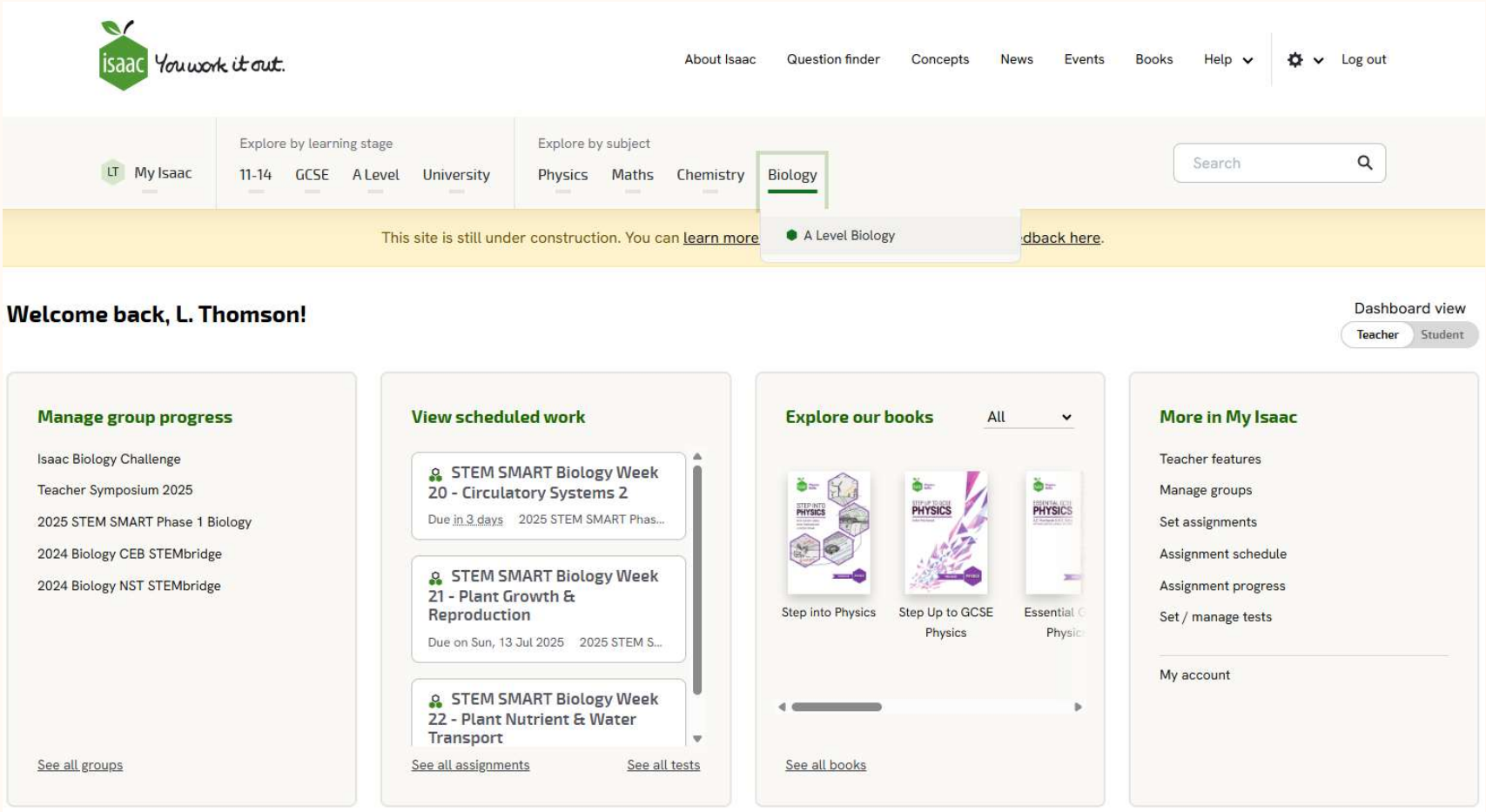
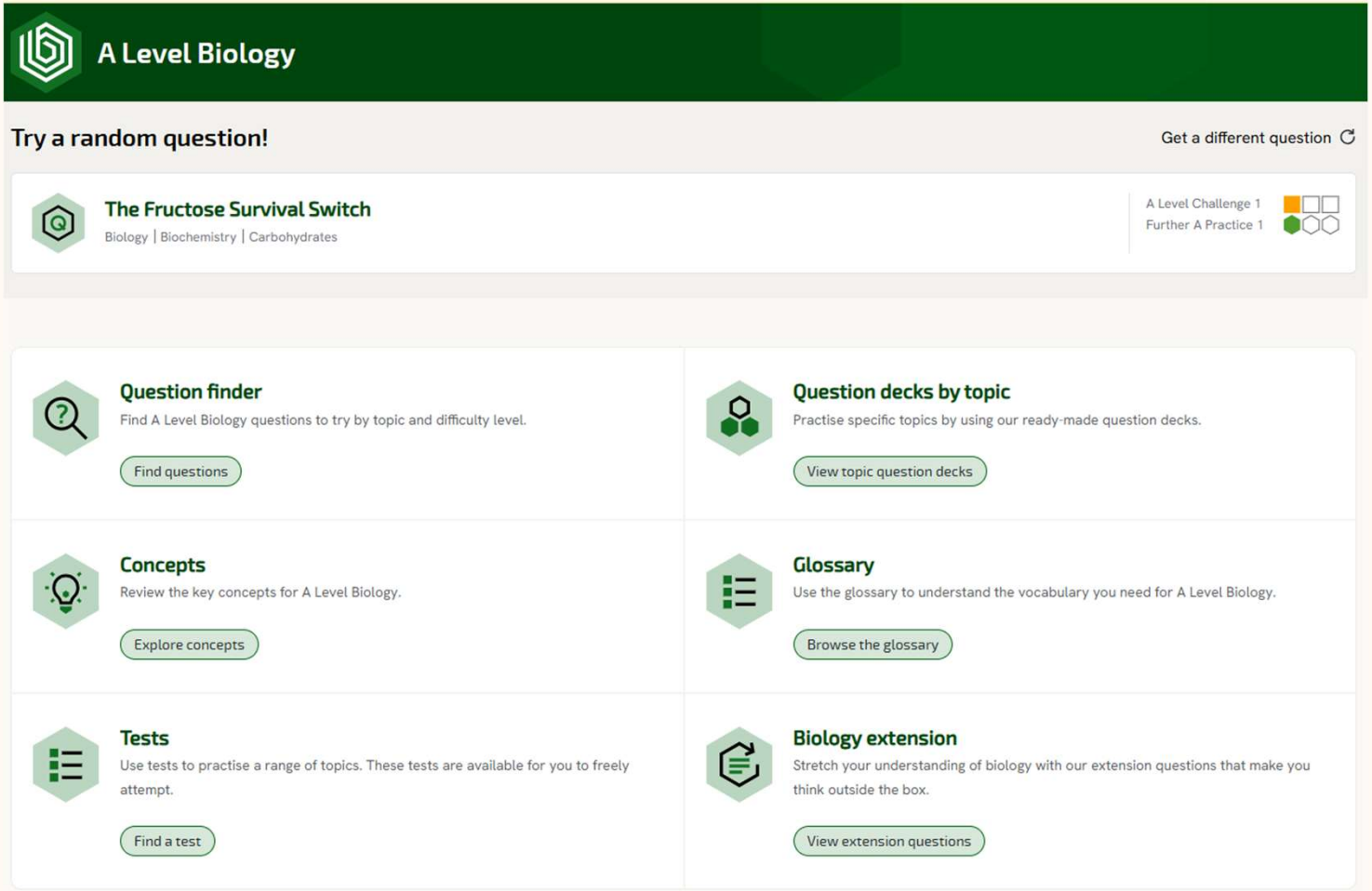
Isaac Biology

