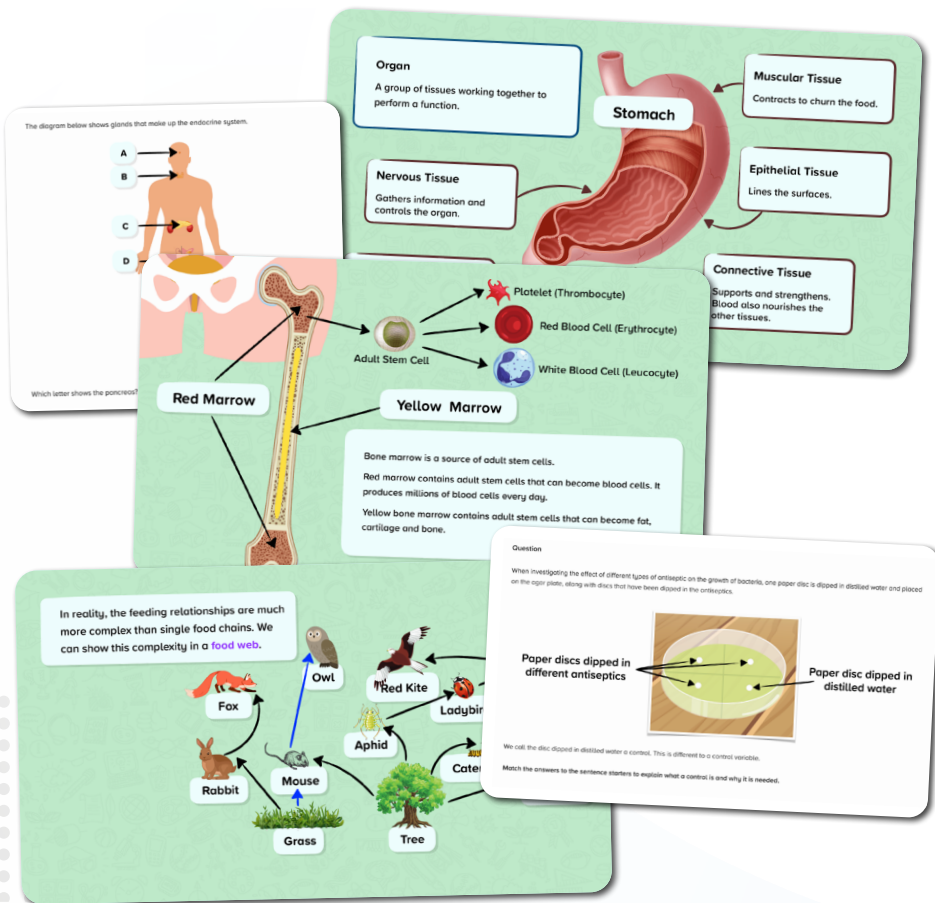
These courses are mapped to the IGCSE Cambridge scheme.



Science Biology IGCSE (Core)



Science Biology IGCSE (Extended)



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Science Courses

IGCSE Cambridge

These courses are mapped to the IGCSE Cambridge scheme.

Thomson's Conclusions

- The cathode ray is made up of negatively charged particles.
- These particles are only 1/1840 the mass of a hydrogen atom, so these negative particles must actually be part of the atom.

Atomic particles can be found in all elements. The atom must be positively charged to balance out the negative charge of the electrons.

Question: Review the four particle diagrams. Label each of the particle diagrams with the correct state of matter.

Examples of Giant Covalent Structures

Diamond Graphite Silicon Dioxide (Silica)

Question: A 24 carat sample of 18 carat gold was found to contain 18 g of pure gold and 6 g of other metals. Calculate the percentage of gold in the sample. Give your answer to 2 significant figures.

You are given in the question:

Mass of substance (gold) = 18 g
Mass of mixture (sample) = 24 g

To find the percentage of gold in the sample:

Mass of substance (gold)	18 g
Mass of mixture (sample)	24 g
Percentage (%)	75%

Answer: 75%

Question: Nitric acid (HNO₃) and potassium hydroxide (KOH) react to form potassium nitrate (KNO₃) and water (H₂O).

Chemical equation: $\text{HNO}_3 (\text{aq}) + \text{KOH} (\text{aq}) \rightarrow \text{KNO}_3 (\text{aq}) + \text{H}_2\text{O} (\text{l})$

Use the chemical equation to work out how many moles of hydrochloric acid will be needed.

