

## Geography Year 7 Tasks – May 2020

### Case Studies

Task 1: Using the information below, write a brief report on the impact of Hurricane Katrina on the population of New Orleans. The report should include information, opinions and the response from the government/world. What is the long lasting impact?

#### Information

- When hurricanes begin over North Atlantic, the time period during which such hurricanes occur are called Atlantic hurricane season. The 2005 Atlantic hurricane season has been the most active season in the history.
- There were 7 main hurricanes occurred in 2005 Atlantic hurricane season. Of all these, Hurricane Katrina is by far the deadliest cyclone.
- The destruction cost of Hurricane Katrina was 108 billion US dollars, which is by far the costliest disaster in the US history.
- Hurricane Katrina stands at the 7th position as the most intense hurricane of the North Atlantic Ocean.
- After Okeechobee hurricane in 1928, Hurricane Katrina has been the second-most deadliest tropical cyclone in American history.
- When this hurricane came in 2005, it was the strongest tropical cyclone in Gulf of Mexico.

#### Intensity

- The tropical cyclone started on August 23, 2005 over the island country called The Bahamas.
- According to the Saffir–Simpson hurricane wind scale (SSHWS), all the tropical cyclones are classified into 5 categories depending upon the speed of winds. Category 1 hurricane has a minimum 74 mph speed, while category 5 hurricane has a speed of more than 156 mph.
- Hurricane Katrina was a Category 5 hurricane.
- On August 24, the storm was so severe that it took the name 'Katrina'.
- It became Category 3 storm on August 27.
- Katrina turned into a Category 5 storm on August 28. The speed of sustained winds at this category had reached more than 175 mph.
- When Hurricane Katrina reached at Category 3, the speed of sustained winds was just about 125 mph around Louisiana.
- Within just 9 hours after it began, the cyclone became a Category 5 hurricane.

#### Effects

- On August 27, the state of emergency was announced by George W. Bush in Mississippi, Alabama and Louisiana.
- The number of people who died in Hurricane Katrina was from Mississippi and Louisiana. The number of deaths in Louisiana was 1,577 and 238 people died in Mississippi. These are the confirmed deaths.
- In Louisiana, there were 135 persons who are still missing due to Hurricane Katrina.
- Due to the devastating effects of Katrina, almost 3 million persons were left high and dry and had no power in their homes.

Task 2: Answer the following questions, based on the Hurricane Katrina case study.

- 1) Define **social**: Things that affect \_\_\_\_\_
- 2) Define **environmental**: Things that affect \_\_\_\_\_
- 3) Define **economic**: Things that affect \_\_\_\_\_
  
- 4) Label the pictures with the definitions above (**social**, **environmental** and **economic**).



- 5) Decide if the following statements are **Social/Economic/Environmental**:
  - 80% of the city became flooded =
  - 1,833 people lost their lives in Hurricane Katrina =
  - The Hurricane cost over \$105 billion in repairs =

**Extension:** Which of the impacts above (**social**, **environmental** and **economic**) do you think is the most important? Why?

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Task 3: Explain, through a newspaper article what the issues were with Hurricane Katrina. We have included some information for you to use, which will help to inform your article and argument!

**1. Prediction and Warning**

In August 2005 Hurricane Katrina was precisely tracked from the initiation to the conclusion of its short but violent life. Katrina's scale, strength and landfall locations, first in Florida and later in the delta region, were accurately predicted.

Despite the years of investment and numerous warnings of the threat that a major hurricane posed to the people of New Orleans, evacuation plans proved inadequate. Following the event, a Congressional Report described the government's response to Katrina's impact as a national failure, stating that "...clumsiness and ineptitude... characterised behaviour before and after this storm". Part of the problem was that over 25% of households in New Orleans did not own cars and had no easy way of evacuating the city. Residents also refused to leave their homes, fearing looting in their absence; some paid for this inaction with their lives.

**2. Education**

It appears that despite the official awareness of the risk to New Orleans, most residents had little fear that the city would be badly impacted.

**3. Building Codes**

In New Orleans the city's situation – much of it lies below sea level – meant that the flooding was so severe that even the strict building codes did little to reduce the impact. In the aftermath some people have suggested that the worst affected areas of the city should not be rebuilt on such a dangerous site. Others have suggested that the worst affected areas should not be redeveloped but that a smaller population should be catered for, and the flood-prone regions given over to low risk land uses such as parkland or sports pitches.

**4. Coastal and river engineering**

The levees and defences along the Mississippi and canals in New Orleans were built to withstand a hurricane up to a category 3, anything beyond that would cause flooding. The cost and practicality of protecting the city and the rest of the region from the worst possible event is prohibitive. Currently the US Corps of engineers, who have the task of rebuilding New Orleans defences, is restoring them to their previous height while the city's mayor wants them raised and improved to deal with category 5 hurricanes.

**5. Insurance**

Most households in New Orleans could not afford the premiums required to cover hurricane damage and this explains why in the hardest-hit, working class regions of the city many of the residents have decided not to return.