**Storm surge**

(the deadliest part of a tropical cyclone)

1. **What category of storm was Katrina?**

3

1. **How many *hours* from landfall was Katrina when a mandatory evacuation was ordered?**

24

1. **What are levees?**

Walls to prevent flooding

1. **When the levees broke, what were the two consequences?**

Extensive flooding, people were trapped and couldn’t evacuate

1. **How high was the storm surge?**

20-30 feet

1. **Storm surge is the main cause of death’s due to tropical cyclones. What are the second and third most common causes?**

Rain, Wind.

1. **What causes storm surge?**

Strong winds push water in towards the shore

1. **When does storm surge happen?**

Before landfall, just after high tide.

1. **How can storm surge make the impacts of the tropical cyclone worse?**

Coastal flooding is worse, evacuation becomes more difficult

1. **What is increasing the risk of storm surge every year?**

Climate change

1. **What factors affect storm surge? (Name as many as you can)**

Wind speeds, size of storm, angle of approach, atmospheric pressure, shade and depth of coast (including local features of the coastline), forward speed of storm

1. **Can we prevent storm surge?**

No

1. **Name two parts of the world where storm surge is common**

S/SE US, Bangladesh, Philippines, NE Australia

1. **Can preparedness affect the impact of storm surge? Explain your answer**

Yes. Levees and sea walls can stop or redirect rising water away from people. If these haven’t been built, the effects would be much worse, especially if the sea is shallow, as flooding would be worse.