

GCSE Astronomy Observation Tasks: Frequently Asked Questions (FAQs)

1. What are the GCSE Astronomy observation tasks?

GCSE Astronomy requires students to complete **two observation tasks** as part of the subject criteria:

- **One unaided observation** (conducted with the naked eye)
- **One aided observation** (using optical instruments such as a telescope, binoculars, or photographs)

These tasks are **mandatory**, though they are **not formally assessed for marks**. Instead, they are certified as complete by your exam centre (NEC, in this case), and your exam entry depends on their satisfactory completion.

2. Are the observations assessed?

While the observations themselves are **not marked for your final GCSE grade**, they are an **essential part of the course**:

NEC will need to confirm that you've completed both tasks and that you've kept notes or a report **written while you were doing the observation**, showing what you learned and how you carried it out.

You must submit **full reports** for each observation, demonstrating planning, execution, data collection, analysis, and evaluation.

At least **15% of your final exam marks** will be based on your understanding and application of observational skills. These may be examined through questions based on:

- Your observation experiences
- Novel contexts testing similar skills

3. What is the difference between aided and unaided observations?

- **Unaided Observation:** Performed using the naked eye. May involve techniques such as dark adaptation, averted vision, or measuring shadows. Examples include tracking star motion or observing lunar features.
- **Aided Observation:** Conducted using equipment (e.g., binoculars, telescopes, or digital cameras). These may include direct use or indirect access to images or data (e.g., photographs from online databases or robotic observatories).

Note: You **cannot** submit two observations of the same type or from the same code (e.g., A7 and B7).

4. When should I carry out the observations?

- It is **strongly recommended** that you complete at least **four assignments** in your NEC course before attempting the observation tasks. This ensures you have the foundational knowledge needed.
- Some observations (e.g., lunar features, meteor showers) are **seasonal or time-dependent**, so you must plan ahead.
- Your **final reports must be submitted by mid-March** in the year of your exam entry.
- Observations can take **days or weeks** to complete, depending on the task, weather, and availability of celestial phenomena.

5. What does NEC require from me to verify my tasks?

To validate your work, NEC requires:

- A **contemporaneous record** of the observations, including planning, raw data, diagrams/photos, and analysis
- Evidence of your **understanding and interpretation**
- **Authentic, individual submissions**; group work is permitted for observations but the write-up must be your own
- Reports that are complete and demonstrate clear links between **observation** and **astronomical theory**

6. What support does NEC offer for the observation tasks?

NEC offers several forms of support:

- Your **tutor will review** your proposal and completed work, offering guidance and feedback
- NEC can **arrange access** to online observation tools such as the **School's Observatory** run by Liverpool John Moores University (a free, powerful resource)
- Help in **planning and selecting tasks** suited to your location and resources
- **Deadlines and reminders** built into the course schedule to ensure timely completion
- Access to resources such as **Stellarium** (free astronomy software) and curated web tools

If you do not have access to equipment, your tutor can help you find an alternative task using online data or coordinate observations through NEC's systems.

7. What happens if I don't complete the tasks or fail to meet the criteria?

- Completion of both tasks is a **requirement** for NEC to submit your exam entry.
- If you submit a task that does not meet the assessment criteria, **you will need to redo the observation.**
- NEC permits resubmissions, subject to a **£15 fee per resubmission.**
- You should consult the "About Assessment" section on *learn@nec* for full details.

8. Where can I find guidance on the available observation tasks?

You will find detailed guidance in the **Practical Astronomy: Observational Tasks** section of your NEC course materials. These are found:

- After Section 3 of the course
- With codes (e.g., A1/B1) indicating whether a task is unaided or aided

- Alongside advice on planning, safety, data recording, and analysis

Popular choices include:

- **A1/B1**: Changing appearance of lunar features
- **A8/B8**: Estimating stellar densities
- **A9**: Finding longitude using a shadow stick

Each task has unique requirements. It is important to read these in detail before beginning.

9. Can I do the observations early in the course?

Some tasks (e.g., A9) can be observed early, though you may need to **complete the analysis later** in the course when the relevant theory is covered (e.g., Equation of Time in Section 6).

In general, NEC recommends that you complete **Sections 1 and 2** before choosing and planning your tasks. This gives you the scientific background required to approach the observations meaningfully.

10. How do I plan an observation task?

Your report should show evidence of clear planning, including:

- Task aim and reasons for choice
- Date and time of observation
- Equipment used (where applicable)
- Environmental factors (e.g., moon phase, weather, light pollution)
- Contingency plans (in case of poor weather or visibility)

11. What should my observation report include?

Each report must include the following elements:

- **Planning:** Purpose, conditions, equipment
- **Data Collection:** Drawings, measurements, photographs, observation notes
- **Analysis:** Interpretation of what was observed, explanations using astronomy theory
- **Evaluation:** Limitations, reflection on the method, suggestions for improvement

All references to software, imagery, and data sources (especially for aided tasks using online content) must be clearly acknowledged.

12. Can I do my aided observation using online resources?

Yes. If you lack access to binoculars or a telescope, you can:

- Use images from online databases (e.g., Messier objects)
- Access the School's Observatory for scheduled photographic data
- Reference image databases, but ensure all sources are correctly cited

Speak to your tutor to confirm suitability before proceeding.

13. Can I take my written exam anywhere?

Yes, NEC will arrange your exam entry and then transfer you to an exam centre of your choice. You may sit your exam at:

- One of NEC's **11 partnership centres** (including Cambridge, London, Manchester, Oxford)
- A **private exam centre**, although NEC must still process your entry

The exam entry process is detailed on the **Exams and Assessment** page on *learn@nec*.

14. What happens after I submit the observation reports?

Your tutor will:

- **Review and verify** that your observations meet the standard
- Provide **feedback** if changes or clarifications are needed
- Submit confirmation to NEC's assessment team, who will authorise your exam entry
- Retain the reports as evidence to satisfy exam board requirements

15. Who should I contact if I need help?

For help with:

- **Task selection, resources, or planning:** Contact your **NEC astronomy tutor**
- **Technical access (e.g., Schools' Observatory):** Request via your tutor or NEC's academic team
- **Exams, entries, or policies:** Refer to the **Exams and Assessment** page on *learn@nec* or contact NEC's student support team