



ACTIVITY: Weather Anticipation Guides (Level 1)

1. Weather Overview Anticipation Guide

Write a + if you agree with the statement and a – if you disagree with the statement. Below is an example of a completed anticipation guide.

Before Reading	Statement	After Reading
+	NASA thinks that it is important to watch the weather during a Shuttle Launch.	+
+	Shuttles can launch in any kind of weather.	–

Before Reading	Statement	After Reading
	Weather Information is provided by over 100 stations from all over the world.	
	During the countdown, formal weather briefings begin 25 hours before the launch.	
	Weather is monitored by Naval Officers aboard a ship in the ocean.	
	The Range Weather Operations Facility and Melbourne prepare the launch weather forecasts, ground operations forecasts, and launch weather, which apply after launch.	
	The Space Flight Meteorology Group (SMG) prepares forecasts, which apply after launch.	

Reflection:

What did you already know about launch weather?

What did you learn from reading the weather overview?

What surprised you?

2. Looking at the Weather Conditions Anticipation Guide

Write a + if you agree with the statement and a – if you disagree with the statement. Below is an example of a completed anticipation guide.

Before Reading	Statement	After Reading
+	NASA thinks that it is important to watch the weather during a Shuttle Launch.	+
+	Shuttles can launch in any kind of weather.	–

Before Reading	Statement	After Reading
	Weather conditions are monitored in the sky and on the ground.	
	Rain and Lightning in clouds and heavy clouds that effect camera visibility are monitored from 10-11.5 mile range.	
	Peak Winds are 75 mph (miles per hour).	
	Temperature ranges allowed for the launch are < 99 degrees Fahrenheit (F) for more than 30 minutes > 48 degrees F.	
	In the table for wind speed the speed is calculated in miles per hour.	

Reflection:

What did you already know about launch weather conditions?

What did you learn from reading the weather overview?

What surprised you?

What still confuses you?

What still confuses you?

3. Monitoring Weather Conditions Anticipation Guide

Write a + if you agree with the statement and a – if you disagree with the statement. Below is an example of a completed anticipation guide.

Before Reading	Statement	After Reading
+	NASA thinks that it is important to watch the weather during a Shuttle Launch.	+
+	Shuttles can launch in any kind of weather.	–

Before Reading	Statement	After Reading
	The Digital Display can verify information from the other displays in the weather console.	
	Knowing the barometric pressure, wind speed and direction helps you predict the weather.	
	Radar detects clear air, precipitation, and wind.	
	Lightning flashes on the Lightning Display correspond to the cool (blue/green) colors on the Radar Display.	
	(GOES) Visible Satellite Imagery. It helps to understand the cloud cover and movement of clouds and the weather systems.	

Reflection:

What did you already know about monitoring launch weather conditions?

What did you learn from reading the weather overview?

What surprised you?

What still confuses you?