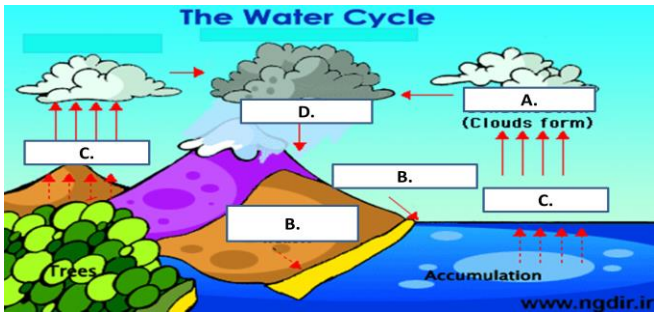
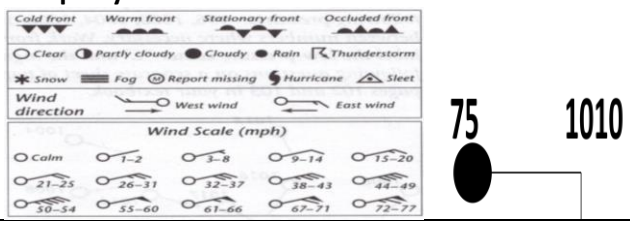
1st Semester Midterm Study Guide: Midterm: January 10th, 2017

Questions:	Answers:
Describe the gas composition of the atmosphere.	
Arrange the main layers of the atmosphere from Earth to space.	
In which layer of the atmosphere is air pressure greatest near the surface of the Earth?	
 Identify the following on the image pictured above: precipitation, surface-water flow, evaporation, groundwater flow, transpiration, and condensation.	
Draw and describe the shape of a cumulus cloud.	
What are low, layered clouds that produce light precipitation called?	
Cumulus clouds signal what type of weather conditions?	
Describe the type of weather cumulonimbus clouds bring.	
Describe a stationary front.	
Describe a cold front.	
An _____ front consist of two cool air masses merging, and forcing the warm air mass up.	
A _____ front forms when warm air moves over cold air.	
Identify what each weather instrument measures: A. Barometer B. Thermometer C. Anemometer D. Rain Gauge E. Sling Psychrometer F. Wind Vane	
Be able to describe the cloud cover, barometric pressure, and wind speed, given a station model and a map key. 	
Define isobars.	

Describe the images used for seeing cloud patterns and movement.	
Define solar energy.	
What process takes place when solar energy is absorbed by Earth's land and water surfaces?	
What is the cause of global winds?	
Explain the reason climate zones occur.	
Which winds blow from east to west in the tropical region moving warm tropical air in that climate zone?	
Which winds blow from west to east in the temperate region?	
What is a fast-moving ribbon of air that moves around the globe of Earth dipping and bending and constantly changes positions.	
Explain the energy flowing in an electric circuit.	
Identify mechanical energy that is related to the position of an object.	
Identify mechanical energy an object has due to its motion.	
Explain the Law of Conservation of Energy.	
What forms when a wire in an electric circuit is wrapped around an iron core producing a magnetic field?	
How do power plants produce electric energy for our homes?	
Which poles of a magnet attract?	
Identify the four ways electrical energy can be transformed in electrical circuits.	
Draw and label the three components of an electric circuit.	
Draw an example of <u>convection</u>.	
Draw an example of <u>conduction</u>.	
Draw an example of <u>radiation</u>.	
Explain a property that enables something to do work.	
Explain the meaning of work.	
Be able to identify examples of evidence of energy (work being done).	
Look around the classroom and make <u>two quantitative</u> and <u>two qualitative observations</u> as well as <u>two inferences</u>.	
Be able to identify correct and incorrect lab safety procedures in a image provided.	