Name: _____

Period: _____

2. WEATHER RADAR & SATELLITE

DIRECTIONS: Using links from the website (http://earthscience.wordpress.com/weather-links), or paper handouts if the website is not available complete the following questions with the best possible answer.

Meteorologists use several different types of images to help them forecast the weather. Two of these types of images are radar and *satellite*. These two image types differ in important ways, but both give crucial weather information every day

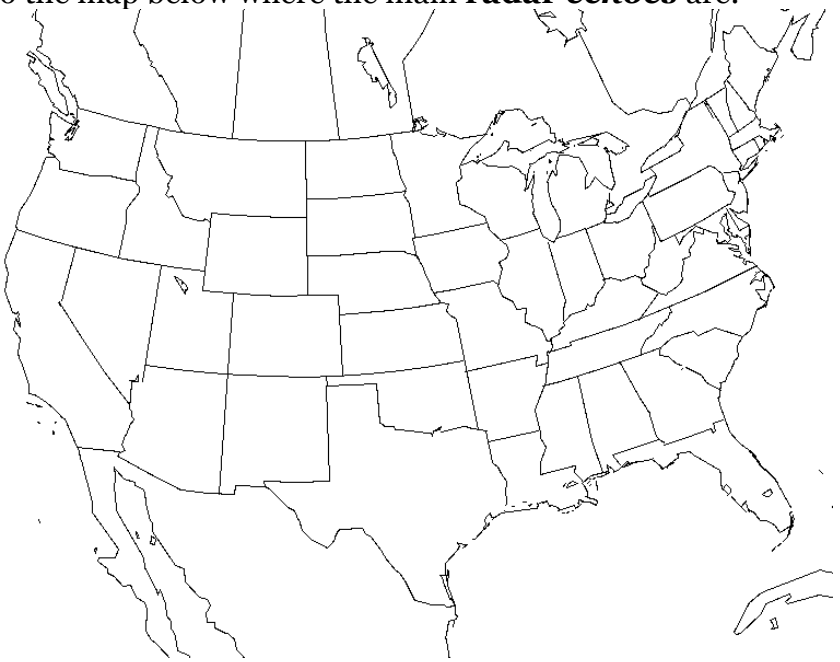
I. Weather Radar

Using the link in the bottom "References" section of the website, read about **Radar Basics** [http://earthscience.wordpress.com/weather-links > References > 3. Weather Radar > Basics] and answer the following questions.

1. Radar uses what type of *pulse* transmitted through the atmosphere? _____
2. Does weather radar send *out* energy or *receive* energy or *both*? _____
3. Using the "Radar > Imagery" link, describe in your own words what the term *radar echo* means:

Next, go back to the weather forecasting page: http://earthscience.wordpress.com/weather-links
Go to the "Current Radar Imagery" section and click on the link for the US radar IMAGE.

4. What is the *time stamp* on the radar image? _____
5. Sketch ***lightly*** onto the map below where the main **radar *echoes*** are:



6. Next, click on the National Radar LOOP link. Using this information, sketch several *arrows* on the map above indicating the direction of motion of the radar echoes you have drawn.

II. Weather Satellites

Using the link in the bottom "References" section of the website, read about **Satellite Basics** [http://earthscience.wordpress.com/weather-links >References > 4. Weather Satellites > Basics] and answer the following questions.

1. According to the website, Webster's Dictionary defines a ***satellite*** as what kind of object?

2. Using the same website, click on the links for the "GOES" and "POES" information. Describe the ***difference*** between these two types of satellites.

3. When did the first weather satellite get launched into space? _____

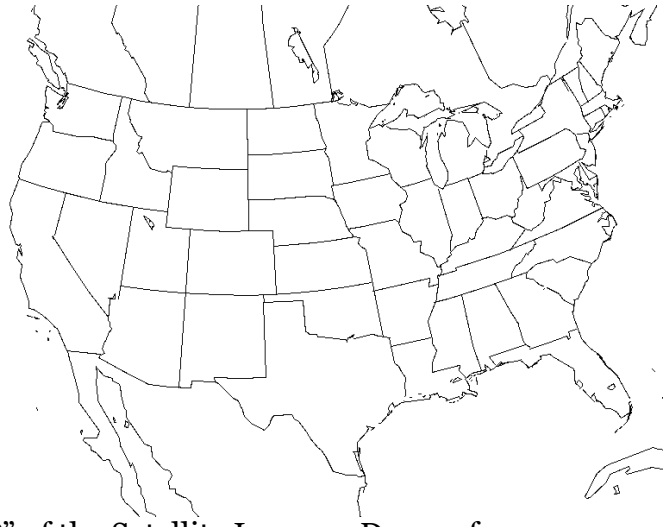
Next, go to the "Weather Satellites > Imagery" link from the weather homepage.

4. What type of clouds are brighter on satellite images: thin or thick clouds? _____

Go up to the "Satellite Images" area of the THS Weather page > Current US Visible Satellite image.

5. What is the "time stamp" on the image? _____

6. Sketch on the image below what the satellite image looks like:



7. Next, look at the "**LOOP**" of the Satellite Images. Draw a few arrows on the map above showing the movement of the clouds that you already sketched onto the map.

8. Complete a small Venn Diagram for Radar vs. Satellite, including at least three differences on each side and at least on common factor in the center.