

Here are sample answers corresponding to the questions outlined on the student E-Sheet.

Step 1:

- **Is public awareness about hurricanes better today than it was in the early 1900s?**
(Yes, it is. Today, people threatened by hurricanes receive warnings one or two days in advance, after already being aware of its existence days earlier. Back in the early 1900s, people had less than a day to prepare for oncoming tropical storms because of limited technology.)
- **Does this change in hurricane awareness help people today? If so, how?**
(Answers will vary.)
- **What kinds of technology help scientists to identify and follow hurricanes?**
(They include satellites, radars, airplanes, and other machines. Note: it may be necessary to briefly explain what satellites and radars are and what they basically do.)
- **What do meteorologists do when they see a tropical storm using radars and satellites?**
(They monitor the storms and issue hurricane watches and warnings to the public so that they have time to prepare in case the storm reaches their area.)
- **What is the difference between a Hurricane Watch and a Hurricane Warning?**
(A Hurricane Watch informs the public that hurricane-type weather poses a possible threat to the region, while a Hurricane Warning informs the public that a hurricane is expected in a specific area within 24 hours.)
- **Who are hurricane hunters? What do they do?**
(Hurricane hunters fly airplanes with special weather instruments straight into the middle of hurricanes and other powerful storms to gather information about the storm's position and intensity.)
- **Is the job of a hurricane hunter something you would ever do? Why or why not?**
(Answers will vary.)

Step 2:

- **Watch Hurricane Georges from 1998. How does this hurricane begin and end?**
(It begins and ends as a tropical depression moving at speeds less than 34 knots.)
- **Watch Hurricane Fran from 1996. What happens to this hurricane when it reaches the United States?**
(It slows down from a category 3 hurricane to a tropical storm, then tropical depression as it goes further.)
- **Watch Hurricane Andrew from 1992. What is the highest category this hurricane reached?**
(It reached the level of a category 4 hurricane with a top wind speed of approximately 135 knots an hour.)

Step 3:

- **What is happening today in the West Pacific?**
(Answers will vary.)

Step 4:

- **What does this map do?**
(It measures the daily temperatures of different regions of North America.)

- **What do the colors represent?**
(The different colors on the scale at the bottom of the map reflect the different temperatures in the regions they cover.)
- **In what part of the United States is it the hottest today? The coolest?**
(Answers will vary.)
- **How does the temperature in Texas compare to that in California?**
(Answers will vary.)

Step 5:

- **Do you see any storms moving over the United States? Where?**
(Answers will vary.)
- **Look at the scale at the bottom of the map. What kinds of storms are they? Are they serious?**
(Answers will vary.)
- **In what direction are they moving?**
(Answers will vary.)
- **How do radar images like this help scientists and meteorologists track and measure the weather?**
(Answers will vary.)
- **Do you think scientists would be able to follow the weather without machines like radars or satellites? Why or why not?**
(Answers will vary. The storms are either too big and/or too far away for the human eye to accurately follow. Technology is needed to gain and measure up-to-date accurate details about all aspects of weather in order to inform and prepare society for any possible developments or danger.)

Step 6:

- **By the way, what are satellites? What do they do?**
(Answers will vary. In general, they are human-made machines that orbit the earth collecting data, taking photos, and other functions.)
- **Which regions of the United States have the most clouds?**
(Answers will vary.)
- **Look at the scale below the map. Where are the highest clouds and coldest weather? In what direction are they moving?**
(Answers will vary.)
- **Which areas have the clearest weather?**
(Answers will vary.)
- **How accurate do you think the information is on the screen? Why?**
(Answers will vary.)