## CREATE WEATHER STATION MODELS

## Activity 1 - Make You Own!

In the chart below, you find meteorological data that was taken at several different airports in Utah. Use this data to create weather station models for each city listed in the table.

| City                | Temp. Dew Point |    | Wind      |       | Air      | Cloud             | Current               |
|---------------------|-----------------|----|-----------|-------|----------|-------------------|-----------------------|
|                     | °F              |    | Direction | Speed | Pressure | Coverage          | Weather<br>Conditions |
| Salt Lake           | 45              | 30 | SW        | 16    | 1016.9   | Sky<br>obstructed | fog                   |
| St George           | 79              | 45 | NE        | 5     | 1030.1   | 2/8               | none                  |
| Provo               | 42              | 19 | SW        | 20    | 998.2    | Overcast          | drizzle               |
| Bryce Canyon        | 31              | 8  | W         | 30    | 986.4    | 6/8               | heavy snow            |
| Ogden               | 39              | 26 | NW        | 35    | 991.9    | 7/8               | thuderstorm           |
| Hill Air Force Base | 44              | 30 | S         | 10    | 1000.0   | 3/8               | none                  |

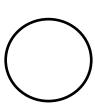
Salt Lake



St George



Provo



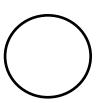
**Bryce Canyon** 



Ogden



Hill Air Force Base

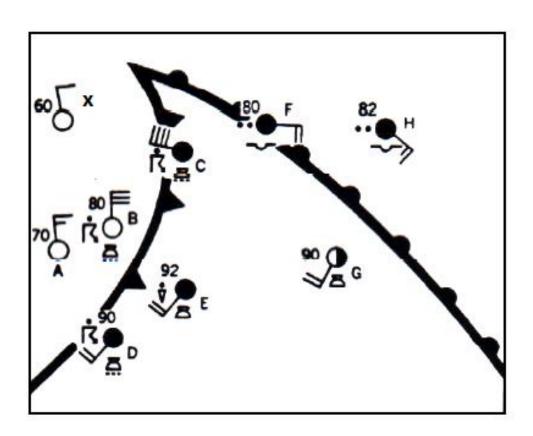


## Activity 2 - Tying it all Together

Study the weather station models show in the diagram of a weather map below. Then write the letter or letters (some may have more than one) under each description.

- 1. Areas where wind is north
- 2. Areas where wind is south
- 3. Areas where wind is east
- 4. Areas where wind is southwest
- 5. Closest to the warm front
- 6. Closest to the cold front

- 7. Areas that are overcast
- 8. Areas that have thunderstorm
- 9. Areas that have light rain
- 10. Areas with winds at 20 knots
- 11. Areas where wind is 40 knots.
- 12. Areas that have cumulonimbus clouds



- 1. Shade the area where a maritime Tropical (mT) air mass is located in red.
- 2. Shade the area where a continental Polar (cP) air mass is located in blue.
- 3. Describe a real life situation when a weather station model is useful.