



## Science and Technology

To gain this badge the Explorer Scout must complete all the requirements in one of the following alternatives.

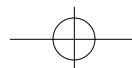
### Alternative A – Meteorology

- 1** Demonstrate a continued interest in meteorology. This should involve regular participation in activities, the use of a variety of recording instruments and recording observations for at least 50 hours.
- 2** Demonstrate skills in meteorological recording and observation to a group of young people to encourage them to try the activity.
- 3** Understand in detail the formation of clouds, and weather associated with different clouds and fronts.
- 4** Understand in detail how weather maps are produced and how to interpret them for use in Scouting activities.



### Alternative B – Mechanic

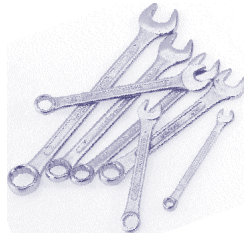
- 1** Demonstrate a continued interest in maintenance of a mechanical machine for at least 50 hours. This should involve regular activity and use of a variety of techniques.
- 2** Demonstrate skills in being a mechanic. This should involve knowledge of the principles of engine, gearbox and drive axle operation.
- 3** Discuss the safety rules of their activity and how to use the skills learned in a responsible manner with the examiner or instructor.





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These requirements should be adapted accordingly for marine and aviation engines.



### Alternative C – Radio Communication

- 1** Demonstrate continued interest in a method of communication. This should involve regular participation in activities, the use of a variety of recording instruments and recording observations for at least 50 hours.
- 2** Demonstrate skills in a communication method to a group of young people to encourage them to try the activity.
- 3** Discuss the rules or Codes of Practice of their chosen activity and how to use the equipment in a responsible manner with the examiner or instructor.

- 4** Demonstrate knowledge of appropriate alphabets and internationally recognised signs and signals.

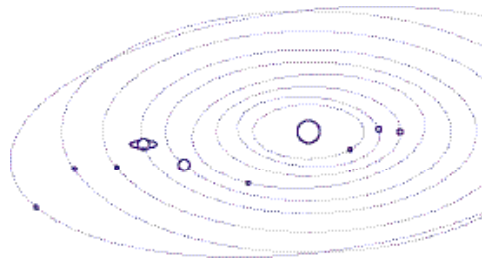
### Alternative D – Electronics

- 1** Demonstrate a continued interest in electronics. This should involve regular participation in activities and use of a variety of techniques and equipment for at least 50 hours.
- 2** Demonstrate skills in electronics to a group of young people to encourage them to try the activity.
- 3** Discuss the safety rules or safe working practices of electronics and how to use any equipment in a responsible manner with the examiner or instructor.
- 4** Demonstrate detailed knowledge of circuits, components and the symbols used in electronics.

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### Alternative E – Astronomy

- 1** Demonstrate a continued interest in astronomy. This should involve regular participation in activities, the use of a variety of recording instruments and recording observations for at least 50 hours.
- 2** Demonstrate skills in astronomical recording and observation to a group of young people to encourage them to try the activity.
- 3** Understand the meaning of technical astronomical terms and describe in detail our galaxy and solar system including planets and other bodies.
- 4** Demonstrate a good knowledge of man's activities in space since 1969.



### Alternative F – Naturalist

- 1** Demonstrate a continued interest in the natural world. This should involve regular participation in activities, using of a variety of study and conservation techniques, for at least 50 hours.
- 2** Demonstrate skills in the recording and observation of the natural world to a group of young people to encourage them to try the activity.
- 3** Understand in detail how man's activities are affecting the natural world, referring to pollution, deforestation and new farming techniques.
- 4** Demonstrate a good knowledge of natural history terminology, particularly local animal and plant species and other specialist words.