

Name: _____

Weather Unit Exam

Exam is on: _____

You are permitted to write down any notes you wish on **both** sides of a 3 by 5 index card. Rules for note cards:

- You are responsible to bring your index card to class on the day of the exam.
- You must produce your own card and turn it in after the exam.
- You cannot use or share anyone else's card on the exam.
- You cannot exceed the area of the index card's front and back.

Exam Format

- **Part 1:** 30 Multiple-choice questions about storm model and assigned readings.
- **Part 2:** 10 Multiple-choice questions about comparing a set of isobar maps. You will draw 1 isobar map. You will compare this map to others to make inferences about weather phenomena. Maps and analysis are done as a group. The multiple-choice questions are done individually.

Terms (in no particular order)

- | | | |
|---------------------|-----------------|-----------------|
| ● Cloud cover map | ● Front | ● Barometer |
| ● Precipitation map | ● Low pressure | ● Humidity |
| ● RADAR | ● High pressure | ● Temperature |
| ● Isobar | ● Up draft | ● Wind |
| ● Isotherm | ● Down draft | ● Precipitation |
| ● Cumulonimbus | ● Conduction | ● Air mass]Rage |
| ● Surface winds | ● Convection | gage |
| ● Upper winds | ● Millibar | ● Thermometer |
| ● Warm front | ● Cold front | ● Storm |
| ● Weather | ● Air pressure | ● Zulu time |

Ideas to Study (Not an all inclusive list, but a good place to start.)

- Be able to explain how air is heated indirectly by sunlight.
- Be able to differentiate between conduction and convection.
- Be able to describe various types of clouds.
- Be able to explain how clouds form.
- Be able to explain the motion of warm air and cold air.
- Be able to explain how winds form.
- Be able to explain the role of air pressure in storm formation.
- Be able to explain the difference between precipitation maps, cloud cover maps, isobars and isotherms.

- Be able to explain how temperature, pressure, wind, and humidity change before and during a storm.
- Be able to convert Zulu time into local non-military time.
- Be able to describe which types of weather tools are used for measuring which types of weather
- Be able to explain how different surfaces affect the temperature of the air above it.
- Be able to explain how an updraft happens as opposed to a downdraft.
- Be able to explain the types of precipitation and updrafts associated with warm fronts vs. cold fronts.

Study Materials

- Isobar and isotherm maps you drew
- CER: How is Air Heated?
- BBB: How's the Weather, BBB: Storm Newscast
- Isobar and isotherm maps you drew
- Labs done in class
- Storm model and principles