Moles of HNO₃ needed = _____ moles

Type your answer as a number, without a unit.



Science Chemistry IGCSE (Core)



Science Chemistry IGCSE (Extended)

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Science Courses

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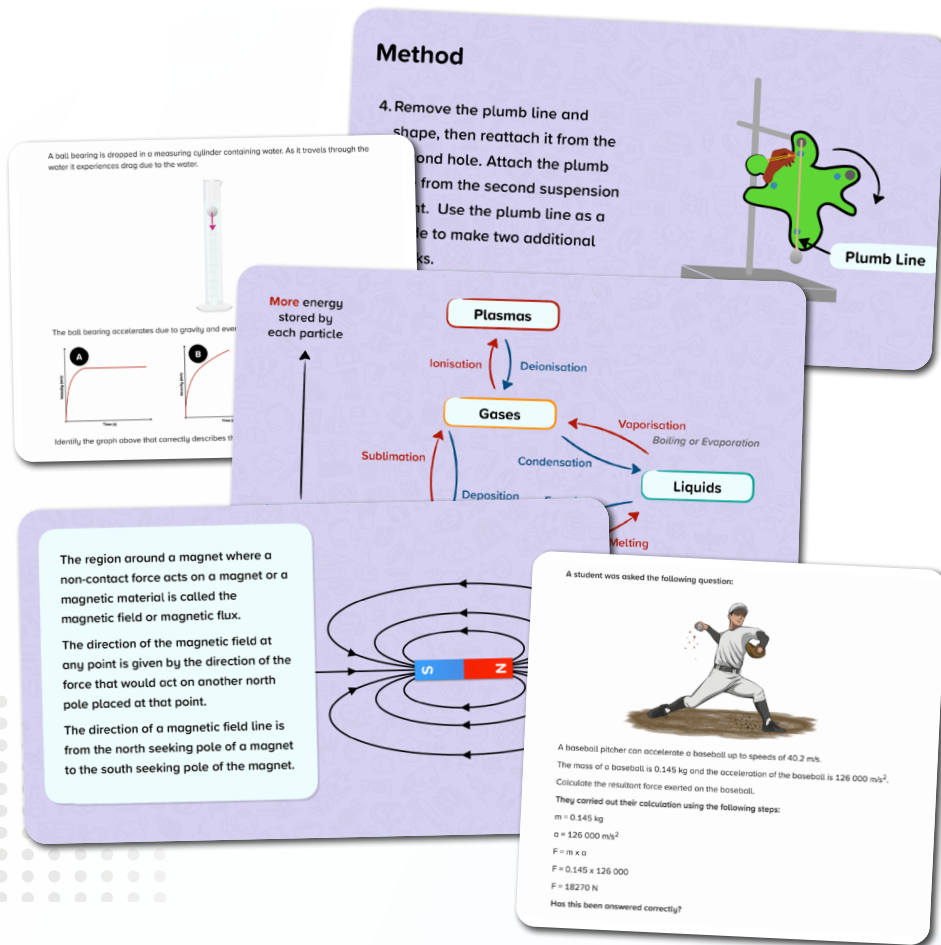
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Science Physics IGCSE (Core)



Science Physics IGCSE (Extended)

