

## WEATHER IN ABERDEEN

When the first settlers arrived in Aberdeen they *experienced* weather that was very similar to the weather we have today. The summers were hot and windy, and the winters were very cold and snowy. Weather conditions in an area that are *consistent* over a period of years are called the area's *climate*.

This climate would *determine* what type of home or job the new settlers could have. They would have to be able to provide a source of heat in their homes to stay warm during the cold of winter. Farmers would have to plant crops that grew quickly because the summers were very short. The weather of an area is important because it tells us how people might live.

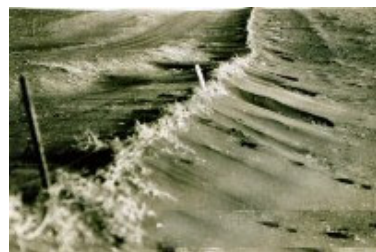
Aberdeen has *extreme* weather which means it can be very hot in the summer and very cold in the winter. There also isn't much *moisture* in our climate that comes from rain and snow. The area around Aberdeen gets about 25 inches of *precipitation* each year, and most of that comes from summer rains. That is an *average* amount, some years will be wetter and some drier. The years with extreme weather conditions are usually when the people living in an area have problems doing their jobs and participating in activities.

Today we have people who *forecast* weather so we can be prepared if there is bad weather coming. When the first residents of Aberdeen lived here, they had no way of knowing what the weather might be the next day or the next week. The newspapers printed forecasts which were created by people living in bigger cities like Minneapolis or even Chicago. The forecasters in these cities would send this information by *telegraph* to the man who was in charge of the Aberdeen railroad station who would put up one or more flags which told people what the weather would be. These were called *signal* flags, and they are pictured later in this lesson.



When the early residents had a blizzard, they had to shovel the snow from the sidewalk and street by hand because they did not have snowblowers. They piled the snow in their yards and on the edge of the street because they also had no trucks to carry it away. One winter they had so much snow, they had to dig tunnels through snowbanks so they could get across the street.

Sometimes it would rain too much and Aberdeen would flood because the land is so flat and there was no place for the water to go. When they had a flood, the people had to use boats to get around until the water *evaporated* and the streets were dry again. Today we have storm sewers that help carry water away from our houses and streets so the streets do not flood.



There are some years when Aberdeen does not get enough precipitation and that causes a drought. Grass, trees, flowers, and crops will not grow when there is a drought because they must have water to live and grow. When the land is very dry the dirt becomes dust. Wind picks up the dust and blows it around in the air. If there are no trees or plants to hold the dirt down, entire fields can blow away if they are too dry. This dirt will drift just

like snow ending up in huge piles around fences or buildings.

The climate of Aberdeen also can be very windy. Sometimes we even have wind storms that have winds so strong they can lift buildings off the ground or blow them apart so they can't be used any more.

The people who came to Aberdeen to live had to learn how to live in Aberdeen's climate so they could survive. What do we do today to live through blizzards, rains, winds, and floods?



# Weather in Aberdeen



## **Central Building Fire at NSU 1961**

This building stood at the center of the NSU campus where the Mewalt-Jensen building stands today. It was the oldest building on the campus built in 1901 when the school opened. Fire nearly destroyed it before it was completed but rebuilding began immediately so the building was ready for students in 1902. At that time, it was the only building on campus. The fire in this picture took place in February, 1961. This time the building was torn down rather rebuilt.



## **Wind Damage at the Tri-State Fairgrounds 1921** (now Brown County Fairgrounds)

A new fairgrounds was built for Aberdeen in 1921. These new grounds were almost ready for the first ever Tri-State Fair when a windstorm damaged some of the buildings including this stock barn. The fair was held despite these damages.



## **Drifted Dust 1934**

During the 1930s, Aberdeen and all of South Dakota suffered a drought. No crops would grow because little or no rain fell for several summers. Winds were constant and eventually picked up the dry dirt and blew it throughout the region. The dirt finally ended up in drifts along fences like this one. This is one form of erosion.



