

ICAS PRACTICE BOOKLET · YEAR 6

Step up to ICAS.

A practice booklet for Year 6 students
getting ready to sit ICAS Paper D.

My name

My school

My year level

Sitting date

[icasassessments.com](https://www.icasassessments.com)

Hello, Year 6 student.

This booklet is yours. Write in it, circle things, work out problems in the margins. It's here to make ICAS feel familiar before you sit Paper D, so the real questions feel like ones you've seen before.

A few things to know.

- ▶ ICAS Paper D is your level. The questions are pitched for end-of-primary students — not too easy, not impossible. You don't need to revise extra content. You need to read carefully and reason.
- ▶ Multiple choice only. There are no marks for spelling or handwriting — choose the best answer.
- ▶ Questions are ordered roughly easiest to hardest. If you're stuck, skip and come back at the end.
- ▶ There is no penalty for guessing. A guess has a 25% chance; a blank has 0%. Always pick something.
- ▶ Every student gets a certificate. The strongest answers earn higher certificates — but everyone walks out having learned something.

How long does this booklet take?

About 45 minutes to work through the practice questions, plus a few more minutes to check your answers at the back. You don't have to do it all in one sitting — split it across two or three days if you like.

How an ICAS question works.

Every ICAS question has three parts. Spot them as you read.

1. The stimulus.

A short text, table or scenario you have to read or look at first. Don't skim it — you'll need to come back to it.

2. The question.

What you actually need to answer. Underline the key word — it tells you whether to compare, calculate, infer, predict, or just identify.

3. The answer choices.

Usually four, sometimes five. Only one is the BEST answer. If two look close, find what makes them different — the difference is what the question is testing.

You'll sit ICAS online.

ICAS is done on a computer or tablet. As well as picking from A/B/C/D, you might click a word in a sentence, click a spot on a picture, drag items into groups, or type a short answer into a box. The thinking is the same — just the way you tap in your answer is different. Your teacher will show you the practice screens before sitting day.

A strategy worth remembering.

If you don't know an answer straight away, cross out the choices you know are wrong first. Then choose the best from what's left. ICAS has no penalty for wrong answers — always pick something.

WARM-UP · ENGLISH · PAPER D

Reading.

Read the passage below carefully. Then have a go at the questions on the next page.

Lions, dragons and giants.

Thump! What's that!? At the rear of the boat, I see a young sea lion settling down on our back step. Then thump, a second one! Well, we are here — anchored in the Galapagos Islands!

Where are the Galapagos? Well, put your finger at the bottom of a map of South America, on the west coast. Go north till you get to the Equator. Turn left and continue for about 900 kilometres and there you are at these isolated islands. If you dipped your toe into the water, you would feel a cold current from the Antarctic coming to meet a warmer current at the Equator.

Below the ocean, these islands are sitting on a tectonic plate, one of several jigsaw-like chunks that cover the surface of the planet. One of the islands is moving very slowly over cracks in Earth's crust where hot lava oozes. On this rugged island, stunning pink flamingos feed on shrimp that thrive in the warm waters. There are even small Galapagos penguins — they depend on the icy ocean currents coming from South America. What a mix of living conditions. This unique microclimate is the reason the Galapagos Islands are so special, with many animals found nowhere else.

In fact, the Galapagos Islands are like an open zoo. The giant Galapagos tortoise, which can weigh around 400 kilograms and live for over 100 years, feeds on a prickly pear cactus that grows on dry rocky land. Ouch! Orange dragon-like iguanas live near volcanic craters where the heat incubates their eggs. Blue-footed boobies show off their fabulous feet in a dance to attract a mate.

Galapagos animals have no fear of humans. Like these sea lions basking on our boat. We need to shoo them away gently. They protest with a short 'bark' as they slide off the step — but return as soon as we are gone. There are giants in the surrounding oceans too: green turtles more than a metre long and graceful manta rays with three-metre-wide wing spans.

As we sail away from this magical place, an enormous shape appears, 15 metres long — longer than our boat. It's a whale shark. The species has been around for 60 million years and eats only tiny plankton. A gentle monster. How lucky we are to see it.

Question 1 · Paper D · Q1 · Writer's Craft – Purpose

'What's that!?' What is the purpose of this quotation at the beginning of the text?

- (A) to persuade readers to visit the Galapagos Islands
- (B) to draw on readers' knowledge of the Galapagos Islands
- (C) to engage readers' curiosity about the noise
- (D) to emphasise the volume of the noise to readers

My answer: _____

ENGLISH QUESTIONS · PAPER D

Working through the passage.

Three more questions on the passage you just read. Refer back to it as often as you need.

Question 2 · Paper D · Q2 · Vocabulary – Word in context

The word 'isolated' in the third paragraph means

- (A) unique.
- (B) remote.
- (C) discovered.
- (D) abandoned.

My answer: _____

Question 3 · Paper D · Q3 · Text Comprehension – Synthesise

According to the text, which option most accurately describes the Galapagos Islands?

