

Explain science results

What can a set of results tell us?

CLASS Year 7 Academic English · A2 → B1

TIME 120 minutes

RESOURCES Slides 1–23 · Handout pp1–5 · Whiteboards and pens · Glass, spoon, sugar

AIMS

Content Find the relationship in results.

Language Write a results paragraph.

Skills Understand how a paragraph is organised.

KEY LANGUAGE

- germinate · variable · result · relationship · evidence · precise · relevant · factor
- The results show... · As ___ increases, ___ increases / decreases.
- For example, at ___, ___, but at ___, ___. · This suggests ___, but the results do not show ___.

Stage	Time	Procedure	Resources	Watch for and adapt
1 Do now and aims AIM Review words. Preview the lesson. <i>Whiteboards, individual</i>	5 min 0–5	1 Show slide 1. Learners match words 1–6 to meanings A–F. Ask: “How do you know?” 2 Read the aims. Show slide 2 and read the four steps. ANSWERS 1 C, 2 E, 3 A, 4 F, 5 D, 6 B.	• Slides 1–2 • Whiteboards	
2 Seed investigation and results AIM Understand the experiment. Read the table. <i>Pairs, whole class</i>	12 min 5–17	1 Show slide 3 (pictures only). Read the caption. Ask: “What is different? What is the same?” Say “germinate”; learners repeat. 2 Show slide 4. Pairs talk through the three prompts, then write a prediction for day 7. Do not give results yet. 3 Show slide 5 and handout p1. Student A answers odd questions, Student B even. The partner checks the table. Say: “Show me.” ANSWERS Slide 4: temperature changes (10, 15, 20, 25 °C); 20 seeds, soil, water, time stay the same. Slide 5: 1 temperature. 2 how many seeds germinated. 3 20. 4 °C; per cent. 5 40%. 6 25 °C (90%). 7 it goes up. 8 13 seeds; 65%.	• Slides 3–5 • Handout p1	• “Highest point”: model “the highest percentage”. LANGUAGES Instruct pairs to talk in a shared language first, then give one sentence in English.
3 Key words and the relationship AIM Say how two things are linked. <i>Whole class, pairs</i>	8.5 min 17–25.5	1 Show slide 6. For each word: say it, learners repeat, read the definition, link it to the seed table. 2 Ask: “Which words look or sound like words in your language?” 3 Show slide 8. Teach “As ___ increases, ___ increases / decreases.” Pairs complete one sentence per card and say both aloud (spoken, not written). ANSWERS 1 As the temperature increases, the percentage of seeds that germinated increases. 2 As time increases, the water temperature decreases.	• Slides 6–8 • Handout p3 (key words)	• The 20 seeds do not change, so they are not a variable. • “Goes up” is fine; model “increases”. LANGUAGES Instruct learners to note any similar words on the handout p3 “In my language” column.
4 Model paragraph: the three jobs AIM See how a paragraph is organised. <i>Whole class, pairs</i>	11.5 min 25.5–37	1 Show slide 9 and handout p1. Read the model aloud; learners follow with a finger. Say: “This is the paragraph you will write.” 2 Show slide 10. Say: “Sentence 1 is the opening.” Pairs colour sentences 2–6 on the handout: use colour 1 for the finding, colour 2 for the evidence and colour 3 for the careful conclusion. 3 Show slide 11. Reveal. Learners fix their labels and read each starter aloud. ANSWERS 1 opening (no job). 2 F, 3 E, 4 C, 5 C, 6 C.	• Slides 9–11 • Handout p1	• “This proves...” or “because”: say “Use ‘suggests’ or ‘might’.”

