



Get started with **ICAS.**

A teacher's preparation pack for international schools
in Singapore and Malaysia.

INTERNATIONAL RESELLER EDITION

2026 · For school onboarding and classroom use

WELCOME

How to use this pack.

This preparation pack is built for teachers in international schools that are introducing or growing ICAS participation. It gives you everything you need to confidently familiarise students with ICAS, integrate ICAS-style thinking into normal teaching, and run a smooth competition day — without any platform or device requirements at the school level.

All components are designed for local printing. Photocopy, distribute and adapt freely within your school.

What's inside.

- Section 1 — Test Familiarisation Guide. A quick-read overview of ICAS structure, paper levels, timing and question types so you and your colleagues understand exactly what students will sit.
- Section 2 — Practice Question Sets. Year-level appropriate practice items in English, Mathematics and Science, organised by skill area so students build confidence across the full range of question types.
- Section 3 — Sample Lesson Plans. Three ready-to-use lessons that fold ICAS-style thinking into normal classroom instruction, mapped to the ICAS skill framework.
- Section 4 — Teaching Aids. Worked examples, question-type explainers and strategy cards you can pull out of this pack and use directly in class.
- Section 5 — Student Preparation Booklet. A short student-facing workbook section that builds familiarity with ICAS pacing and approach, designed to reduce anxiety and build confidence ahead of sitting day.

A note on positioning.

ICAS is not a high-stakes exam. It is a skills-based academic competition that sits alongside your curriculum. Frame it for students and parents as an opportunity to stretch, be recognised, and celebrate effort — not as a test that must be passed.

Suggested onboarding sequence.

1. Read Section 1 yourself, then walk Heads of Department through it.
2. Choose two or three lessons from Section 3 to run in the four to six weeks before the sitting window.
3. Distribute the Section 5 student booklet two weeks before the test.
4. Use the Section 2 practice items as warm-ups, homework, or class starters.
5. On the morning of sitting day, run the short ten-minute orientation in Section 4.

1. Test Familiarisation Guide.

A clear, teacher-facing overview of what ICAS is, what students will encounter, and how it differs from the high-stakes assessments your students may already sit. Use this section to brief your colleagues and to decide which year groups will participate in 2026.

What is ICAS?

ICAS is an international academic competition that recognises and celebrates academic excellence in students from Year 2 to Year 12. It has been running for more than 40 years, and over 10 million students from 16,000 schools have taken part.

ICAS is designed by assessment specialists at Janison and supported by the University of Sydney. It is trusted by schools across Australia, New Zealand, Asia and around the world.

Crucially, ICAS is built to push students beyond the day-to-day application of the curriculum. It rewards students who can analyse, problem-solve, and apply classroom knowledge in unfamiliar contexts. Question difficulty increases throughout each paper, so every student finds a section that challenges them and a section where they can show what they know.

Skills-based, curriculum-adjacent.

ICAS does not test a national curriculum. It tests transferable thinking skills — inference, reasoning, interpretation, problem-solving — across content domains your students are already familiar with. That makes it well-suited to international schools running British, American, IB or local curricula.

Paper structure and year-level mapping.

ICAS uses a paper-based system. Each year level sits a paper labelled Intro through to J. The international primary focus of this pack is Papers Intro to D, which cover the early and middle primary years.

Region	Intro	Paper A	Paper B	Paper C	Paper D	Paper E +
Singapore	—	Primary 2	Primary 3	Primary 4	Primary 5	Primary 6+
Malaysia	Standard 2	Standard 3	Standard 4	Standard 5	Standard 6	Form 1+
Australia	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+

Tip for international schools.

All international schools register against Australian year levels. School codes for international schools start with 46. If a Singapore Primary 5 student would sit Paper C, that is consistent with an Australian Year 5 student. The content has been calibrated to be appropriate for that age regardless of the local curriculum.

Subjects, skills and timing.

In the Singapore and Malaysia market, ICAS offers five subjects across Years 2 to 12: English, Mathematics, Science, Writing, and Digital Technologies. This pack focuses on the Core 3 — English, Mathematics and Science — which are the subjects most commonly adopted by international schools at primary level.