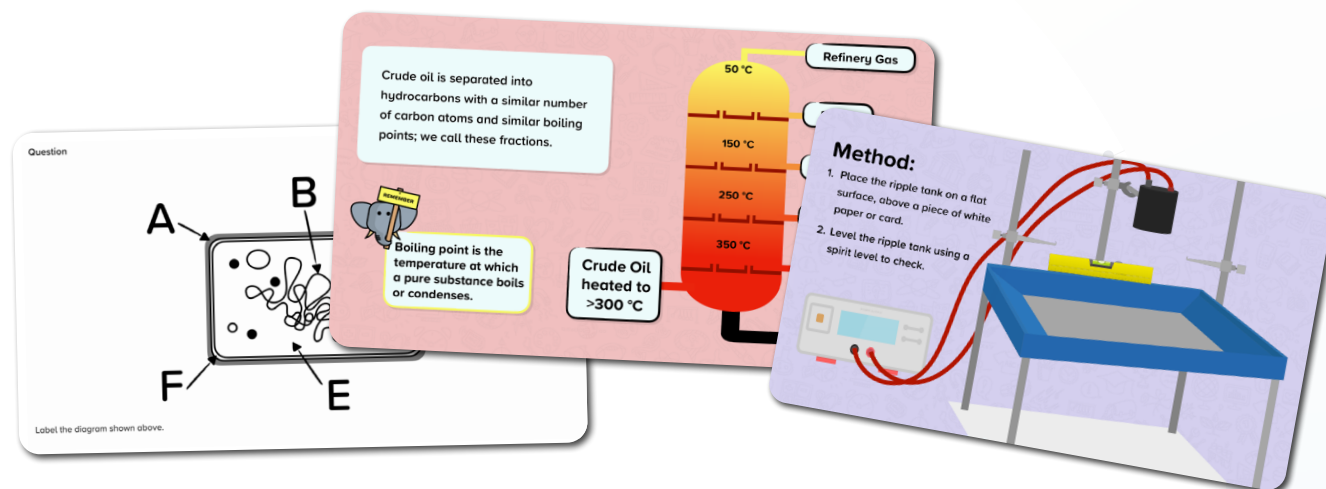


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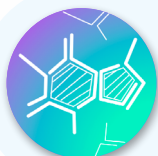
These courses are mapped to the IGCSE Cambridge scheme.



**Science Combined IGCSE –
Biology (Core)**



**Science Combined IGCSE –
Biology (Extended)**



**Science Combined IGCSE –
Chemistry (Core)**



**Science Combined IGCSE –
Chemistry (Extended)**



**Science Combined IGCSE –
Physics (Core)**



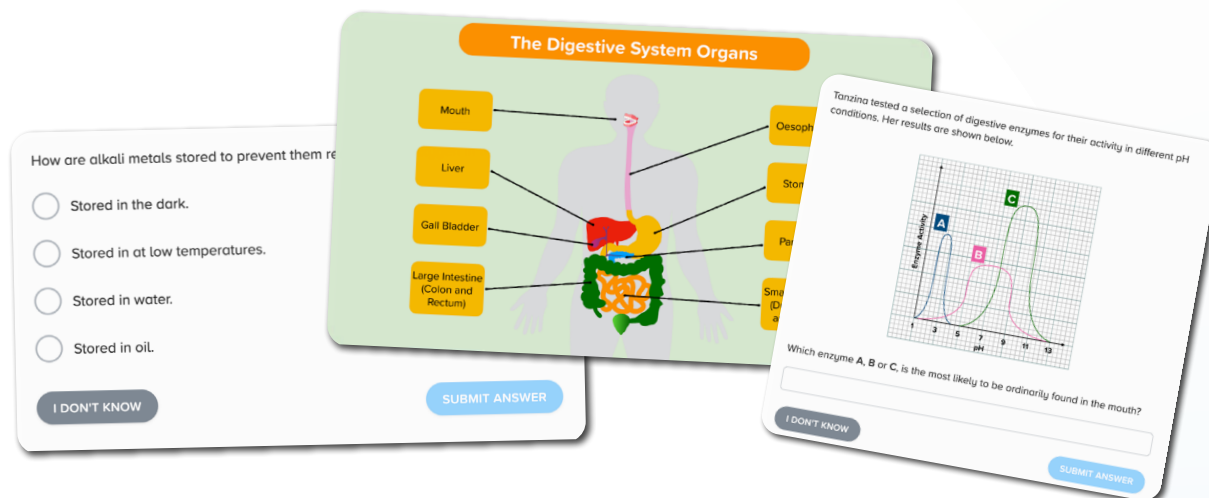
**Science Combined IGCSE –
Physics (Extended)**

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Science Courses

IGCSE Cambridge

These courses are mapped to the IGCSE Cambridge scheme.



Science Co-ordinated IGCSE – Biology (Core)



Science Co-ordinated IGCSE – Biology (Extended)



Science Co-ordinated IGCSE – Chemistry (Core)



Science Co-ordinated IGCSE – Chemistry (Extended)



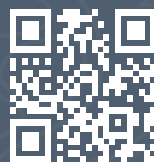
Science Co-ordinated IGCSE – Physics (Core)



Science Co-ordinated IGCSE – Physics (Extended)

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Questions?
Email support@century.tech



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