Lewis Thomson

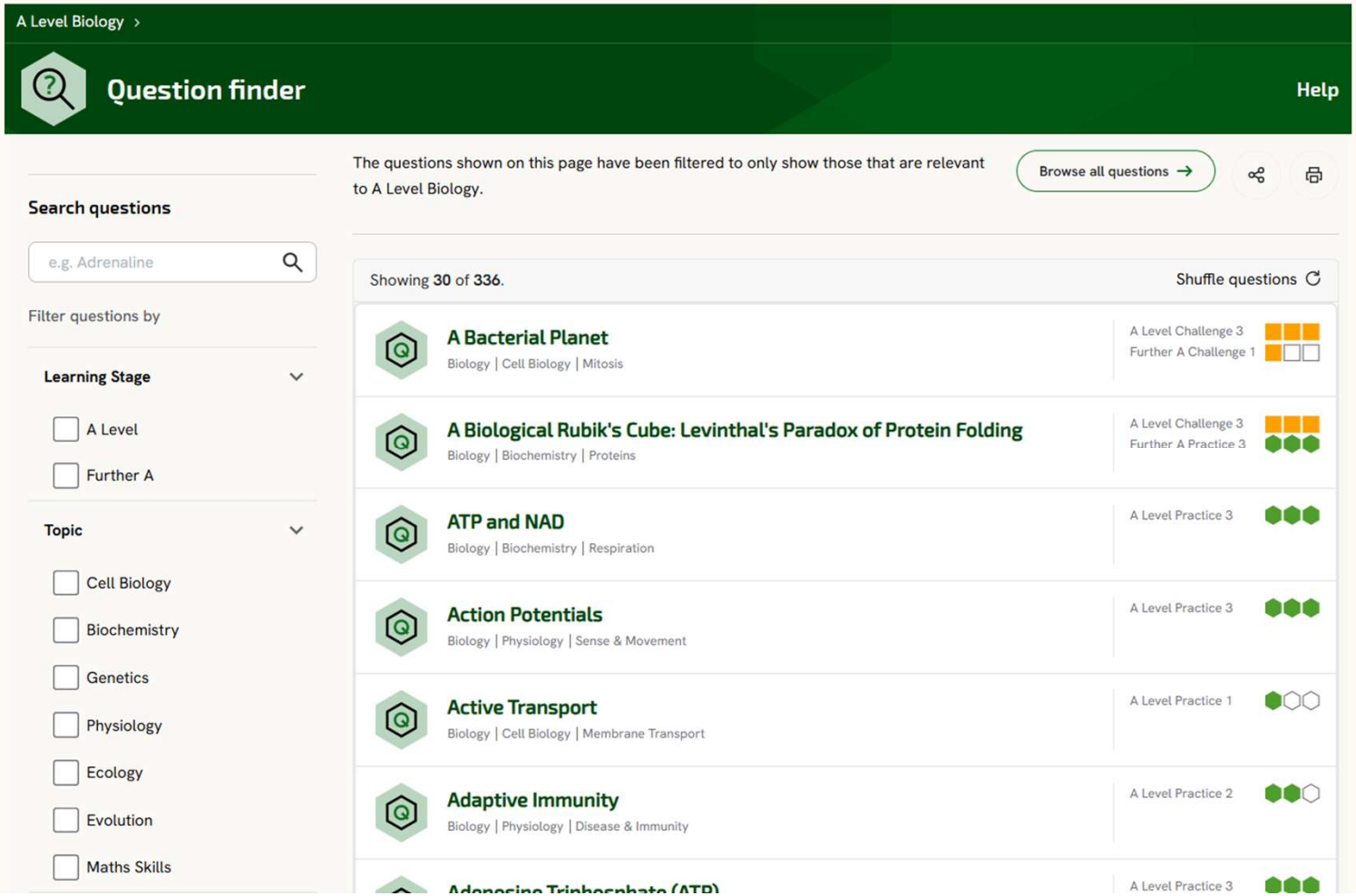
Isaac Biology resources



A Level Biology homepage



Question finder



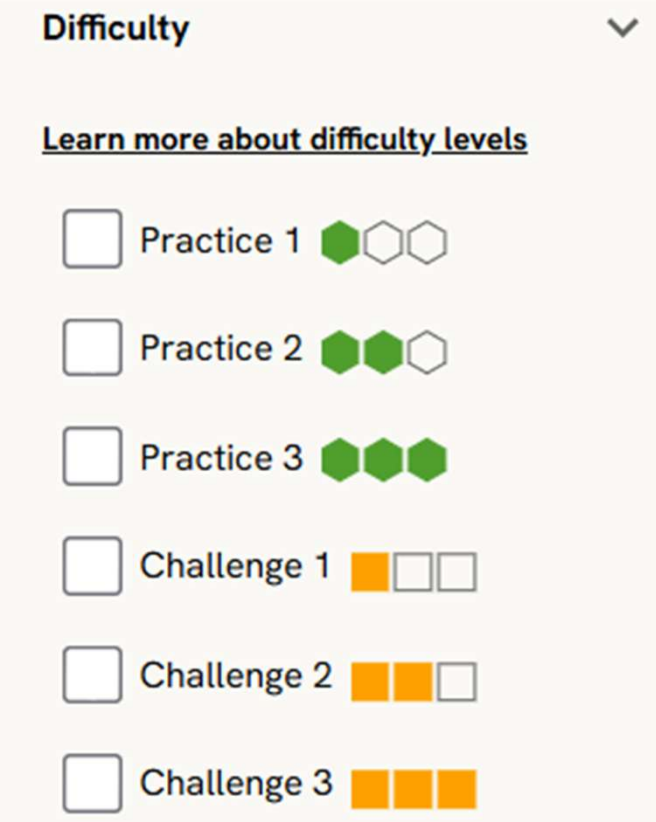
Questions

- Original questions (majority)
- Exam past papers (OCR, CIE)
- Natural Sciences Admissions Assessment (NSAA) past papers

Questions: topics

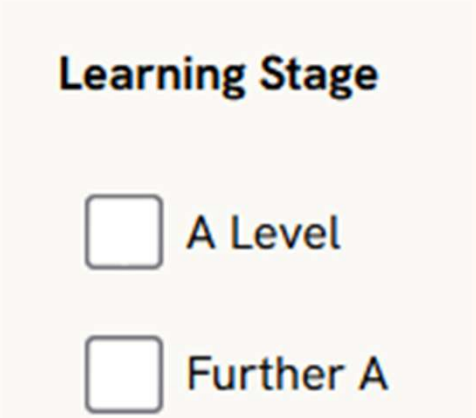
- [x] Cell Biology
  - [ ] Cell Structure
  - [ ] Mitosis
  - [ ] Meiosis
  - [ ] Viruses
  - [ ] Membrane Transport
  - [ ] Tissues
- [x] Biochemistry
  - [ ] Proteins
  - [ ] Carbohydrates
  - [ ] Lipids
  - [ ] Respiration
  - [ ] Photosynthesis
- [x] Genetics
  - [ ] DNA replication
  - [ ] Transcription
  - [ ] Translation
  - [ ] Genes & Alleles
  - [ ] Inheritance
  - [ ] Biotechnology
- [x] Physiology
  - [ ] Plants
  - [ ] Breathing & Circulation
  - [ ] Hormones
  - [ ] Digestion & Excretion
  - [ ] Sense & Movement
  - [ ] Disease & Immunity
- [x] Ecology
  - [ ] Populations
  - [ ] Ecosystems
  - [ ] Nutrient Cycles
  - [ ] Biodiversity
- [x] Evolution
  - [ ] Variation
  - [ ] Theory
  - [ ] Phylogenetics
- [x] Maths Skills
  - [ ] Statistical Tests