Question counts and timings shown are for Paper B (Year 4 / Standard 4 / Primary 4) as a representative example. Other papers are similar; for full timing tables, see the ICAS website.

Subject	Skills assessed	Questions (Paper B)	Time (Paper B)	Format
English	Text comprehension, writer's craft, syntax, vocabulary	45	45 minutes	Multiple-choice
Mathematics	Number, algebra & patterns, measures & units, space & geometry, chance & data	40	45 minutes	Multiple-choice
Science	Observing & measuring, interpreting, predicting & concluding, investigating, reasoning & problem solving	30	45 minutes	Multiple-choice

Full subject range.

Students in Years 2–12 can enter up to all six subjects. Paper ranges differ by subject:

- English, Mathematics, Science — Introductory Paper through to Paper J (Years 2 to 12).
- Writing — Paper A through to Paper J (Years 3 to 12).
- Digital Technologies — Introductory Paper through to Paper E (Years 2 to 7).

All ICAS questions share three traits.

- They use a familiar context as a vehicle for higher-order thinking. Students don't need to memorise obscure facts — they need to apply what they know in new contexts.
- They reward careful reading. Stems are concise and precise. Time spent reading the question carefully is rarely wasted.
- They scale within a paper. All questions contribute equally to the score, but early questions are accessible to most students, while later questions stretch the strongest.

ICAS is delivered online.

ICAS is an online assessment. Students sit each subject on a device (school-supplied or BYOD) during a scheduled sitting window. Unlike a paper-and-pencil test, the online format supports a wide variety of item types beyond traditional multiple choice. Familiarise students with these formats before sitting day so they don't lose marks to unfamiliarity.

Item types students may encounter.

Item type	What the student does
Multiple Choice	Choose ONE answer from a list of 3 or more options. The most familiar item type.
Multiple Choices	Choose MORE THAN ONE option from a list of 3 or more. Students often miss this format and select only one — emphasise reading the instruction.
Textspot	Click on one or more words within a sentence. Common in English comprehension items.
Graphic Hotspot	Click a point on an image or diagram. Common in Maths (geometry) and Science (labelled diagrams).
Drag and Drop	Move words or images into a sentence or diagram. Used across all subjects for classification and completion tasks.
Matching — drag & drop	Sort images, words or statements into groups.
Matching — checkbox	Tick the correct column for each statement.
Matching — lines	Draw lines between items in two columns to indicate pairs.
Keyword	Type a number or a single word into a box. Used for numerical answers in Maths and short-answer vocabulary items in English.
Sequencing	Move words or images into the correct order (chronological, procedural, or logical).
Extended response	Type a longer response directly into the test player. Used in ICAS Writing only — an instruction page presents the task and hints, then a separate interaction page for the response.

What these item types look like on screen.

The screenshots below are actual images from the ICAS test player showing the interface students will see at primary level. Show these to students in class the week before sitting day — familiarity with the interface removes a real source of anxiety on the day.

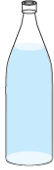
Multiple Choice · *Camping items scenario. Radio buttons; students pick ONE option.*

4:35 PM

Question 14 of 29

People need to breathe air, drink water, eat food and keep warm to stay alive.

Jen is going camping in the mountains for three days. She is preparing things to take with her from these:



soap sleeping bag torch pocketknife water canned beans

Which of the following are the three most important things for her to take?

☐ torch, pocketknife, sleeping bag

☐ sleeping bag, water, canned beans

☐ sleeping bag, torch, water

☐ soap, sleeping bag, water

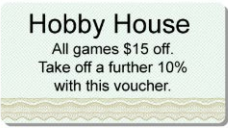
Multiple Choices · *Fin's game stores — pick TWO with checkboxes. Emphasise reading the instruction line "Which TWO...".*

4:59 PM

Question 33 of 40

Fin wants to buy a new computer game. The full price is \$55 at each of these stores.

Fin can use one of these discount vouchers to buy the game.





Which **TWO** stores offer the lowest price for the game?

