Level 1 Science: practice paper 2026

AS 91923 Demonstrate understanding of science-related claims in communicated information · Vertex Academy practice paper, not an NZQA paper

Attempt ALL the questions. Show ALL working. Write your answers on lined paper, or in the space under each question.

QUESTION ONE

Resource A: NightOwl Optics website (product page)

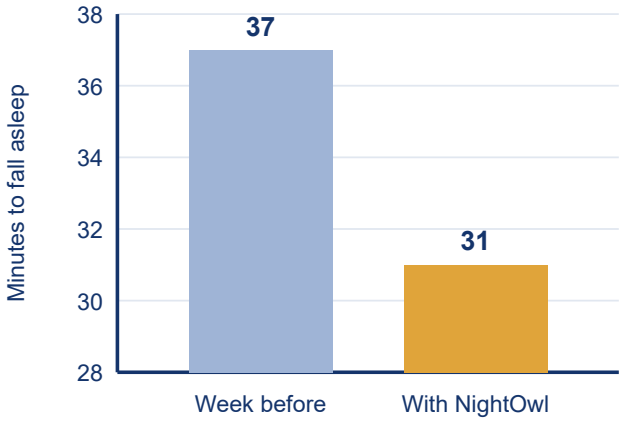
SLEEP BETTER TONIGHT with NightOwl Blue-Block Glasses.

Phones and laptops give off blue light, which tells your brain it is still daytime. Our patented amber lenses block 99% of blue light, so your body can make melatonin, the sleep hormone, naturally.

Clinically tested: in our 2025 trial, 20 NightOwl customers wore the glasses for two hours before bed for one week. On average they fell asleep in 31 minutes, compared with 37 minutes the week before.

"I fall asleep so much faster now!" Aroha, Hamilton

$89 with free shipping anywhere in New Zealand.



(a) Use Resource A.
(i) Who published this information?
(ii) Why was this information published?
(iii) What is a science-related claim in this resource?

(b) What science language or conventions are used to support the claim you gave in (a)(iii)? Explain how each one is used to make the claim more believable.

(c) How well do the science language and conventions in Resource A support the claim you gave in (a) (iii)? Use evidence from the resource to support your answer.

QUESTION TWO

Resource B: news article from a university news website

Blue-light glasses probably won't help you sleep, review finds. Southern University News, 12 March 2026.

A team at the university's Southern Sleep Lab has combined the results of 14 randomised controlled trials, involving 540 adults in total, published in peer-reviewed journals between 2008 and 2025. In each trial, some people wore blue-light-filtering glasses in the evening and a control group wore glasses with clear lenses that looked the same. Nobody knew which glasses they had.

The review, now published in a peer-reviewed journal, found no clear difference between the two groups in how long people took to fall asleep or how well they slept.

"The evidence is low certainty, because most of the trials were small and lasted only a few weeks," said the lead author. "We can't rule out a small effect, but there is no good evidence that these glasses improve sleep."

The review was funded by a government health research grant. The authors declared no conflicts of interest.

(a) Use Resource B.
(i) Who published this information?
(ii) Why was this information published?
(iii) What is a science-related claim in this resource?

(b) What science language or conventions are used to support the claim you gave in (a)(iii)? Explain how each one is used to make the claim more believable.

(c) How well do the science language and conventions in Resource B support its claim that blue-light glasses make little or no difference to sleep? Use evidence from the resource to support your answer.

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