### **Aberdeen Snow Tunnel 1897**

There was so much snow (over 94 inches) during the winter of 1896-1897 that tunnels were dug (by hand) so people could continue traveling throughout the city. This tunnel was located at the corner of Eighth Avenue northwest and Washington Street. It was large enough for a full size horse and sleigh to pass through.



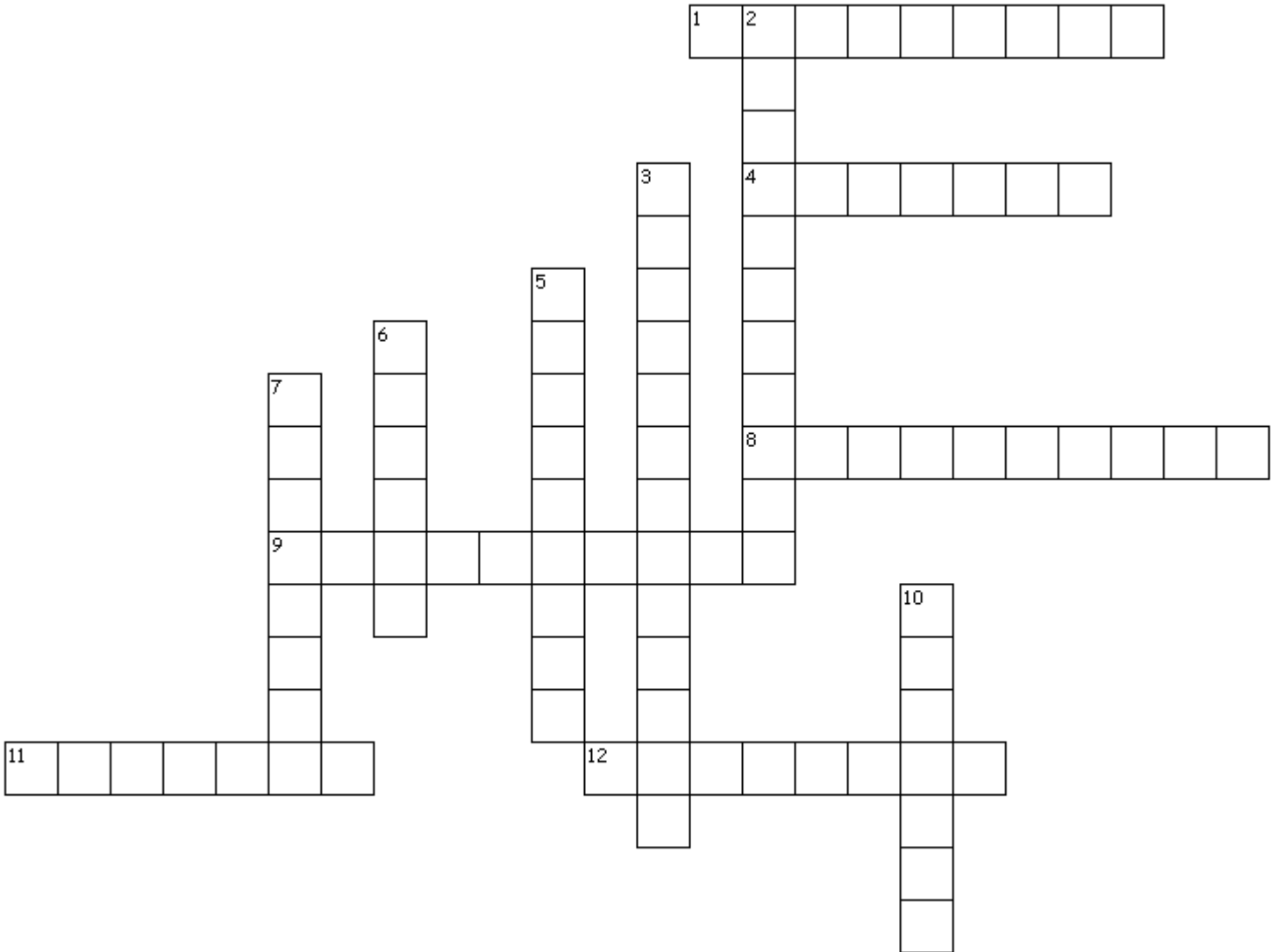
### **Spring Floods 1897**

After all the snow of 1896-1897 melted, some parts of Aberdeen were under water as deep as eighteen inches. This picture was taken at the corner of Fifth Avenue and Washington Street. Notice that water even covered the sidewalk which was made out of wood. People had to use row boats to travel throughout Aberdeen. These flood waters did not evaporate until mid summer.

## WORDS FOR ME TO LEARN

1. **Experienced** (verb) lived through
2. **Consistent** (adjective) always the same
3. **Climate** (noun) the type of weather a place has year after year  
Example: Florida has a warm climate
4. **Determine** (verb) to decide or to discover
5. **Extreme** (adjective) exaggerated or outside the normal
6. **Moisture** (noun) wetness
7. **Precipitation** (noun) the amount of water received from rain, sleet, or snow
8. **Average** (noun) normal
9. **Forecast** (verb) to predict
10. **Telegraph** (noun) an early method of communication using a series of dots and dashes transmitted over a wire to send messages over great distances instantly.  
Early day e-mail
11. **Signal** (noun) a method of giving a warning
12. **Evaporated** (verb) to have vaporized or to have disappeared

# Weather in Aberdeen



## Across

1. to decide or to discover
4. exaggerated or outside the normal
8. always the same
9. to have vaporized or to have disappeared
11. the type of weather a place has year after year    Example: Florida has a warm climate
12. wetness

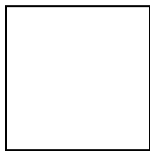
## Down

2. lived through
3. the amount of water received from rain, sleet, or snow