☐ Mega Mall

☐ Debbie's Deals

☐ Games Galore

☐ Hobby House

Drag and Drop · *Elephants, manatees and hyraxes passage. Students drag a word from the top bar into the sentence.*

 4:45 PM 

Question 6 of 35 

We are family

What do an elephant, a manatee and a hyrax have in common? No, this isn't the start of a (bad) joke; these three very different animals have a lot in common.

Although a hyrax is much smaller than a manatee or an elephant, its toes, teeth and skull are like those of the other two animals. At first glance, a hyrax, which is a small furry animal, looks like a guinea pig and is often mistaken for a rat. On the other hand, a manatee looks like a seal, and it is difficult to tell them apart when they are swimming. An elephant, however, is easily recognised by most people.

A hyrax has pointy teeth (which make it look a bit angry!); they are like tiny elephant tusks. Its soft, rubbery foot pads are not like the sharp-clawed feet of some rodents. These special pads help hyraxes live in their rocky homes. Elephants also have large pads that cushion the bottom of their feet to help them walk long distances. And just like elephants that live together in herds, hyraxes live together in close family groups.

Surprisingly, a manatee, which is a water-dwelling creature, shares many features with an elephant. A manatee has thick skin covered with tough bristles, and its teeth, like a hyrax's, resemble elephant tusks. A manatee uses its trunk-like, flexible upper lip to feed, much like its land-dwelling relative the elephant uses its trunk to find and eat food.



An elephantA manateeA hyrax

Text: © Janison Solutions Pty Limited. Images: see acknowledgements.

Which word can be added to the sentence? Drag the word into the box.

too and but also

'Surprisingly, a manatee, which is a water-dwelling creature, shares many features with an elephant.' (paragraph 4)

Graphic Hotspot · *Email interface. Students click the correct area on the image to answer "where should Adam click so the email is sent?"*



Question 2 of 5 

Adam wrote an email to his friend Helen.

Where should Adam click so that the email is sent?

Send Saved Discard

To: Helen@mailpro.com

[Add Cc](#) | [Add Bcc](#)

Subject: public speaking competition

 [Topics for 4T.doc \(application/msword\) 20kb](#)

[Attach another file](#)

B *I* U       

Hi Helen

I am sending you the list of topics for the public speaking competition on Presentation Day. I have chosen 'Look before you leap'. Hope you are feeling better soon.



Adam

Matching — Lines · Georgie's crayons. Students draw lines between the left and right columns to pair each item with its probability.

5 : 20 PM

Hide time

Question 1 of 1

Georgie has a large box of crayons that are organised by shade, as shown in the table below.

Crayon Shade	Red	Green	Blue	Purple	Orange	Brown	Yellow	Monochrome
Number of Crayons	20	23	19	16	14	13	8	7

Georgie randomly selects three crayons from the box to colour with. As she uses each crayon she throws them on the floor instead of returning them to the box. The first crayon she selects is green, the second crayon is orange and the third crayon is green again.

Match each of Georgie's crayon selections with the correct probability.

First Crayon

Second Crayon

Third Crayon

14/120

14/119

23/120

22/120

22/118

Matching — Drag & Drop · Screwdriver bits. Students drag each screw head image into the correct labelled box.

4 : 36 PM

Hide time

Question 17 of 29

A screwdriver turns a screw, which pushes the screw into wood. Different bits allow a screwdriver handle to be used with different screws.

screwdriver handle

bit set

screws

Each screw has a head with a particular shape. Only a bit with a matching shape will turn the screw.

These are some bits.

A

B

C

D

Move each screw head to match the bit it fits.

A

B

C

D

Sequencing · Order Dave, Sam and Vani from youngest to oldest by dragging the name tiles into order.

4:54 PM

Hide time

Question 3 of 40

Vani is 8 days older than Sam.
Sam is 2 weeks younger than Dave.

Order the children from youngest to oldest.

Dave

Sam

Vani

Reassure your students.

There is no penalty for an incorrect answer. Students should attempt every question. If they are unsure, they should NOT wild-guess — they should eliminate clearly wrong options first by re-reading the stem, then make the best choice from what remains. This single piece of test-craft typically lifts scores noticeably. Encourage students to flag any question taking more than a minute and return to it at the end.