Questions: difficulty



- Practice:
  - Recall of information, basic calculations
  - Common question types
    - Drag & drop
    - Short answer (1 or 2 word)
    - Reorder
- Challenge
  - Application, logic & reasoning, problem-solving
  - Common question types
    - Item (multiple choice with multiple correct options)
    - Calculation

Questions: learning stage



- More than just A Level biology required
- May require A Level maths or chemistry

*This question involves using **exponentials and logarithms**, which are part of A Level Maths. For more information please check with your teacher.*

Question decks by topic

Question decks by topic

Decks by stage

A Level

Decks by subject

Physics

Chemistry

Maths

Biology

Published

The Biology topics below are ordered to allow for progression of ideas from one question deck to the next (within each section). To find a question deck on a specific topic, use `Ctrl+F` in your browser. You can also click on the links below to jump to the relevant section.

- Biochemistry
- Cell Biology
- Ecology
- Evolution
- Genetics
- Physiology
- Statistics in Biology

The "**What it contains**" column lists the difficulty levels of the questions and how many there are: for example, "3×P, 6×C" means three "Practice" questions and six "Challenge" questions. Generally, "Practice" questions are recall-based questions that test basic knowledge of a topic, while "Challenge" questions are application-based questions that test the ability to apply that knowledge to an unfamiliar scenario. Some ratings are preliminary and subject to change, so feedback from teachers is very welcome. The table also shows which question types are used in each question deck:

- **MCQ**: multiple-choice with only one correct answer
- **Item**: multiple-choice with multiple correct options to select
- **Numeric**: enter a number (with or without units)
- **Symbolic**: enter an algebraic expression
- **Chemistry**: enter a chemical formula or chemical equation
- **Short-answer**: type a word or combination of words
- **Drag-and-drop**: drag pre-loaded options into gaps in text or a table
- **Reorder**: drag pre-loaded options into the correct order

Biochemistry

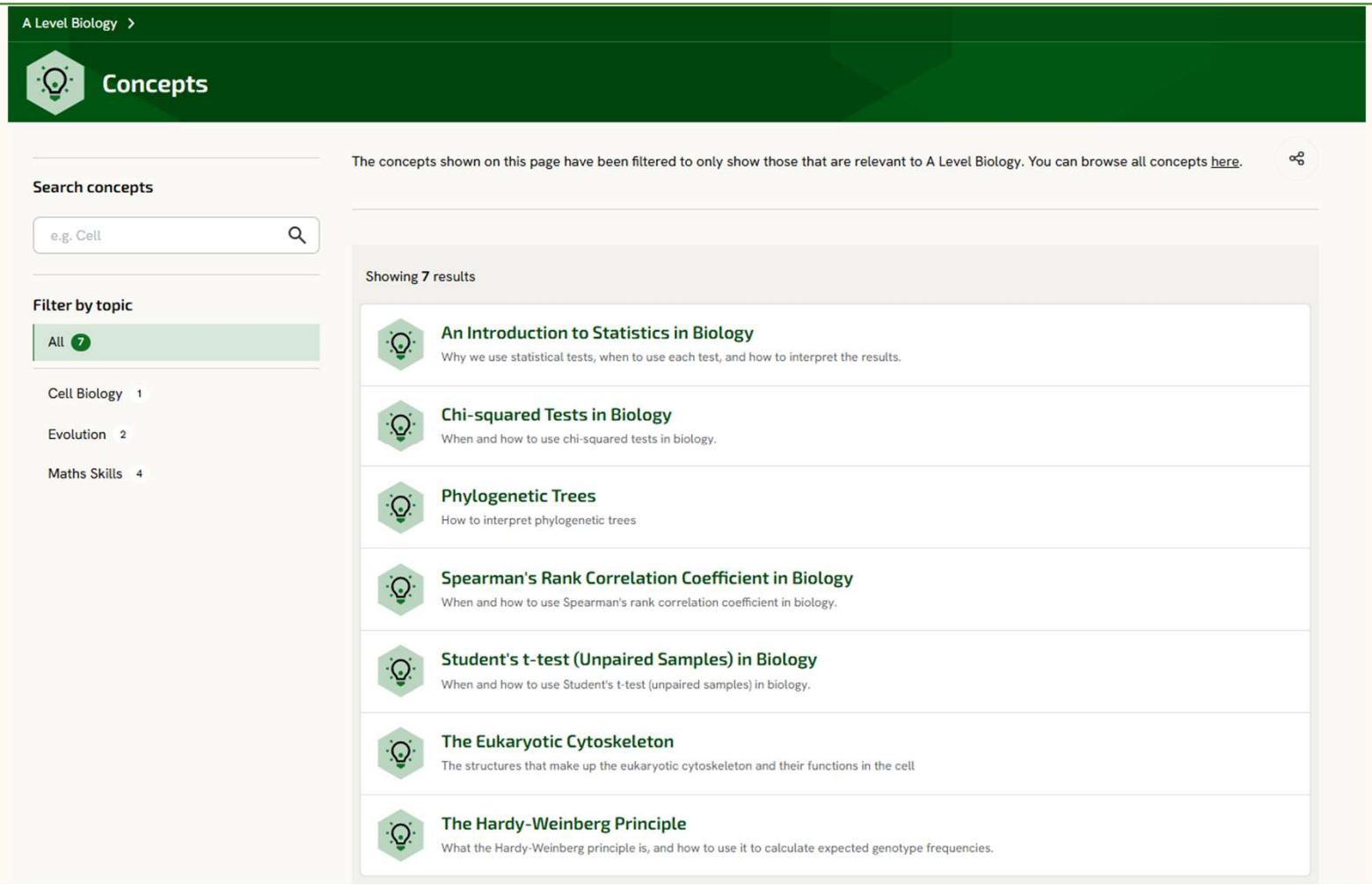
Biochemistry

Topic	What it contains	Link
Proteins	2×P, 5×C	View question deck
Enzymes	1×P, 5×C	View question deck
Carbohydrates	6×P	View question deck
Lipids	2×P, 5×C	View question deck
Respiration 1	7×P	View question deck
Respiration 2	6×P, 1×C	View question deck
Photosynthesis 1	5×P, 1×C	View question deck
Photosynthesis 2	5×P, 2×C	View question deck

