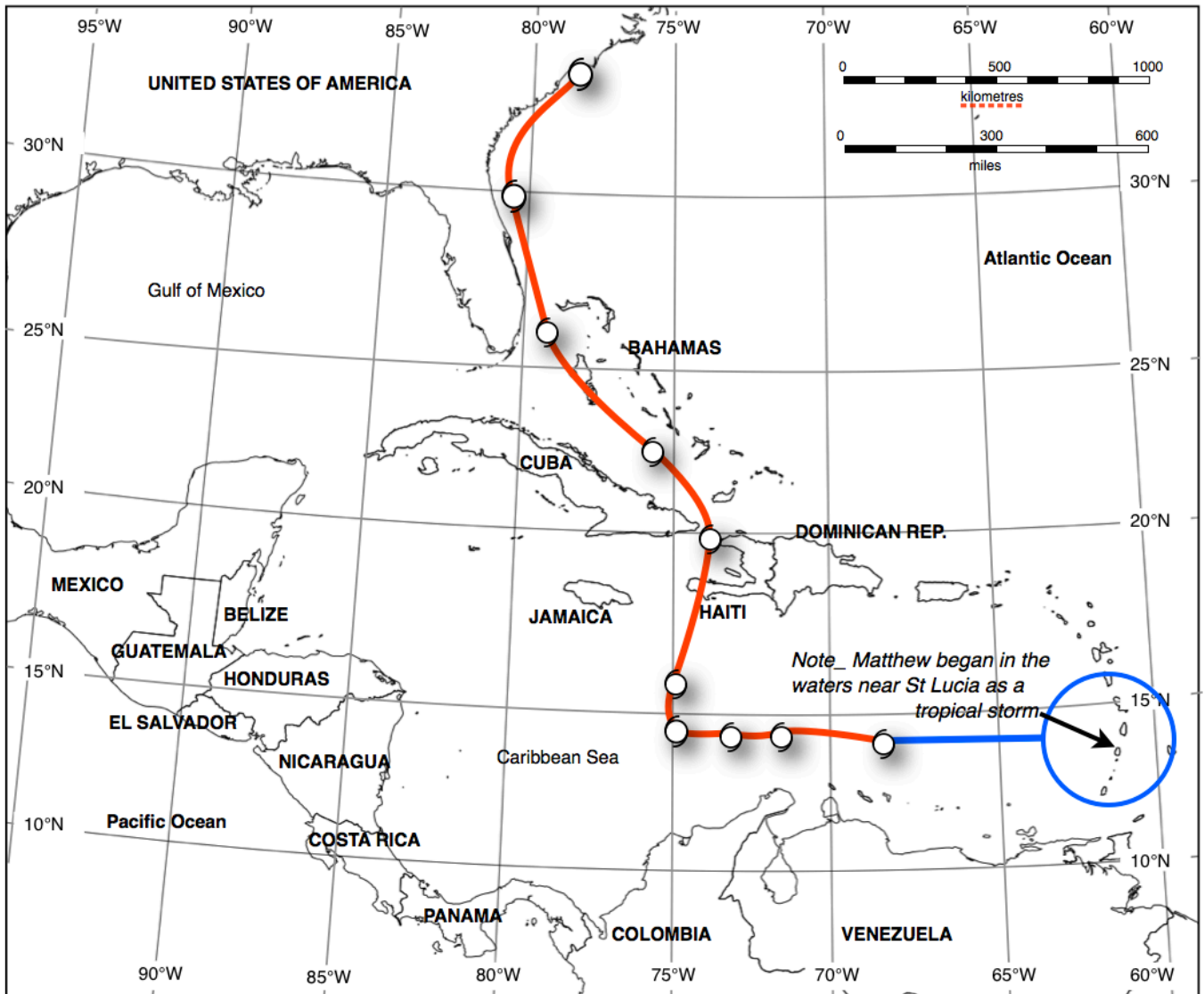




# FOR THE TEACHER

1.



2. **What are hurricanes?** Huge tropical storms up to 600 miles (1,000km) in diameter with winds spiraling in and up towards the centre with speeds from 75 to 200 mph (120 to > 250km/hr). Centre of storm is the eye and spiraling cloud bands out from the eye can give torrential downpours of rain.

**Air spirals into the centre of a hurricane in which direction -**

in the northern hemisphere? *Anticlockwise*

in the southern hemisphere? *Clockwise*

**What is the “eye” of a hurricane?** The centre of the storm and the calmest part of the storm - the eyewall is the band of spiraling clouds at the edge of the eye and is where the winds are at their strongest.

**Where do hurricanes generally form?** In warm tropical waters with temperatures at 80°F (27°C) or warmer within 5 to 15 degrees of the equator.

**Where do they get their energy from?** *Heat and energy comes from the evaporated water from the ocean surface.*

**What are storm surges and how are they generated by hurricanes?** *Winds push water in towards the centre creating a mound of water near the storm centre - this coupled with higher tides can cause a flooding of coastal lowlands as the storm centre approaches land.*

**Describe the other two ways in which hurricanes cause damage.** **High wind speeds** that can damage property as well as debris picked up and blown by the wind acting as projectiles. **Torrential rain** leads to flooding and water damage when wind damages integrity of buildings.

3.

#### BEFORE A HURRICANE

- \* Have disaster plan and a pet plan ready.
- \* Board up windows and store outdoor objects that could blow away.
- \* Know where all the evacuation routes/centres are.
- \* Prepare a disaster supplies kit for your home and car:
  - first aid kit,
  - canned food and a can opener,
  - bottled water,
  - battery-operated radio,
  - flashlight,
  - protective clothing
- \* Know how to turn off electricity, gas, and water.
- \* Have some cash handy as well, because following a hurricane, banks and ATMs may be temporarily closed.
- \* Make sure your car is filled with fuel.

**These are the ideas from the website students were directed to - good way to practise students in reducing text in paragraphs to dot points. - you may want to discuss these with your students and perhaps add to the lists.**

#### DURING A HURRICANE

- \* Move away from low-lying and flood prone areas.
- \* Don't venture outdoors during a hurricane, because of strong winds.
- \* Leave caravans and go to a shelter.
- \* If your home isn't on higher ground, go to a shelter.
- \* If authorities say to evacuate, then do so immediately - don't wait or disobey.

#### AFTER A HURRICANE

- \* Stay indoors until it is safe to come out.
- \* Check for injured or trapped people, don't put yourself in danger.
- \* Watch out for flooded areas.
- \* Don't attempt to drive in flooded areas.
- \* Stay away from still water - it may be electrically charged from underground or downed power lines and/or contaminated
- \* Don't drink tap water until authorities say its safe to do so.

4. **Where did Hurricane Matthew form?** *Matthew formed in the warm tropical waters near St Lucia (in the Windward Islands group)*

**Hurricane Matthew was a category 4 storm by the time it reached Haiti.**

**Describe the characteristics of Hurricane Matthew by the time it reached Haiti.**

*"The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage".*

*Source: NOAA*

*Category 4 - 131-155 mph (210 - 250km/hr) - --> possibility of extreme property damage*

5. **MEDIA RESEARCH - from a range of media sources, in brief note form, describe the impact of Hurricane Matthew on the areas indicated.**

*Students will gather a wide range of material from the media that can be used in a class discussion.*