

## Earthquake Resistant Buildings



- Go to your public, school, and classroom libraries and check your home for any books about earthquake resistant buildings. Collect all the different materials you can on this topic and bring them to school. Read and research all you can on earthquake resistant buildings. Keep a bibliography on all the books you read and record them on your "Bouncing Building" chart.
- Interview an earthquake scientist to discover how various soils will react under earthquake conditions and what effect this will have on the buildings above. Before the interview create a list of 5-10 questions, and practice them with a friend. Finally, contact the scientist and arrange a time to interview them in person or on the phone. Write down the answers to your questions.
- Make a chart that shows the soil types, and describe how buildings erected on each soil type would react in the event of an earthquake.
- Interview an architect that designs buildings that will be erected in earthquake zones such as San Francisco. Before the interview create a list of 5-10 questions, whose answers will help you understand the kind of reactions a building undergoes during an earthquake, how soil type effects these reactions, and what design features are best to protect single- and multi-storied buildings during an earthquake.
- On paper, design to scale three building structures that use the techniques you have learned about. On separate pages describe which structure is best under which conditions and why. Choose two of your designs and construct models of the buildings. Carefully label the earthquake resistant features.

- Write two twelve line poems. The first poem should describe the feelings of a non-earthquake resistant building as it goes through an earthquake. The second poem should describe the reactions of an earthquake resistant building as it goes through the same quake.
- Create an advertisement for a paper in San Francisco highlighting your earthquake resistant building.
- Construct a globe and draw the major continents on it. Now mark where most of the major earthquakes take place. Which areas are most in need of special design features in homes or commercial buildings?