Question styles and preparation tips per subject.

Each ICAS subject has its own question style. Understanding the style is the single biggest predictor of a student's comfort on sitting day. Share these with the teachers of the relevant subjects, and consider passing the parent tips column home in a parent communication.

Subject	What ICAS actually tests	Practical prep tips (share with parents)
English	Stimuli come from a wide range of genres: narratives, poems, plays, scientific articles, advertisements, blogs and journals. Tests comprehension, inference, interpretation and prediction — reading beyond the surface.	Read widely: narratives, blogs, factual and scientific articles, essays, poems and biographies. Ask "What was the text about?" and "What do you think the writer meant by that?" Practise guessing the meaning of unfamiliar words from context.
Mathematics	Real-world scenarios and stimuli (tables, graphs, diagrams, shapes) requiring multi-step reasoning — not just calculation. Students draw on number, measurement, geometry, patterns and data, and must decide which operation to apply.	Bring maths into everyday life. Ask: "How much change would we get?", "How long will it take to get from x to y?" Look for opportunities to build multi-step reasoning — not just quick mental arithmetic.
Science	Students think like scientists — forming hypotheses, interpreting data, evaluating experimental designs. Questions span physical, life, earth and chemical sciences, always grounded in real-world contexts. Content recall is NOT the focus.	Ask "What do you think will happen next — and why?" Encourage everyday scientific curiosity (kitchen chemistry, weather observation, garden biology). These conversations build the reasoning ICAS Science assesses.
Writing	Students are given a task and must produce a piece of writing for a specified purpose and audience. Rewards planning, structure,	Practise writing for different purposes. Focus on planning, structure, careful word choice, and a variety of sentence types (simple,

Subject	What ICAS actually tests	Practical prep tips (share with parents)
	vocabulary choice, proofreading and writing that achieves its intended effect.	compound, complex). Get into the habit of reviewing, proofreading and editing every piece.
Digital Technologies	Questions test understanding of algorithms, data, networks and the logic behind how digital systems work. Students must think computationally — following sequences, identifying patterns and reasoning through problems.	Discuss how technology works in everyday life. Thinking through sequences, logic and cause-and-effect in tech contexts develops the computational thinking ICAS Digital Technologies assesses.

Assessment frameworks.

For a detailed breakdown of the skills tested in each paper level of each subject, download the official ICAS Assessment Frameworks: icasassessments.com/products-icas/subjects/. Each framework has one page per ICAS Paper and lists the specific skills assessed.

Recognition: medals and certificates.

Every ICAS participant is recognised. Certificates are awarded based on international ranking within each subject and year level. Medals go to the very top achievers within each country or region.

Award	Who receives it	Notes
ICAS Medal	Top score in each subject and year level, per country / region	The most prestigious recognition. One medal per subject per year level per participating country — in the international market, a Singapore or Malaysia medal.
High Distinction Certificate	Top 1% of participants internationally	Global benchmark. Cited on scholarship applications and academic CVs.
Distinction Certificate	Next 10% of participants internationally	A strong result. Roughly the 90th percentile globally.
Credit Certificate	Next 25% of participants internationally	An above-average result. Approximately 65–89th percentile globally.
Merit Certificate	Next 10% of participants internationally	Recognises solid performance. Approximately 55–64th percentile globally.
Participation Certificate	All remaining participants	Every student who sits ICAS is recognised. Frame this as a shared achievement across the class.

Results access.

When results are released, EduVision emails each family a **TAP-ID and PIN** so parents can access their child's results portal directly. The portal shows: an overall grade and certificate, performance in each skill strand of the subject, comparison to the country / regional average, and item-level results (which questions the student got right, plus the % of students regionally who answered each question correctly).

2. Practice Question Sets.

All practice items in this section are lifted directly from 2018 ICAS past papers (© Janison Solutions Pty Ltd) and are released for classroom use in this market. They are organised by subject and by skill area. Each item is tagged with its source paper, question number, and the ICAS skill area it targets, so you can match items to a year group and to a teaching focus.