- (A) The Galapagos Islands sit at the bottom of South America and move slowly over hot lava.
- (B) The Galapagos Islands are located where warm and cold oceanic currents meet.
- (C) The Galapagos Islands are home to several animal species that are found on other islands.
- (D) The Galapagos Islands contain a large zoo where animals are kept in their natural habitats.

My answer: _____

Question 4 · Paper D · Q5 · Writer's Craft – Figurative Language

An oxymoron is a figure of speech where two seemingly opposite ideas appear together. Which phrase from the text is an example of an oxymoron?

- (A) 'rugged island'
- (B) 'fabulous feet'
- (C) 'fur bracelet'
- (D) 'gentle monster'

My answer: _____

WARM-UP · MATHEMATICS · PAPER D

Numbers and patterns.

Three questions to start. Read each one twice before you choose an answer.

Question 5 · Paper D · Q8 · Number & Arithmetic

Jamie is using this recipe to cook pumpkin soup.

PUMPKIN SOUP — Serves 15. Ingredients: pumpkin 2100 grams, beef stock 1800 millilitres.

Jamie is cooking for 5 people. How much pumpkin should he use?

- (A) 420 grams
- (B) 600 grams
- (C) 650 grams
- (D) 700 grams

My answer: _____

Question 6 · Paper D · Q12 · Algebra & Patterns

Romesh wrote down the number 12 and a smaller number. He found the difference between these two numbers. Romesh then doubled this difference. This answer was the same as the sum of the two numbers. What was the smaller number?

- (A) 4
- (B) 6
- (C) 8
- (D) 10

My answer: _____

Question 7 · Paper D · Q19 · Number & Arithmetic – Reasoning

Mr Tin's class is selling cordial at a fair. Cordial costs 50c per cup.

They have 7 jugs full of cordial. Each jug of cordial can fill 4 bottles. Each bottle of cordial can fill 8 cups.

How much money will they collect if they sell all of the cordial?

- (A) \$44
- (B) \$88
- (C) \$112
- (D) \$224

My answer: _____

CHALLENGE · MATHEMATICS · PAPER D

Stretch yourself.

These come from the harder half of the paper. Take your time. Working in the margin is encouraged.

Question 8 · Paper D · Q25 · Number & Arithmetic – Reasoning

The school sports organiser ordered 15 buses to transport 750 students to the carnival. There were 2 supervising teachers on each bus. Each bus had seats for 53 passengers. How many spare seats were there altogether?

- (A) 15
- (B) 30
- (C) 45
- (D) 75

My answer: _____

Question 9 · Paper D · Q30 · Number & Arithmetic – Reasoning

Zac's phone number has nine digits. The sum of the digits is 49. All of the digits are odd numbers and one digit appears exactly three times. Zac wrote down the first six digits: 9 9 5 7 7 3. Which digit appears three times in Zac's phone number?

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

My answer: _____

Question 10 · Paper D · Q33 · Number & Arithmetic – Fractions

A drink bottle is $\frac{3}{8}$ full. It contains 240 millilitres of water. How much water does the bottle contain when it is half-full?

- (A) 90 millilitres
- (B) 120 millilitres
- (C) 320 millilitres
- (D) 640 millilitres

My answer: _____

WARM-UP · SCIENCE · PAPER D

Observing and reasoning.

ICAS Science wants you to think carefully — not to recite facts. Read the scenarios slowly.

Question 11 · Paper D · Q4 · Investigating – Equipment

Elena thought that the stronger the wind, the further it can blow a seed. She set up an experiment to investigate this, using a fan. Which of the following tools did she also need for her investigation?

- (A) timer
- (B) balance
- (C) thermometer
- (D) measuring tape

My answer: _____

Question 12 · Paper D · Q5 · Investigating – Fair test

In Elena's experiment, what must she change and what must she keep the same for this to be a fair test?

- (A) Change the fan setting; keep the starting position of the seed the same.
- (B) Change the starting position of the seed; keep the fan setting the same.
- (C) Change the type of seed; keep the fan setting the same.
- (D) Change the fan setting; keep how far the seed is carried by the wind the same.

My answer: _____

Question 13 · Paper D · Q8 · Predicting & Concluding – Life & Living

Carnivores are meat-eating mammals. They mainly cut and tear meat and crush bones. They rarely grind their food. The table lists the types of teeth that four different adult mammals normally have.

Mammal W: incisors 3, canines 1, premolars 3, molars 1.

Mammal X: incisors 0, canines 0, premolars 3, molars 3.

Mammal Y: incisors 3, canines 1, premolars 2, molars 4.

Mammal Z: incisors 1, canines 0, premolars 0, molars 3.

Which of the mammals is most likely a carnivore?

- (A) W
- (B) X
- (C) Y
- (D) Z

My answer: _____

CHALLENGE · SCIENCE · PAPER D

Reading data.

These questions ask you to read a small table or data set, then reason about what it shows — and what it does not.

