| KEY CONCEPTS | RELATED<br>CONCEPTS | GLOBAL CONTEXT        |
|--------------|---------------------|-----------------------|
| Systems      | Resources           | Time, place and space |

### STATEMENT OF INQUIRY

Societies can be affected by different types of hazards and require innovative systems and resources in order to respond effectively

What are Japan's natural hazards and how do the Japanese respond to them?

## **COLOUR-SYMBOL-IMAGE**

Consider our topic: <u>natural disasters.</u> Individually or in small groups, choose a colour, symbol and image that you feel best represents or captures the essence of the topic.

Be ready to **explain** to others in the class why you decided on the particular colour, symbol and image.

## What have been responses to these natural hazards in Japan?











#### Saffir - Simpson hurricane scale

Hurricane Irma is category 5 with winds up to 300km/h



BBC

## Typhoons





## JEBI

#### Monday Night-Wednesday

RUSSIA

JAPAN

SOME RISK

GREATEST RISK

JEBI

- Damaging winds
- Flooding
- Mudslides
- Dangerous seas and surf

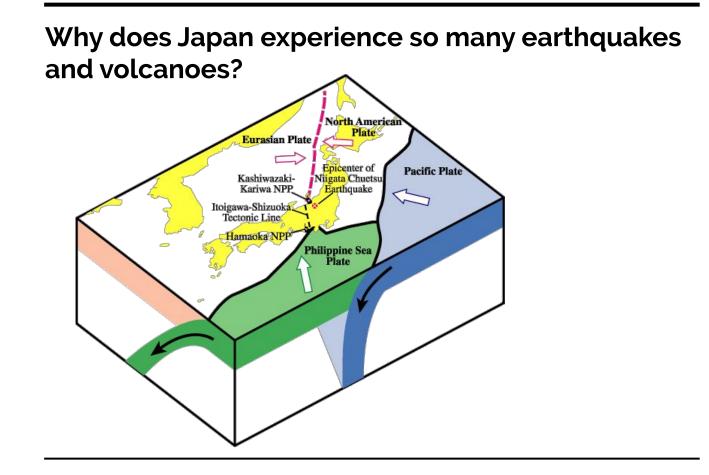
S. KOREA

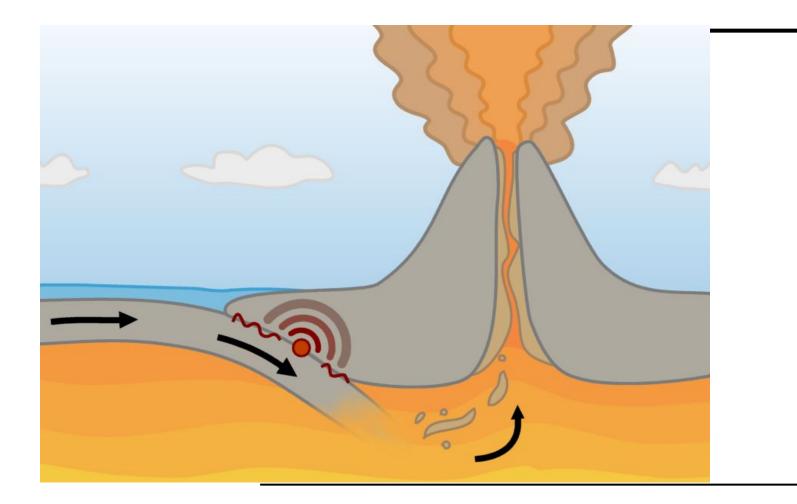
FAS<sup>-</sup>

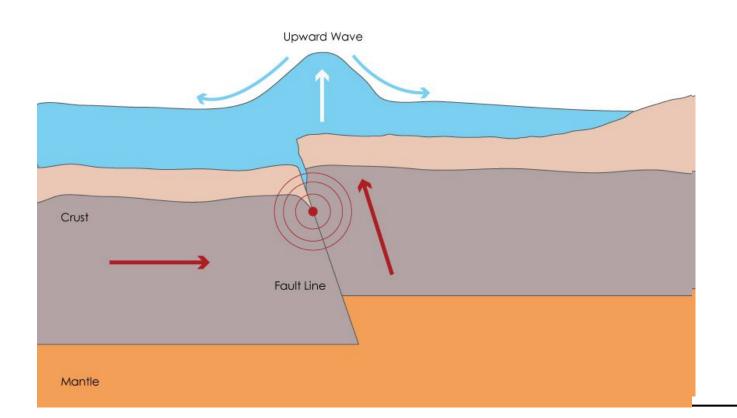
SEA



## STRONGEST TYPHOON FOR 25 YEARS SMASHES INTO JAPAN





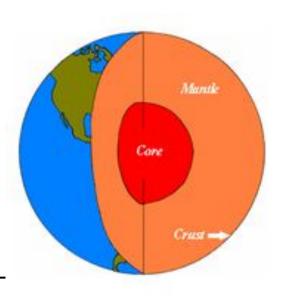


#### Why does Japan experience so many earthquakes and volcanoes?

The surface of the earth (the \_\_\_\_\_\_) is split up into several large sections called \_\_\_\_\_\_. The place where two plates meet is called a

\_\_\_\_\_ It is here that most \_\_\_\_\_\_ and





#### Earthquake, Tsunami, Meltdown – The Triple Disaster



# Tohoku Earthquake - Causes, effects and responses

<u>Students will</u> read through the statements carefully and organise the statements into their THREE groups:

- → Causes what made the earthquake, tsunami or meltdown happen / make it worse?
- → Effects what problems did the tsunami bring?
- → Responses and Solutions what did people do afterwards?

#### <u>Extension</u>

Now categorise and summarize the effects and responses into



## Group Research - The Great Kanto Earthquake 1923

- → Causes what made the earthquake or tsunami happen / make it worse?
- → Effects what problems did the earthquake bring?
- → Responses and Solutions what did people do afterwards?

| Causes | Effects | Responses |
|--------|---------|-----------|
|        |         |           |
|        |         |           |
|        |         |           |
|        |         |           |
|        |         |           |

| Causes   | Effects   | Responses   |
|--|---|---|