How to use these items.

Treat the practice sets as a working library, not a test bank. Pick three to five items at a time, work through one as a whole-class think-aloud, then ask students to attempt the rest independently. The goal is familiarity with the question style and pacing — not coverage of every item before sitting day.

English practice.

All English items lifted from 2018 ICAS English Paper A. They progress through the four English skill areas in the ICAS framework: Text Comprehension, Writer's Craft, Syntax and Vocabulary.

Stimulus. Read the short text below, then answer the questions that follow. Source: 2018 ICAS English Paper A © Janison Solutions Pty Ltd.

The Earl of Sandwich.

The Earl of Sandwich looked at his cards and frowned. His stomach rumbled but he didn't want to stop playing. The Earl clicked his fingers. The smell of peas, celery and onion came wafting in. His servant appeared carrying pea soup. He slurped the soup while holding his cards. The soup sloshed onto the cards. The Earl frowned and clicked his fingers.

The smell of roasted meat rushed into the room. His servant appeared carrying cut up chicken. The Earl nibbled the meat whilst holding his cards. The meat left a greasy smear on the cards. The Earl frowned and clicked his fingers.

The smell of warm toast filled the room. His servant appeared carrying salted meat between two slices of toasted bread. The Earl crunched into the toast and meat. He looked at his cards and nodded, then beamed. His playing partner laughed and said, 'I'll have what Sandwich is having.' And so the sandwich was born.

Question 1 • Paper A · Q4 • Writer's Craft – Alliteration

When beginning sounds are repeated in a group of words, it is called alliteration. For example, 'dogs dig during the day'. Which of these is another example of alliteration?

- (A) 'The Earl of Sandwich'
- (B) 'His servant appeared carrying pea soup.'
- (C) 'The smell of roasted meat rushed into the room.'
- (D) 'The Earl crunched into the toast and meat.'

Answer: (C)

Question 2 • Paper A · Q5 • Vocabulary – Word in context

In the third paragraph when the Earl of Sandwich 'beamed', what was he doing?

- (A) winning
- (B) agreeing
- (C) nodding
- (D) smiling

Answer: (D) **smiling**

Question 3 · Paper A · Q7 · Vocabulary – Synonym in context

'And so the sandwich was born.' (paragraph 3) Which word would best replace 'born' in the sentence?

- (A) found
- (B) saved
- (C) invented
- (D) eaten

Answer: (C) *invented*

Question 4 · Paper A · Q8 · Text Comprehension – Analyse

Which problem did the Earl of Sandwich find a solution for?

- (A) how to decide what type of food to serve
- (B) how to eat with one hand while keeping clean
- (C) how to be successful at card games
- (D) how to feed his guests quickly

Answer: (B)

Mathematics practice.

All Mathematics items lifted from 2018 ICAS Mathematics Papers A, B and D. Together they sample the five ICAS skill areas: Number & Arithmetic, Algebra & Patterns, Measures & Units, Space & Geometry, and Chance & Data.

Question 5 · Paper A · Q9 · Number & Arithmetic

Susan counted 20 petals on the flowers she picked. Each flower had 5 petals. How many flowers did she pick?

- (A) 2
- (B) 3
- (C) 4
- (D) 5

Answer: (C) *4*

Question 6 · Paper B · Q7 · Number & Arithmetic

Ella had 20 jelly bears. She had 6 bags. Ella placed the same number of jelly bears in each bag. How many jelly bears did Ella have left over?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

Answer: (B) *2*

Question 7 · Paper B · Q23 · Number & Arithmetic – Reasoning

Mrs Lo is having a party for her daughter Mia. She has 25 cupcakes and 40 balloons to share equally among the children. After Mrs Lo hands out the cupcakes, there are 4 left over. After she hands out the balloons, there are 5 left over. How many children are at the party?

- (A) 3
- (B) 5
- (C) 7
- (D) 9

Answer: (C) *7*

Question 8 • Paper D · Q4 • Measures & Units

A plane drops 10 food parcels at equal intervals over a distance of 3 kilometres. About how many metres is it between one parcel and the next?