Question 14 · Paper D · Q10 · Interpreting – Energy & Change

A moving object has kinetic energy due to its movement. Some objects, such as elastic bands or springs, have potential energy stored in them when stretched or compressed. One form of energy can be converted to another but it cannot be destroyed. Which option shows the correct conversion of energy forms when a hand releases a compressed spring with a toy car?

- (A) kinetic energy of the toy car → kinetic energy of the spring
- (B) kinetic energy of the spring → potential energy of the toy car
- (C) potential energy of the spring → kinetic energy of the toy car
- (D) potential energy of the toy car → potential energy of the spring

My answer: _____

Question 15 · Paper D · Q12 · Observing & Measuring – Data

The table lists some of the components in 100 grams of the milk that some mammals produce.

Cow: protein 3.3 g, fat 3.9 g, lactose 4.6 g, energy 66 kcal.

Human: protein 1.3 g, fat 4.1 g, lactose 7.2 g, energy 69 kcal.

Goat: protein 3.1 g, fat 3.7 g, lactose 4.4 g, energy 62 kcal.

Sheep: protein 5.4 g, fat 5.8 g, lactose 5.1 g, energy 93 kcal.

How many grams of protein are there in 200 g of goat's milk?

- (A) 3.1
- (B) 3.3
- (C) 6.2
- (D) 6.6

My answer: _____

Strategies for sitting day.

Six pieces of test-craft that earn extra marks. Read them the night before.

1. Read every question twice. ICAS questions hide the key word — often it is "not", "most likely", "best", or "difference".
2. In English, locate the relevant sentence in the passage before you choose. The right answer is always supported by something in the text.
3. In Maths, scribble working in the margin. The right answer often involves two or three steps — skip the working and you skip the answer.
4. Cross out wrong options first. The right one is easier to see when only two remain.
5. Mark and move. Anything taking longer than 90 seconds — circle it, move on, come back at the end. Time is precious.
6. Always pick an answer. There is no penalty for guessing — a guess is 25%, a blank is 0%.

On the morning.

Eat a real breakfast — protein, carbs and water. ICAS is delivered online: your teacher will show you the device and the sitting screen before you start. Bring a pencil and scrap paper for working out. Walk in knowing you have prepared. Take three slow breaths before the first question.

Answers — part 1.

Check your answers. Read the "Why" column — it shows the thinking. Tally how many you got right at the bottom, but don't stress about the score — every question you understood is a win.

Q	Subject	Answer	Why
1	English	(C)	The quotation grabs the reader's attention and creates curiosity about what the noise is — a hook to draw you into the story.
2	English	(B) remote	The passage describes the Galapagos as far from anywhere — 900 km west of South America. "Isolated" means cut off or remote.
3	English	(B)	The passage says the islands sit where a cold Antarctic current meets a warmer Equator current — that is what gives them their unique microclimate.
4	English	(D) 'gentle monster'	"Monster" suggests something fearsome; "gentle" is the opposite. Two opposite ideas paired together = an oxymoron.
5	Maths	(D) 700 grams	5 people is $\frac{1}{3}$ of 15. So Jamie needs $\frac{1}{3}$ of 2100 g = 700 g of pumpkin.
6	Maths	(A) 4	Let the smaller number be x . Difference = $12 - x$. Sum = $12 + x$. Doubled difference = sum: $2(12 - x) = 12 + x \rightarrow 24 - 2x = 12 + x \rightarrow 12 = 3x \rightarrow x = 4$.
7	Maths	(C) \$112	$7 \text{ jugs} \times 4 \text{ bottles} \times 8 \text{ cups} = 224 \text{ cups}$. At 50c per cup, total = \$112.
8	Maths	(A) 15	Seats: $15 \times 53 = 795$. People: 750 students + 30 teachers (2×15) = 780. Spare = $795 - 780 = 15$.

Answers — part 2.

Q	Subject	Answer	Why
9	Maths	(C) 7	First six digits sum to 40, so the last three must be odd digits summing to 9. The only set of three odd digits summing to 9 that gives one digit appearing exactly three times across the whole number is 1, 1, 7 — that brings the count of 7s to three (the two already shown plus one more).
10	Maths	(C) 320 millilitres	$\frac{3}{8}$ of the bottle = 240 mL, so $\frac{1}{8}$ = 80 mL. Full bottle = 640 mL. Half-full = 320 mL.
11	Science	(D) measuring tape	She needs to measure HOW FAR the seed is blown — distance — so a measuring tape is essential.
12	Science	(A)	In a fair test, change ONE variable (the one being tested — fan setting / wind strength) and keep everything else the same, including the starting position of the seed.
13	Science	(A) W	Carnivores need canines for tearing (W has 1) and few molars for grinding (W has 1). X and Z have no canines. Y has 4 molars — too many for a carnivore.
14	Science	(C)	The spring was compressed, so it stored potential energy. When released, that energy is transferred to the car as movement — kinetic energy.
15	Science	(C) 6.2	100 g of goat's milk has 3.1 g protein. 200 g = double, so 6.2 g of protein.

See you on sitting day.

Read each question twice. Underline the key word. Eliminate wrong answers first.

You've got this.