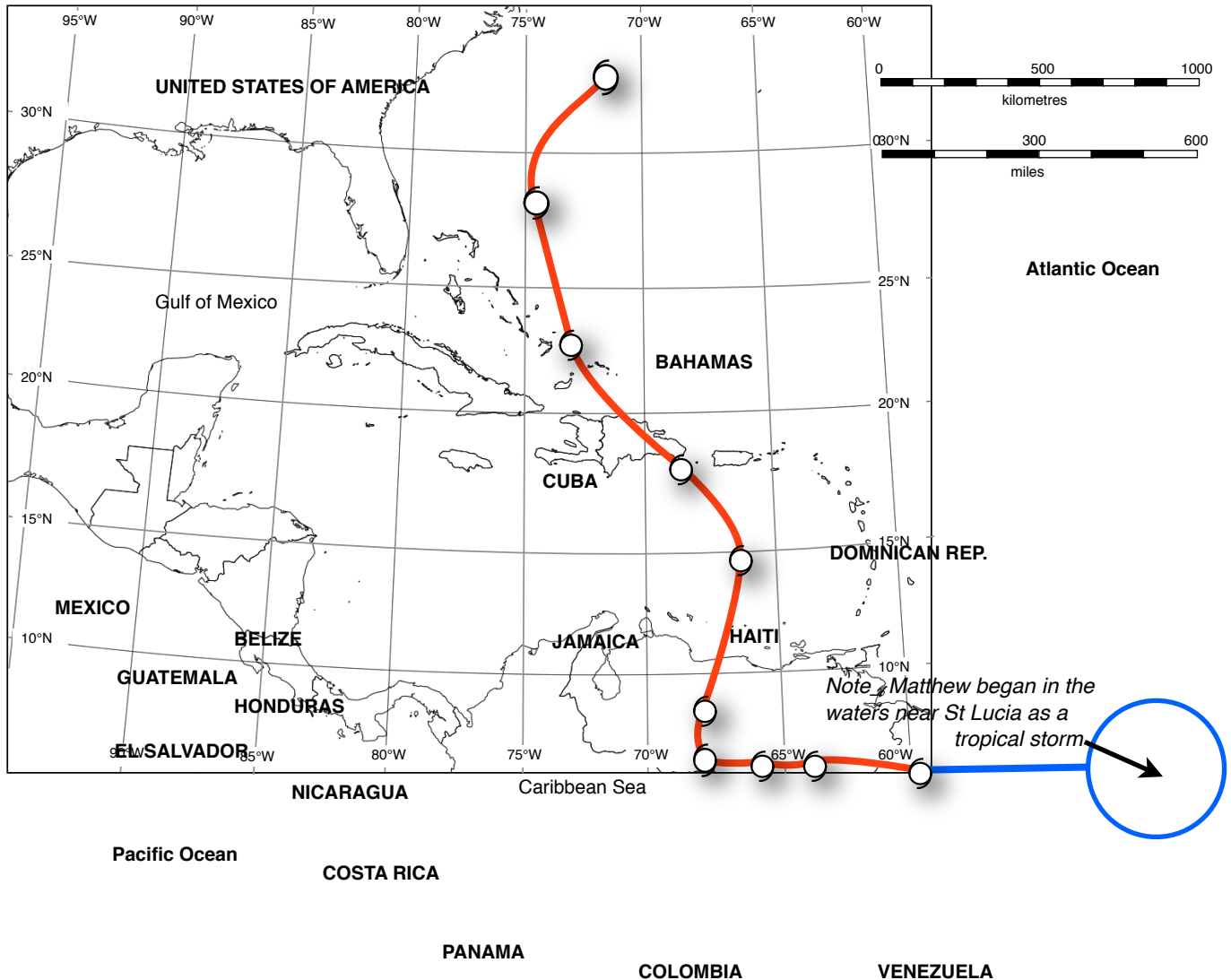




FOR THE TEACHER

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.