



2024 Edition

SCOUTMASTER BUCKY

Weather Merit Badge

SCOUTS PARTICIPATING IN A SCOUTMASTER BUCKY MERIT BADGE OPPORTUNITY (ONLINE OR IN PERSON), PLEASE CONSIDER ALSO USING THE WEATHER MERIT BADGE CLASS PREPARATION PAGE FOR CLARIFICATIONS, INSIGHTS, AND EXPECTATIONS.

<https://scoutmasterbucky.com/merit-badges/weather/weather-cpp.pdf>

WEATHER MERIT BADGE WORKBOOK

REQUIREMENT 1: Define meteorology.

Notes:

REQUIREMENT 1: Explain what weather is

Notes:

REQUIREMENT 1: Explain what climate is.

Notes:



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REQUIREMENT 1: Discuss how the weather affects farmers, sailors, aviators, and the outdoor construction industry. Tell why weather forecasts are important to each of these groups.

FARMERS:

How weather affects them:

Why weather forecasts are important to them:

SAILORS:

How weather affects them:

Why weather forecasts are important to them:



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AVIATORS:

How weather affects them:

Why weather forecasts are important to them:

OUTDOOR CONSTRUCTION INDUSTRY:

How weather affects them:

Why weather forecasts are important to them:



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REQUIREMENT 2: Name five dangerous weather-related conditions. Give the safety rules for each when outdoors and explain the difference between a severe weather watch and a warning. Discuss the safety rules with your family.

DANGEROUS WEATHER CONDITION #1:

Name:

Safety Rules when Outdoors:

DANGEROUS WEATHER CONDITION #2:

Name:

Safety Rules when Outdoors:



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DANGEROUS WEATHER CONDITION #3:

Name:

Safety Rules when Outdoors:

DANGEROUS WEATHER CONDITION #4:

Name:

Safety Rules when Outdoors:



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DANGEROUS WEATHER CONDITION #5:

Name:

Safety Rules when Outdoors:

REQUIREMENT 2: Explain the difference between a severe weather watch and a warning. Discuss the safety rules with your family.

Notes:



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REQUIREMENT 3: Explain the difference between high- and low-pressure systems in the atmosphere. Tell which is related to good and to poor weather.

Notes:

REQUIREMENT 3: Draw cross sections of a cold front and a warm front, showing the location and movements of the cold and warm air, the frontal slope, the location and types of clouds associated with each type of front, and the location of precipitation.

Notes:



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REQUIREMENT 4: Tell what causes wind

Notes:

REQUIREMENT 4: Tell why it rains

Notes:

REQUIREMENT 4: Tell how lightning is formed.

Notes:

REQUIREMENT 4: Tell how hail is formed.

Notes:



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REQUIREMENT 5: Identify and describe clouds in the low, middle, and upper levels of the atmosphere. Relate these to specific types of weather.

LOW LEVEL ATMOSPHERE CLOUDS:

Identify and Describe:

Weather these type of clouds are related with:

MIDDLE LEVEL ATMOSPHERE CLOUDS:

Identify and Describe:

Weather these type of clouds are related with:



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HIGH LEVEL ATMOSPHERE CLOUDS:

Identify and Describe:

Weather these type of clouds are related with:

REQUIREMENT 6: Draw a diagram of the water cycle and label its major processes.

Notes:



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REQUIREMENT 6: Explain the water cycle to your counselor.

Notes:

REQUIREMENT 7: Identify some human activities that can alter the environment, and describe how they affect the climate and people.

Notes:



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REQUIREMENT 8:

Describe how the tilt of Earth's axis helps determine the climate of a region near the equator, near the poles, and across the area in between.

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DO ONE OF THE FOLLOWING (9A or 9B) FOR REQUIREMENT 9

REQUIREMENT 9a: Make one of the following instruments: wind vane, anemometer, rain gauge, hygrometer.

Consider utilizing the Weather Merit Badge Pamphlet for assistance in preparing for this requirement component.

This requirement component must be reviewed with your merit badge counselor.

Be sure to bring your instrument to share with your merit badge counselor.

REQUIREMENT 9a: Keep a daily weather log for one week using information from this instrument as well as from other sources such as local radio and television stations, NOAA Weather Radio All Hazards, and internet sources (with your parent's permission). Record the following information at the same time every day: wind direction and speed, temperature, precipitation, and types of clouds. Be sure to make a note of any morning dew or frost. In the log, also list the weather forecasts from radio or television at the same time each day and show how the weather really turned out.

You will need to develop your own logbook or log sheet for completing this requirement.

This requirement component must be reviewed with your merit badge counselor.

Be sure to bring your logs to share with your merit badge counselor.

REQUIREMENT 9b: Visit a National Weather Service office or talk with a local radio or television weathercaster, private meteorologist, local agricultural extension service officer, or university meteorology instructor. Find out what type of weather is most dangerous or damaging to your community. Determine how severe weather and flood warnings reach the homes in your community.

National Weather Service Office or Local Weather Professional you visited or spoke with:

Date and Location of Visit:

Notes:



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REQUIREMENT 10: Give a talk of at least five minutes to a group (such as your unit or a Cub Scout pack) explaining the outdoor safety rules in the event of lightning, flash floods, and tornadoes. Before your talk, share your outline with your counselor for approval.

COUNSELOR APPROVAL: CLEARLY STATED IN THE REQUIREMENT, PRIOR TO GIVING YOUR TALK, YOU MUST GET APPROVAL FROM YOUR MERIT BADGE COUNSELOR BY SHARING YOUR OUTLINE.

Outline:

Counselor's Name

Phone

Counselor's Signature

Date

approved

Group you will speak to:

Date and Location of Presentation:

Notes:



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REQUIREMENT 11: Find out about a weather-related career opportunity that interests you. Discuss with and explain to your counselor what training and education are required for such a position, and the responsibilities required of such a position.

Selected Career Opportunity:

Educational Requirements:

Training Requirements:

Responsibilities: