

# Weather Watchers Web Quest

## Introduction

You are working towards completing the requirements you need to become a certified meteorologist. To do this, you must show that you can check weather data, prepare a weather forecast, and predict the weather for the next two days. You will be using the Internet to gather information you will be including in your weather forecast.

## The Task

You will participate in activities that will test your knowledge of weather, gather information from the Internet, and use the information you have found to prepare a daily weather report and predict the weather forecast for at least two days. Go to the web sites provided and complete the activities listed in the Process section below. Then answer the questions on the worksheet provided by your teacher.

## Resources

Visit the National Weather Service radar page ([weather.noaa.gov/radar](http://weather.noaa.gov/radar)) to see a national and local radar map. You can see where there is precipitation and how close it is to your area.

The Weather Channel ([www.weather.com](http://www.weather.com)) site gives you the opportunity to check your local weather forecast.

Dan's Wild, Wild Weather Page ([www.wildwildweather.com](http://www.wildwildweather.com)) is an excellent site for learning more facts about weather and forecasting.

Accuweather ([www.accuweather.com](http://www.accuweather.com)) is another great location to check radar maps and local weather conditions.

## The Process

1. Visit the National Weather Service radar page ([weather.noaa.gov/radar](http://weather.noaa.gov/radar)) and click on the words – Most Recent National Composite. Look at the map of the United States. Then check your local radar conditions by choosing your state on the left side of the site. Answer the questions on the worksheet using the information you gather on this site.
2. Visit The Weather Channel ([www.weather.com](http://www.weather.com)) site to gather information about the current weather conditions in our area right now. To get to your local weather conditions, you will have to type in your zip code in the box in the upper right corner of the page. Answer the questions on the worksheet using the information you gather from this site.

3. Visit Dan's Wild, Wild Weather Page ([www.wildwildweather.com](http://www.wildwildweather.com)) to check on the cloud conditions in your area and to learn more about the different types of clouds and what they mean in weather forecasting. To compare cloud types with your local clouds, click on the word clouds on the left side of the page. Next, scroll to the bottom of the page and click on "Clouds: One Key to Foretelling the Weather". On the left side of the page, click on the type of cloud you found outside. Answer the questions on the worksheet using the information you gather from this site. (There is a great deal of information at this site so you may want to take a few minutes to look at some of the other areas that interest you.)
4. Visit Accuweather ([www.accuweather.com](http://www.accuweather.com)) to check other radar and satellite maps and gather data on the high and low temperatures over the next several days. To gather information for your area, you will have to type in your zip code in the box on the upper left side of the page. Then at the top of the page, click on radar to see any precipitation in our area. Next click on Satellite at the top of the page to see any cloud cover in our area. Finally, click on maps to see the current temperature in our area. Use the drop down charts at the bottom of this page to check the high and low temperature for the next two days. Answer the questions on the worksheet using the information you gather from this site.
5. Using the information you have gathered from the web sites you have just visited, complete the remainder of the worksheet by forecasting weather predictions for the next two days. After you have made your predictions, go back to The Weather Channel ([www.weather.com](http://www.weather.com)) and type in your zip code again or Accuweather.com ([www.accuweather.com](http://www.accuweather.com)) and click on the My Local Page folder at the top. See if your 2-day prediction matches their prediction for our area.

## **Learning Advice**

Web sites are a great way to learn about the weather. There are even more web sites about weather available. I encourage you to explore the Internet to find as many web sites about weather as possible. Use your new weather knowledge to determine which sites you think give the most useful information about weather in your area.

## **Conclusion**

Congratulations! You have completed the requirements needed to become a certified meteorologist. You now have a very good understanding of gathering and reading weather data and making forecasts and predictions about the weather. Good luck with your new career as a meteorologist.

## Weather Watchers Web Quest Worksheet

National Weather Service Site (<http://weather.noaa.gov/radar/>) and click on the top words – Most Recent National Composite. Look at the map of the United States. Check your local radar conditions by choosing your state on the left side of the site and clicking on “Blacksburg”.

- A. Where in the USA is there precipitation? \_\_\_\_\_
- B. Is there any precipitation close to your State? \_\_\_\_\_
- C. Looking at this map, do you think there will be any precipitation in your area in the next two days? \_\_\_\_\_
- D. Using the local radar conditions map, is there precipitation in your area now?  
\_\_\_\_\_
- E. Do you think there will be precipitation in your area soon? \_\_\_\_\_
- F. What information can you gather from these two maps that may help you forecast the weather?  
\_\_\_\_\_  
\_\_\_\_\_

2. Visit The Weather Channel ([www.weather.com](http://www.weather.com)) site to gather information about the current weather conditions in your area right now. To get to your local weather conditions, you will have to type in your zip code in the box in the upper right corner of the page.

- A. What can you find out about current conditions in our area from this site?  
Temperature: \_\_\_\_\_ Cloud Cover: \_\_\_\_\_  
Wind: \_\_\_\_\_ Dew Point: \_\_\_\_\_  
Humidity: \_\_\_\_\_ Barometer: \_\_\_\_\_
- B. Use the Temperature Converter below the Barometer Reading to convert the temperature to Celsius. What is the Celsius temperature? \_\_\_\_\_

3. Visit Dan’s Wild, Wild Weather Page ([www.wildwildweather.com](http://www.wildwildweather.com)) to check on the cloud conditions in your area and to learn more about the different types of clouds and what they mean in weather forecasting. To look at clouds, click on the word clouds on the left side of the page. Scroll down to the clouds chart. Now look outside. Next, scroll to the bottom of the page and click on “Clouds: One Key to Foretelling the Weather”. On the left side of the page, click on the type of cloud you found outside right now.

- A. Using the chart on the web page, what type of clouds are in your area right now? \_\_\_\_\_
- B. Now go to the “Clouds: One Key to Foretelling the Weather”. Click on the type of cloud you found outside. Write down two facts about these clouds.  
\_\_\_\_\_  
\_\_\_\_\_

C. How might this information help you forecast the weather?

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4. Visit Accuweather ([www.accuweather.com](http://www.accuweather.com)) to check other radar and satellite maps and gather data on the high and low temperatures over the next several days. To gather information for your area, you will have to type in your zip code in the box on the upper left side of the page. Then, at the top of the page, click on radar to see any precipitation in our area. Next click on Satellite at the top of the page to see any cloud cover in our area. Finally, click on maps to see the current temperature in our area. Use the drop down charts at the bottom of this page to check the high and low temperature for the next two days.

A. Radar – Is there precipitation in our area at this time? \_\_\_\_\_

B. Satellite – What kind of cloud cover is over our area?

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C. Maps – What is the estimated high temperature for the day? \_\_\_\_\_

D. Using the chart at the bottom of this web page, find the current temperature for today. \_\_\_\_\_

Using the chart at the bottom of this web page, find the expected low and high temperatures for the next two days.

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5. Using the information you have gathered from the web sites you have just visited, write down your weather predictions for the next two days. After you have made your predictions, go back to The Weather Channel ([www.weather.com](http://www.weather.com)) and type in your zip code again or Accuweather.com ([www.accuweather.com](http://www.accuweather.com)) and click on the My Local Page folder at the top. See if your 2-day prediction matches their prediction for our area.

A. Day One Prediction (Tomorrow)

B. Day Two Prediction

C. Is your prediction close to the forecast on the web site you chose for comparison? Why or why not?

6. After you complete your worksheet, go back to Dan's Wild, Wild Weather Page ([www.wildwildweather.com](http://www.wildwildweather.com)) and try the word search and puzzles under the Games and Puzzles link. You can print out copies of the puzzles and word searches after you have completed them.