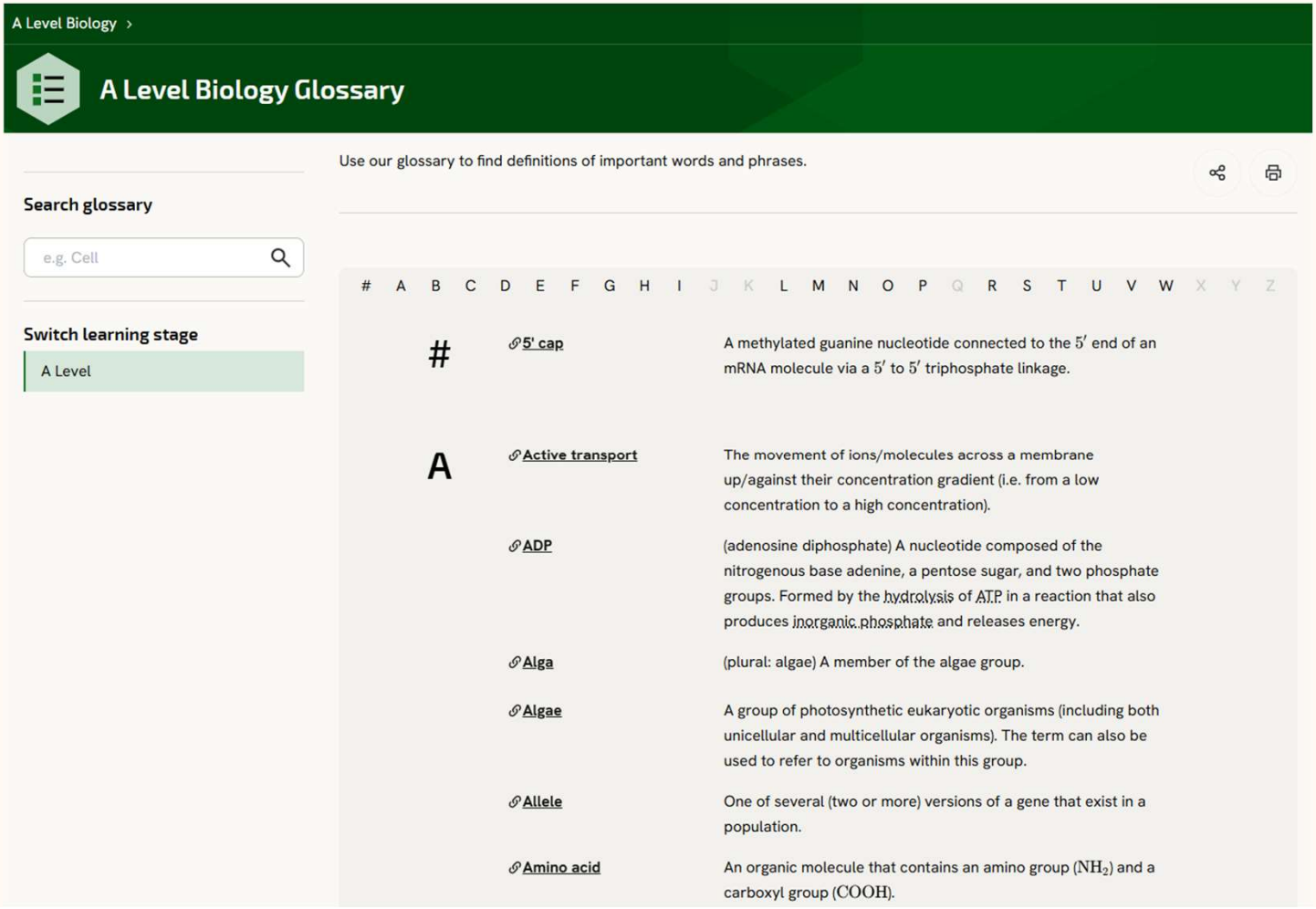
Cell Biology

Topic	What it contains	Link
Cell Structure 1	10×P	View question deck

Concept pages



Glossary



A Level Biology ›

A Level Biology Glossary

Use our glossary to find definitions of important words and phrases.

Search glossary

e.g. Cell

Switch learning stage

A Level

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

#

5' cap — A methylated guanine nucleotide connected to the 5′ end of an mRNA molecule via a 5′ to 5′ triphosphate linkage.

