



G.D.GOENKA PUBLIC SCHOOL

Subject: Science (8th)

Tuesday, 14th September 2021

Topic: Earthquake

This material is not to be printed.

LEARNING OBJECTIVE: To understand the causes and effects of earthquake..

Skill Focus: Observation of various parameters that are the elements to the earthquake.

Richter Scale:

(i) The strength of an earthquake is expressed on a scale called the Richter scale, in terms of magnitude.

(ii) Charles Richter and Beno Gutenberg, of the California Institute of Technology, created the Richter Scale in 1935.

(iii) This shows how intense an earthquake is. The Earthquake intensity is measured on a logarithmic scale from zero to 10.

(iv) Richter is not linear in size. A magnitude increase of 2 on the Richter scale signifies 1000 times more destructive energy. Example: a magnitude 6 earthquake has a thousand times greater destructive energy than a magnitude 4 earthquake.

(iii) This indicates how powerful an earthquake is. An earthquake's intensity is measured at a logarithmic scale of zero to 10.

(iv) Richter is not regular in size. A magnitude rise of 2 on the Richter scale means 1000 times more disruptive force. Example: a magnitude 6 earthquake holds thousand times more destructive energy than a magnitude 4 earthquake.

Damages Due to Earthquake:

Earthquake will cause enormous damage on buildings , bridges, dams and people.

Protection Against Earthquake:

Some of the preventive measures are as follows for the prevention or minimisation of earthquake damage:

(i) The buildings should be designed to endure tremors of great magnitude. Consult architects and structural engineers who are qualified to design quake proof buildings.

(ii) The use of mud or wood is safer than the heavy building materials to make the structures vulnerable to earthquake.

(iii) Cupboards and shelves should be fixed to the walls so that during an earthquake they don't easily fall on someone.

During the Earthquake, Take the Following Steps to Protect Yourself:

1. At Home:

(i) We should hide under a table during earthquake. If you're in hospital, put an ointment on your head and don't get out of bed.

(ii) We should stay away from high and heavy objects which might fall on you because of tremors.

2. At Outdoors:

(i) We should try to move away from buildings and trees, and from overhead power lines and other structures in an open area.

(ii) Do not come out when you are in a car or a bus. Ask the driver to slowly drive into a clear spot. Do not come out until the shiver stops.

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