



Name \_\_\_\_\_

## Reading and Video Questions

### Transforming Satellite Data into Weather Forecasts Reading Questions

Answer the following as you read.

1. How is GOES – 16 an improvement over previous GOES versions?
2. How do RGBs make interpretation easier?
3. Why is the Nighttime Microphysics RGB useful?
4. How are the bands chosen for an RGB?
5. Why is the NtMicro RGB used so frequently in Alaska?
6. How did SPoRT determine the effectiveness of the NtMicro RGB in distinguishing fog from low clouds?

## Ask BOM Video

1. What does RADAR stand for?
2. How do meteorologists determine the distance of an object (or precipitation) from the radar?
3. How do meteorologists determine the type of precipitation from the radar return?
4. What is the optimal range for a radar?
5. What things cause radar to report precipitation when there is none present?

## Inside the KIWX Doppler Radar

1. Are there any areas in your state that are not covered by the 164 radars in the US?
2. How does a radar detect precipitation?
3. What changes can the staff make to the radar dish's operation?
4. What is the purpose of two of the three buildings at the base of the radar?

## Skywarn – Doppler Radar

1. Why does the radar send out a horizontal and vertical pulse?
2. What are the differences between the clear air mode and the precipitation mode?
3. What is the cone of silence? How does it affect how thunderstorms are detected?
4. How does the curvature of the Earth affect radar?
5. What does the base reflectivity image from a radar show?



6. What do the base velocity readings of the radar tell us?
7. What is the purpose of the storm relative velocity data?

## How 5G cell phone service could affect weather forecasting article

Either go to the following web page or read the article provided by your teacher.  
<https://www.9news.com/article/weather/weather-colorado/interference-5g-weather-forecasting/73-a0b30746-33f4-45ef-bca7-a7bf8dd9bbc4>

As you read, answer the following questions.

1. Why can't meteorologists use other frequencies to collect weather data?
2. What makes specific frequencies favorable for communications?
3. What natural compound emits a frequency close to the ones recently purchased by cell phone companies?



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