- (A) 3
- (B) 30
- (C) 300
- (D) 3000

Answer: (C) 300

Question 9 • Paper D · Q14 • Number & Arithmetic – Reasoning

Four students compared their results in a music exam. All 30 questions were worth 1 mark each. • Sue answered 3 out of every 5 questions correctly. • Amy's score rounded to 63%. • Jim made 12 errors. • Peter answered 20 correctly. Which statement is true?

- (A) Peter did better than Sue.
- (B) Sue did better than Amy.
- (C) Amy did better than Peter.
- (D) Jim did better than Amy.

Answer: (A) Peter did better than Sue.

Question 10 • Paper D · Q22 • Chance & Data – Reasoning

Jim invited everyone in his class to his party. He set up 4 games: doughnut dangle, suck it up, apple bob, pin on the tail. Everyone had to choose exactly two different games to play. How many different groups of two games were possible?

- (A) 2
- (B) 4
- (C) 6
- (D) 8

Answer: (C) 6

Science practice.

All Science items lifted from 2018 ICAS Science Papers A and C. They sample the five ICAS skill areas: Observing & Measuring, Interpreting, Predicting & Concluding, Investigating, and Reasoning & Problem Solving.

Question 11 • Paper A · Q7 • Reasoning & Problem Solving – Life & Living

Animals use their senses to explore their surroundings. Butterflies use their feet to sense the chemicals on the plant they are standing on. Which sense organ of people has a similar use to that of a butterfly's feet?

- (A) tongue
- (B) skin
- (C) nose
- (D) feet

Answer: (A) tongue

Question 12 • Paper A · Q6 • Observing & Measuring

When you place an object under water, it pushes the water out of the way and the water level goes up. This is called displacement. Jane placed 4 cubes in 15 millilitres (mL) of water. How much water, in mL, did the cubes displace?

- (A) 4
- (B) 5

(C) 15

(D) 20

Answer: **(B) 5**

Question 13 • Paper C · Q3 • Observing & Measuring

An observation is anything you can see, hear, feel, smell or taste. On one windy day, Bob notices a tree in front of his house. Which of these is an observation Bob can make?

(A) It is going to get cold.

(B) The tree branches may break.

(C) The wind is blowing to the east.

(D) The tree branches are bending to the west.

Answer: **(D) The tree branches are bending to the west.**

Question 14 • Paper C · Q9 • Investigating – Fair test

Ned read that when water freezes it expands and takes up more space. He poured a glass of water before freezing it. What should he do to investigate whether the statement is correct?

(A) mark the water level before and after freezing

(B) weigh the glass of water before and after freezing

(C) compare the volume of water with the mass of the ice

(D) measure the water temperature before and after freezing

Answer: **(A) mark the water level before and after freezing**

3. Sample Lesson Plans.

Three short lessons — one each in English, Mathematics and Science — designed to fold ICAS-style thinking into normal classroom instruction. Each lesson runs in approximately 45–60 minutes and uses materials a teacher already has, plus the practice items from Section 2 of this pack.

Each lesson is built on the same simple structure: warm-up, modelled thinking, guided practice, independent practice, and exit reflection. Adapt freely to the year group you are teaching.

LESSON 1 – ENGLISH

Reading like a detective.

Years 4–6 (Papers B–D) · 50 minutes

Learning intention. Students will infer information that is implied but not directly stated, by quoting evidence from a short text.

Skills targeted. Text Comprehension (Analyse, Infer); Writer's Craft (Understand effect of word choice).

Warm-up (5 min)

Show one short sentence on the board, e.g. "Sami opened the front door, paused, and reached for an umbrella." Ask: what is the weather doing outside? How do we know? Highlight that the answer is not stated — it is inferred.

Modelled thinking (10 min)

Read aloud the Earl of Sandwich stimulus from the Section 2 English practice in this pack. Pause after each paragraph. Think aloud about what you can infer about the Earl (impatient, fussy, focused on his card game above all else) and quote the words that gave you that idea. Make the inference → evidence link explicit each time.

