

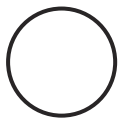


Measuring Earthquakes: The Mercalli Scale

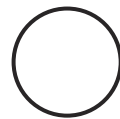
To explain what causes earthquakes and how they are measured.



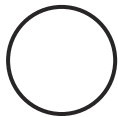
- Sort the following cards into order of strength from the least to the most powerful.
- Can you use Roman numerals to label the effects from I to XII?



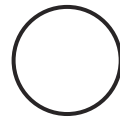
Felt by nearly everyone.
Sleeping people may be woken.
Trees and Telegraph poles sway.



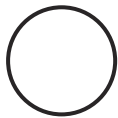
Felt by no-one.



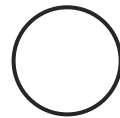
Felt by all. People run outside.
Furniture moves. Slight damage
to property.



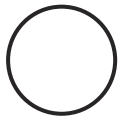
Total destruction.
Waves seen on the ground.



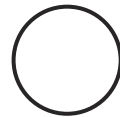
Felt by many but they don't
realise it is an earthquake.



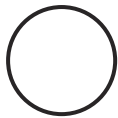
Many buildings destroyed.
Ground is badly cracked.



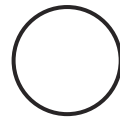
Felt indoors by most people.
Vibrations similar to a lorry
hitting a building.



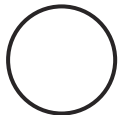
Almost all buildings destroyed.
Wide cracks in the ground. Water,
gas and electric out of action.



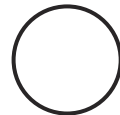
Specially designed buildings
damaged, others collapse.



Felt by very few people. Hanging
objects may swing.



Felt by all. People run outside.
Moderate damage to buildings.



All buildings damaged. Cracks
appear in the ground.

Why might the descriptions for an earthquake of a certain Mercalli intensity differ in different places?



Measuring Earthquakes:

The Mercalli Scale **Answers**

V Felt by nearly everyone. Sleeping people may be woken. Trees and Telegraph poles sway.	I Felt by no-one.
VI Felt by all. People run outside. Furniture moves. Slight damage to property.	XII Total destruction. Waves seen on the ground.
III Felt by many but they don't realise it is an earthquake.	X Many buildings destroyed. Ground is badly cracked.
IV Felt indoors by most people. Vibrations similar to a lorry hitting a building.	XI Almost all buildings destroyed. Wide cracks in the ground. Water, gas and electric out of action.
VIII Specially designed buildings damaged, others collapse.	II Felt by very few people. Hanging objects may swing.
VII Felt by all. People run outside. Moderate damage to buildings.	IX All buildings damaged. Cracks appear in the ground.

Why might the descriptions for an earthquake of a certain Mercalli intensity differ in different places?

It depends on how built-up the area is and how well constructed the buildings are.