A

Active transport — The movement of ions/molecules across a membrane up/against their concentration gradient (i.e. from a low concentration to a high concentration).

ADP — (adenosine diphosphate) A nucleotide composed of the nitrogenous base adenine, a pentose sugar, and two phosphate groups. Formed by the hydrolysis of ATP in a reaction that also produces inorganic phosphate and releases energy.

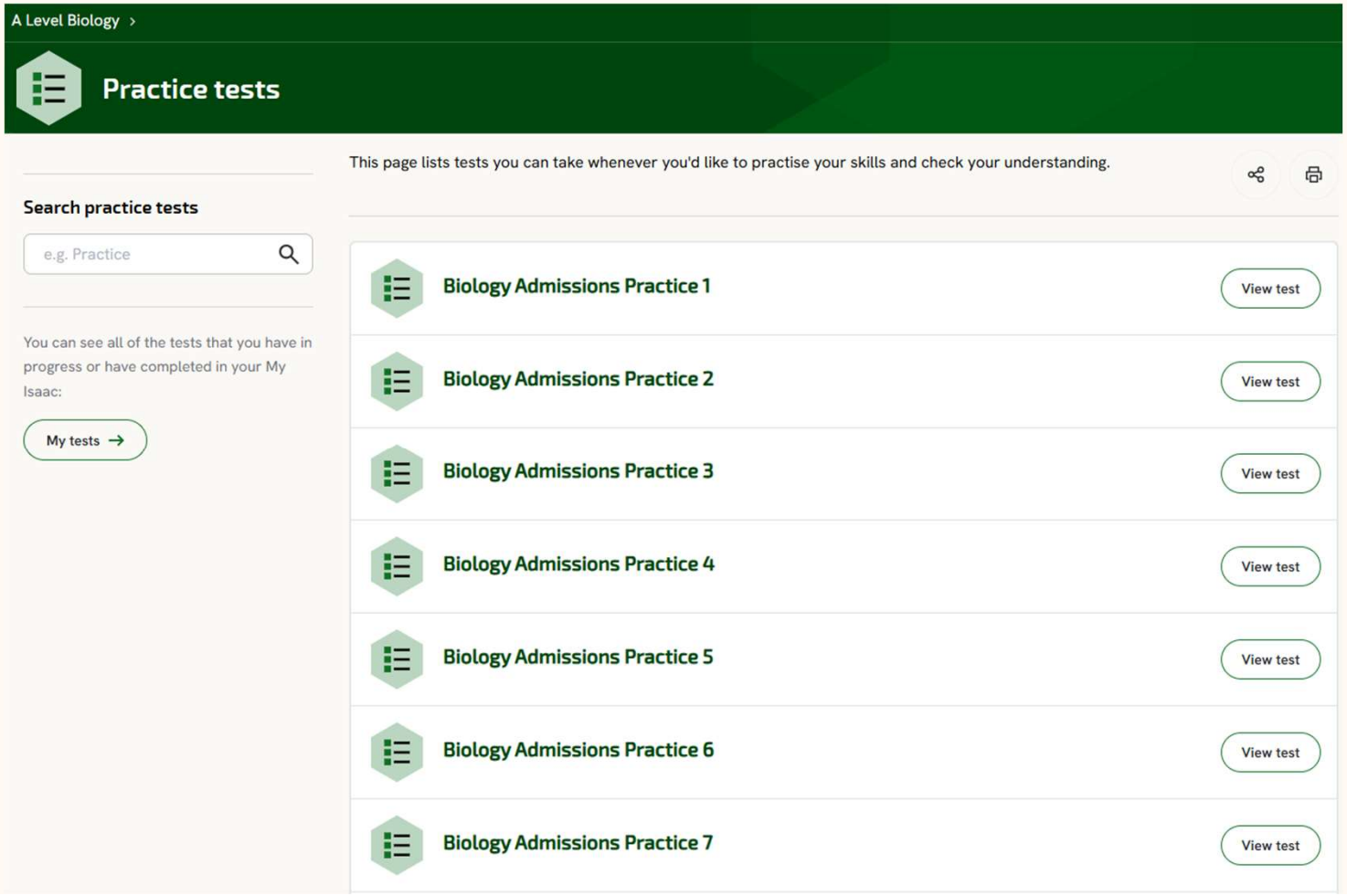
Alga — (plural: algae) A member of the algae group.