| <ul> <li>Megathrust between Philippine<br/>Sea plate and North American<br/>plate.</li> <li>The earthquake struck at<br/>lunchtime when many people<br/>were cooking meals over fire</li> <li>Tokyo was a wooden city</li> <li>The earthquake broke water<br/>mains all over the city</li> <li>A strong typhoon brought high<br/>winds to Tokyo Bay at about the<br/>same time as the earthquake.<br/>These winds caused fires to<br/>spread rapidly.</li> </ul> | <ul> <li>Tsunami was generated waves<br/>up to 10 m high. The tsunami<br/>caused many deaths, Over<br/>570,000 homes were destroyed,<br/>leaving an estimated 1.9 million<br/>homeless.</li> <li>105,385 deaths</li> <li>Some fires developed into<br/>firestorms</li> <li>Many people died when their feet<br/>became stuck on melting tarmac.</li> <li>The single greatest loss of life<br/>was caused by a fire tornado in<br/>downtown Tokyo, where about<br/>38,000 people were incinerated</li> </ul> | <ul> <li>Evacuees were transported by ship from Kanto.</li> <li>A false rumor was spread that Koreans were taking advantage of the disaster, committing arson and robbery, and were in possession of bombs. Some newspapers reported the rumors as fact, including the allegation that Koreans were poisoning wells.</li> <li>23,715 Koreans were placed in protective custody 12,000 in Tokyo.</li> <li>Some interpreted the disaster as an act of divine punishment to punish the Japanese people for their immoral western lifestyles</li> </ul> |

## The Consequences of Earthquakes

In pairs of groups, copy and complete the following table using the information given to you.

|                   | Human and social impact | Economic and political impact | Environmental impact |
|-------------------|-------------------------|-------------------------------|----------------------|
| Immediate effects |                         |                               |                      |
| Long term effects |                         |                               |                      |
|                   |                         |                               |                      |

## **Consequences of Volcanoes**

Volcanic eruptions can have a devastating effect on people and the environment. However, unlike earthquakes, volcanoes can also have a positive impact on an area. These positive impacts can help to explain why people choose to live near volcanoes.

Using your computer research the consequences of volcanoes and organise them into the following table:

| Positive consequences | Negative consequences |
|-----------------------|-----------------------|
|                       |                       |