Guided practice (10 min)

Project Question 4 from the practice set ("Which problem did the Earl of Sandwich find a solution for?"). Read it together. Ask students in pairs to identify which option is best, then to underline the words in the text that prove it. Take feedback from three pairs.

Independent practice (15 min)

Students complete Questions 1–4 from the English practice independently, with no teacher support. Encourage them to circle key words in each stem. Set a soft timer to model exam-style pacing without pressure.

Exit reflection (5 min)

Two prompts on the board: (1) Which question was hardest, and why? (2) What is one strategy you used today that you will use again? Take three responses, then close the lesson.

Differentiation note.

For students working below year level, focus on Questions 2 and 3 (vocabulary in context). For students working above level, ask them to write a fifth question of their own about the same passage that targets the Writer's Craft skill area — then swap with a partner to answer.

LESSON 2 – MATHEMATICS

Working backwards from the answer.

Years 3–5 (Papers A–C) · 45 minutes

Learning intention. Students will use the answer choices in a multiple-choice question as part of their problem-solving toolkit, by checking which option satisfies the conditions in the stem.

Skills targeted. Number & Arithmetic; Reasoning across all skill areas; test-craft.

Warm-up (5 min)

Mental maths chain: $7 + 8$, $\times 2$, $- 6$, $\div 4$, $+ 9$. Final answer? (24.) Do two more chains and ask students to describe their strategy, not just the answer.

Modelled thinking (10 min)

Project Question 9 (the music exam, Paper D Q14). Show two solving paths side by side: (a) calculate each student's actual score (Sue 18, Amy ≈ 19 , Jim 18, Peter 20) and rank them; (b) test each option backwards — “if Peter beat Sue, do the numbers fit?” Demonstrate that both methods reach the same answer; the second is a useful safety check when time is short.

Guided practice (10 min)

In pairs, students attempt Question 7 (Mrs Lo's party) and Question 8 (food parcels) from the practice set, using whichever method they prefer. Circulate and listen for misconceptions about leftovers in division and about unit conversion ($\text{km} \rightarrow \text{m}$).

Independent practice (15 min)

Students complete Questions 5–10 independently. Score together. Celebrate process — ask “did anyone use a different method?” rather than only confirming answers.

Exit reflection (5 min)

Quick poll: hands up if you tried checking your answer by working backwards from the options. Praise everyone who tried it, regardless of whether they got the question right.

LESSON 3 – SCIENCE

Observation, evidence and the fair test.

Years 4–6 (Papers B–D) · 50 minutes

Learning intention. Students will distinguish an observation from an inference, and design a simple investigation that isolates the variable being tested.

Skills targeted. Observing & Measuring; Investigating (fair test thinking); Reasoning & Problem Solving.

Warm-up (5 min)

Hold up a closed water bottle. Ask students to call out everything they can observe (clear, half full, label torn). Then ask them what they can infer (someone drank some, the label is old). Make the distinction explicit on the board: observation = what your senses tell you; inference = a conclusion you draw from observations.

Modelled thinking (10 min)

Project Question 13 (Bob's tree, Paper C Q3). Read the four options aloud. Think aloud through each one: “Is that something Bob can directly see, hear or feel? Or is it a guess about the future?” Eliminate options A and B (predictions), and explain why C is wrong (he cannot see compass direction without a compass). Confirm D as the only direct observation.

Guided practice (10 min)

In pairs, students attempt Question 14 (Ned's freezing investigation, Paper C Q9). Ask them to first describe what Ned wants to find out (does ice take more space than water?) before choosing an option. Take pair feedback. Highlight that the answer must measure space — marking the level does this; weighing or temperature do not.

Independent practice (15 min)

Students attempt Questions 11 and 12 independently. Question 11 (butterfly senses) targets reasoning by analogy; Question 12 (water displacement) targets careful reading of a numerical stimulus. Score together.

Exit reflection (5 min)

On a sticky note, each student writes one example of an observation and one example of an inference from a recent science lesson. Collect at the door.

Why this lesson works for ICAS.