Algae — A group of photosynthetic eukaryotic organisms (including both unicellular and multicellular organisms). The term can also be used to refer to organisms within this group.

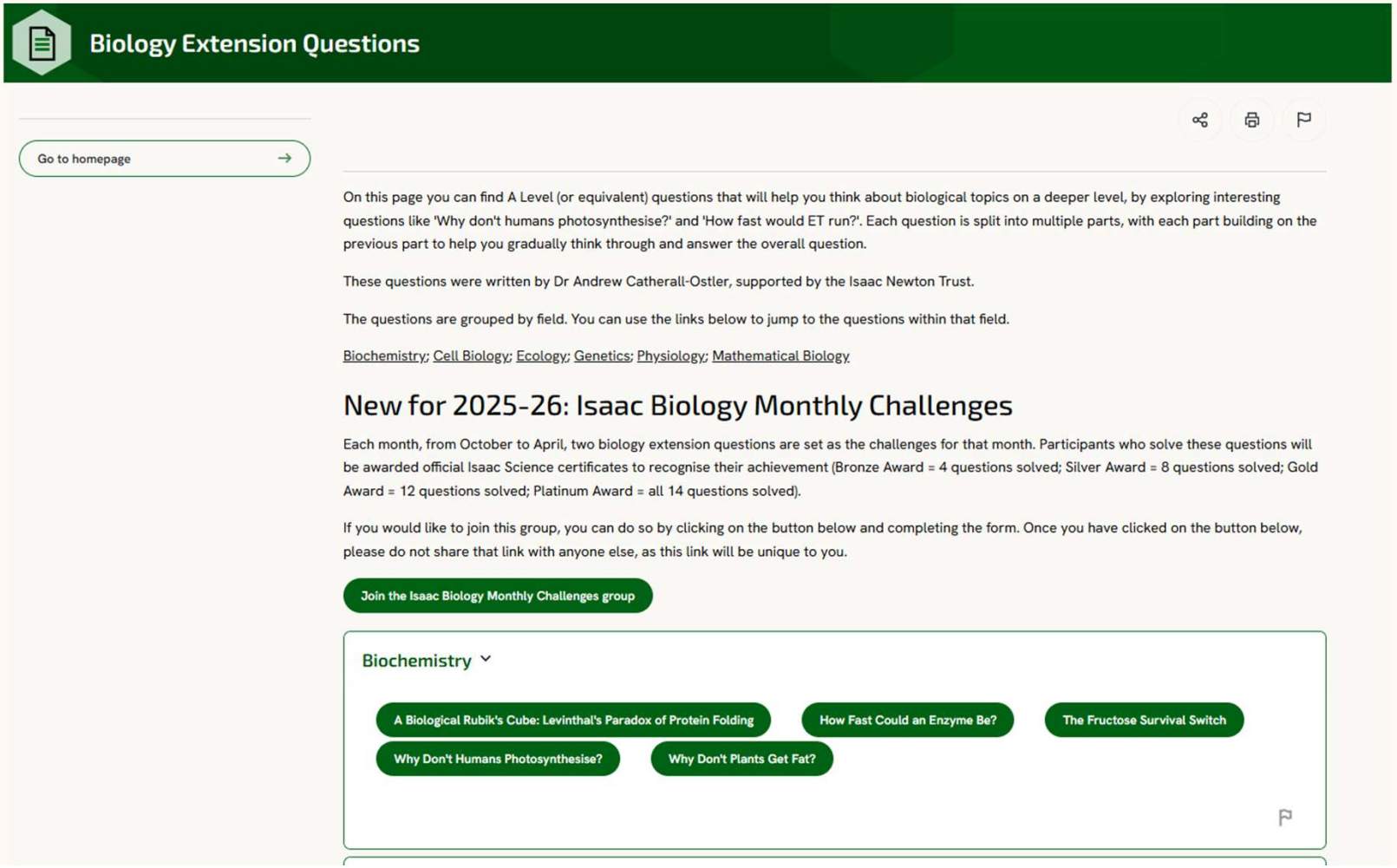
Allele — One of several (two or more) versions of a gene that exist in a population.