5. an early method of communication using a series of dots and dashes transmitted over a wire to send messages over great distances instantly.    Early day e-mail
6. a method of giving a warning
7. to predict
10. normal

# FLAGS THAT TALK

Flags that are a certain color or shape were once used to tell people what kind of weather to expect. These flags were used before we had radio, television, or internet to tell us about the weather. There were five flags used to signal the weather forecast which are shown below. When the temperature flag was placed above any of the flags in the top row, it meant warmer weather; placed below meant colder. When the temperature flag was not flown, it meant the temperature would not change more than four degrees from the temperature of the same hour of the day before in the months from March to October, and not more than six degrees for days in the months of November to February. When the cold wave flag was flown it meant a sudden and drastic fall in temperature.

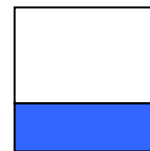
On a separate piece of paper, use these flags to tell what you think the weather will be like for the next 7 days. Can your classmates guess what weather you predict?



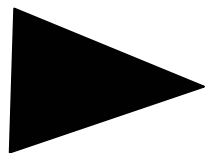
Clear or Fair Weather



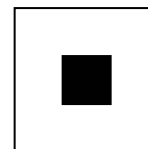
Rain or Snow



Local Rain or Snow



Temperature



Cold Wave



# CENTRAL BUILDING (NSU) FIRE

February 1, 1961



Here is a good example of how the climate of Aberdeen affects how people work. When it is cold outside, firemen have trouble fighting fires because their hoses and other equipment freeze up. The night this fire happened it was about 6 degrees above zero, and also very windy. The firemen's fire coats became wet and soon were covered with ice. The ground was covered with about six inches of slush from all the water the men were shooting on the building. After several hours, the fire hoses froze into that slush making it impossible to move them around. Fighting this fire was very hard for the firemen because of the weather that night.