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5 Build the paragraph and make evidence precise AIM Order sentences by job. Use two exact figures. <i>Pairs, then individual</i>	14.5 min 37–51.5	1 Show slide 13 and handout p3. Pairs put the five sentences in order and write the letters on the handout. Show slide 14. Reveal. Ask: “What helped you decide?” 2 Show slide 15 and handout p2. Say: “It is not wrong, but it is not precise.” Learners rewrite the weak sentence with two figures. 3 Show slide 16. Learners compare. Ask: “Why 10 °C and 25 °C?” ANSWERS Order: B, E, D, A, C (8 out of 20 = 40%; 18 out of 20 = 90%). Precise: “For example, at 10 °C only 20% of the seeds germinated, but at 25 °C 90% germinated.” Accept any two figures that show the difference.	• Slides 13–17 • Handouts p3, p2	• A different order: ask the pair to read it aloud. Does it still work? • Listing every number: say “Choose the two that show the difference.” SUPPORT The frame “For example, at ____”.
6 New investigation: sugar, then plan AIM Understand the experiment. Plan the three jobs. <i>Pairs, individual</i>	12 min 51.5–63.5	1 Show slide 18 (pictures only). Demonstrate dissolving with a glass and spoon. Ask: “What is different? What is the same?” Show slide 19. Pairs talk through the prompts, then predict the seconds in the empty table. 2 Show slide 20 and handout p4. Learners read the table and plan the three jobs aloud using the key language box. Partner checks: Is the finding clear? Are there two figures? Is there something the results do not show? ANSWERS Temperature changes; sugar, water and stirring stay the same. Plan: 1 as water temperature increases, time decreases. 2 e.g. 20 °C, 30 s and 80 °C, 5 s. 3 e.g. above 80 °C; other sugars; stirring.	• Slides 18–20 • Handout p4	• “Time increases”: ask “Does the time go up or down?” • Do not give the numbers before predictions.
7 Independent task: write AIM Write a results paragraph. <i>Individual</i>	14 min 63.5–77.5	1 Show slide 21. Say: “Write 80–100 words. Use your plan and the key language.” 2 Learners write alone on handout p4. Circulate and check the finding first, then the figures. 3 Learners count their words and write the number in the box. Do not mark spelling.	• Slide 21 • Handout p4	• “Because” or “proves”: ask “Do the results show the reason?” • Listing four numbers: ask “Which two?” SUPPORT Use the frame.
8 Check and improve AIM Check, give feedback, improve. <i>Individual, pairs</i>	8 min 77.5–85.5	1 Show slide 23 and handout p5. Learners check their paragraph against the three questions. 2 Learners swap. The partner says one thing that works and one thing to improve. 3 Learners improve one sentence on the handout. If short of time, drop the swap. 4 Ask: “What can a set of results tell us? What can’t they?” ANSWERS A relationship; not other conditions or other reasons.	• Slides 22–23 • Handout p5	• Optional: show the model answer (slide 22) after writing.

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9 Language review and records AIM Review the lesson's words. Update your records. <i>Whole class, then individual</i>	30 min 85.5–115.5	1 Review the words (8 minutes). Read each definition from handout p3. Learners write the word on whiteboards and show it. Then say a word and ask for a sentence about the seed or sugar results. 2 Update the vocabulary book (10 minutes). Instruct learners to copy the words from handout p3 (and its “In my language” column) into their record pages. Learners re-rate these words in the word check. 3 Explore one word (7 minutes). Show slide 24 or 25. Learners complete the table (result, variable, evidence) or the Frayer, not both. 4 Review the frames (5 minutes). Learners underline the three frames they used in their paragraph. Pairs say one frame aloud and name the job it does. ANSWERS Table: result = what you find out from an investigation. variable = something that can change. evidence = facts and numbers that support a point. Frayer: finish “variable”; non-example: the 20 seeds.	• Slides 24–25 • Handout p3 • Vocabulary book • Whiteboards	• Check that learners write meanings in their own words. • Learners with few words recorded: choose three to add now. LANGUAGES Instruct pairs to explain one word to each other in a shared language

AFTER THE LESSON Homework task: to be added. Journey slides: 2, 7, 12, 17.