Isaac Physics New Question Types and Features

1. The new Inline question type

This question type allows students to type numbers or text directly into boxes within sentences or tables.

- When checking their answers, students receive individual feedback on each box.
- Each box may have also a drop-down lists for selecting units.

This question type makes it much easier for students to answer questions which involve filling in tables. It also enables a wider variety of "complete the sentence" questions, which are particularly useful for KS3 physics.

Example questions to try this feature out:

GCSE maths - Essential GCSE Maths 17.14,

KS3 physics - Acceleration 6: A Rocket Accelerating

2. The new **Coordinate** question type

This question type allows students to quickly and easily enter pairs of (x, y) coordinates. A particularly nice feature is that in some questions students can be left to work out how many pairs of coordinates they need to enter.

Example question to try this feature out:

A-level maths - Circles 3ii, parts B and C

3. Graph Sketcher - new features

Graphs can be drawn in the Graph Sketcher using one to three strokes. There are several new ways of manipulating these strokes once they have been drawn. By dragging with the mouse:

- · each strokes can now be moved, stretched and rotated
- the ends of strokes and the turning points of curves can be moved

Drawing curves accurately on a digital device is difficult, and these features make the process easier.

Example question to try these features out:

A-level maths - Transformations of Graphs 2ii

Apps to practise A Level Chemistry skills

A new feature, allowing students to practise core chemistry skills independently such as titration calculations.

New questions are generated each time and the user can request help to be guided through the question step-by-step: https://isaacphysics.org/pages/chemistry app overview

Progress is not tracked, allowing students to practise in a low-stakes environment. Feedback and suggestions for improvements, new features and other skills to include can be passed to Andrea, ac782@cam.ac.uk