ICAS Science items rarely test whether a student knows a fact. They test whether a student can read a stimulus carefully, separate observation from inference, and design or evaluate a fair test. Fifteen minutes of practice on this kind of reading lifts performance more than any amount of factual revision.

4. Teaching Aids.

A pull-out reference set for classroom use. Photocopy any of these pages and pin them to a classroom wall, or distribute them as one-page handouts in the lessons leading up to sitting day.

Six strategies that lift ICAS scores.

These six pieces of test-craft are responsible for most of the gain that careful preparation produces. Students who internalise them perform noticeably better than students who simply revise content.

When students see...	They should...	Common trap
A long stimulus they don't recognise	Read the questions first, then go back to the text. The questions tell you what to look for.	Re-reading the whole text twice instead of locating the relevant detail.
"Always", "never", "all", "none" in an option	Be cautious. Strong wording often signals a wrong option in inference questions.	Ticking the strong-sounding option because it feels confident.
A question they cannot answer in 60 seconds	Mark it, move on, come back at the end. There are easier marks waiting later in the paper.	Spending five minutes on one item and running out of time.
Two options that look almost identical	Find the difference between them. The difference is what the question is really testing.	Picking the more familiar-sounding option.
A maths word problem with extra information	Underline only the numbers and units that the question actually asks about.	Using every number in the stem because it is there.
No idea at all	Eliminate any option you can rule out. Then guess from what is left. Never leave a question blank.	Skipping the question entirely — there is no penalty for guessing.

Walk-through: a Paper B Mathematics question.

Use this as a five-minute walkthrough at the start of any maths lesson.

Worked example: a Paper B Mathematics question.

Q. A garden bed is 3 metres long and 2 metres wide. Sam wants to put a border of small stones around the bed. Each stone is 10 centimetres long. How many stones does he need?

Step 1. Find the perimeter: $2 \times (3 + 2) = 10$ metres.

Step 2. Convert to centimetres: $10 \text{ m} \times 100 = 1000 \text{ cm}$.

Step 3. Divide by the length of each stone: $1000 \div 10 = 100$ stones.

The trap. A student who forgets to convert metres to centimetres will get 10 (or 5). A student who confuses perimeter and area ($3 \times 2 = 6$) will pick a different distractor.

5. Student Preparation Booklet.

The seven student practice booklets that accompany this pack — one for Y3–4, one for each of Y5, Y6 and Y7 at primary level, plus Y8, Y9, Y10 and Y11 at secondary — are designed to be printed and distributed to students two weeks before sitting day.

What's in each booklet.

- A cover page with name, school and year fields.
- A short "welcome" section explaining ICAS in student-friendly language.
- A worked walkthrough showing how an ICAS question is structured.
- Warm-up practice questions across English, Mathematics and Science.
- Six sitting-day strategies plus a full answer key with reasoning.

How to deploy these booklets.

Three weeks out.

- Brief your subject teachers on the ICAS format and share the relevant year-level booklets.
- Choose two lessons from Section 3 to run in class time.

Two weeks out.

- Distribute the Section 5 student booklet to participating students.
- Send parent communication confirming the sitting date, that ICAS is delivered online (device requirements), and how results will be shared (via TAP-ID and PIN emailed by EduVision).
- Display the Section 4 strategy table in classrooms.

Sitting day.

- Run the ten-minute orientation from Section 4.
- Ensure devices are set up and students know the sitting URL.
- Celebrate effort at the end of the session, before any results discussion.

After results.

- Recognise every participant publicly. Celebrate Merit, Credit, Distinction and High Distinction certificates — every certificate is earned. If a student earns an ICAS Medal, consider a dedicated announcement.
- Use question-level data (see the online results portal) to inform next year's teaching focus.
- Share insights with parents in the next reporting cycle.

Need more support?

Your local ICAS reseller is available to support your school through every stage of the ICAS journey — registration, parent communication, classroom resources, and post-results analysis.

Get in touch.

Visit [icasassessments.com](https://www.icasassessments.com) for the latest pricing, sitting dates, year-level mapping, and Assessment Frameworks (one page per paper level).

Speak to your local ICAS reseller for school onboarding, classroom support, and access to the full reseller pack.



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