

## **CATEGORY B**

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### **SUBJECT:**

### **ASTRONOMY**

### **OBJECTIVE(S)**

To acquire a basic knowledge and understanding of Astronomy.

### **PREREQUISITES**

The candidate will have had an active interest and involvement in the study of Astronomy for a period of *at least* twelve months before applying. The candidate's involvement may be through membership in a club, attendance at a series of activities, or independent study.

### **INSTRUCTORS/EVALUATORS**

- Members of local Astronomical Societies/Clubs
- Teachers of Sciences
- Individual Amateur Astronomers

### **REFERENCES AND MATERIALS**

#### 1. Local and school libraries

Reference texts under the following headings:

- Astronomy
- Solar System
- Planets
- Constellations
- Galaxy
- Stars
- Universe

#### 2. Local Museums

#### 3. Planetariums

#### 4. Observatories

#### 5. Weather Stations

#### 6. Appropriate Federal, Provincial or Municipal Government agencies, ministries or departments

- pamphlets

#### 7. Internet

#### 8. In Ottawa

- Dominion Observatory
- Canadian Museum of Nature
- Canadian Space Agency
- Canadian Institute for Scientific and Technical Information

**CONTENT**

Candidates must be able to demonstrate:

1. Ability to recognize and identify the main classical constellations, and know their use in identifying the main star groups and brighter fixed stars.
2. Knowledge of the types of eclipses of the sun and the moon.
3. Knowledge of the phases of the moon, satellites and planets of the solar system, relative distances, time of rotation and orbit.
4. Knowledge of asteroids and meteorites.
5. Has visited one of:
  - a Planetarium
  - Astronomical Observatory
  - Meteorologist Station

**DURATION**

As required.

**CERTIFICATION**

Test on content. A high standard should be expected (at least 70%).

and

Some form of a suitable project must be completed whereby the candidate will demonstrate their knowledge by one of the following:

- a) giving to his/her peers a presentation of at least 4 minutes duration or a written presentation of at least 1000 words including charts, pictures or/and diagrams.
- b) displaying of documents i.e. relevant texts, star guide, collections of photographs or clippings and answering questions related to documents.
- c) technical demonstrations, i.e. marking astronomical observations over periods of time using Binoculars or Telescope.
- d) keeping a log book of sightings over a period of time and elaborating on data.

Some projects on the form of audiovisual displays, expositions, scrapbook, scene plays, etc. may be prepared in teams. As long as each team member participates satisfactorily, Instructors/Evaluators are to ensure that the candidate has a thorough grounding in the basic facts and knowledge as outlined in the content. In addition, the Instructor/Evaluator must ensure an adequate level of understanding on the part of the candidate.

**CERTIFICATION OF SUCCESSFUL COMPLETION OF PROFICIENCY SUBJECT**

**ASTRONOMY**

Instructors/Evaluators should carefully consider the age, ability and accessibility to resource materials of each candidate.

The candidate has completed the above content and meets the requirements to the satisfaction of the Instructor/Evaluator.

Name of Instructor/Evaluator: \_\_\_\_\_

Agency: \_\_\_\_\_

Address: \_\_\_\_\_ Tel #: \_\_\_\_\_

Instructor qualifications: \_\_\_\_\_

I certify that

\_\_\_\_\_ of \_\_\_\_\_  
(candidate's name) (Division #)

meets the criteria of this proficiency subject, as laid out on the previous page(s).

\_\_\_\_\_  
Instructor/Evaluator (signature) Date

\_\_\_\_\_  
Divisional Superintendent (signature) Date