Amino acid — An organic molecule that contains an amino group (NH_2) and a carboxyl group ($COOH$).

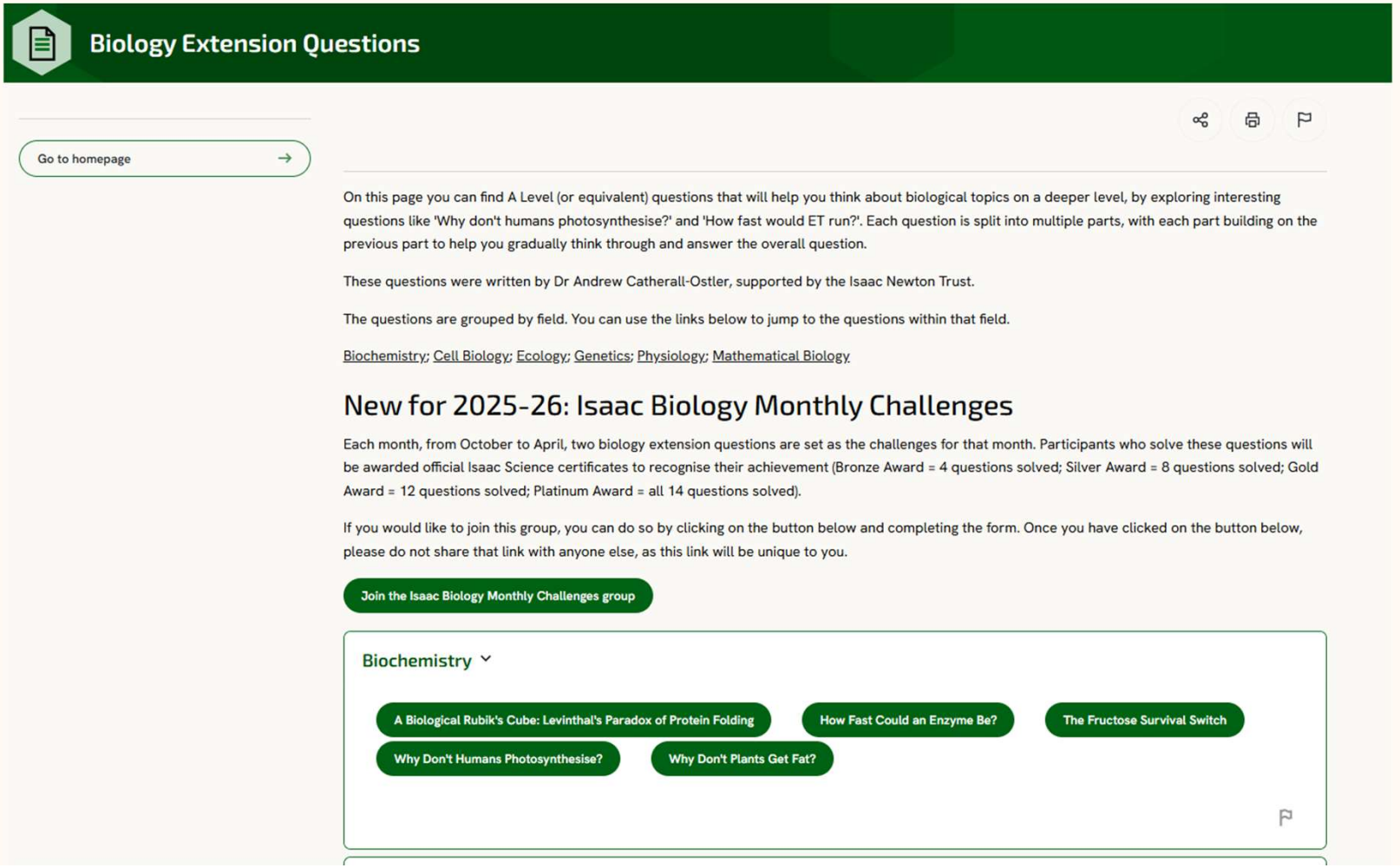
Tests


A Level Biology ›
Practice tests
This page lists tests you can take whenever you'd like to practise your skills and check your understanding.
Search practice tests
e.g. Practice
You can see all of the tests that you have in progress or have completed in your My Isaac:
My tests →
Biology Admissions Practice 1
View test
Biology Admissions Practice 2
View test
Biology Admissions Practice 3
View test
Biology Admissions Practice 4
View test
Biology Admissions Practice 5
View test
Biology Admissions Practice 6
View test
Biology Admissions Practice 7
View test

Extension questions



Isaac Biology Monthly Challenges



Next steps for Isaac Biology

1. A Level book
2. Expanding to include GCSE content
3. Expanding to include KS3 content

Biology WhatsApp group

Thank you!

Lewis Thomson
lewis@isaacscience.org