

# Design an Earthquake-Proof Building

Study the buildings below. How might their shape and structure help them in an earthquake?



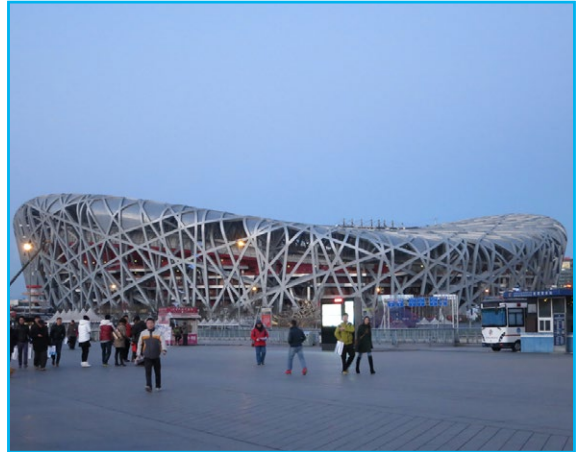
**The Transamerica  
Pyramid -  
San Francisco**



**The Yokohama  
Landmark Tower -  
Japan**



**A Japanese Pagoda**



**Beijing National Stadium**

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## How to Strengthen a Building

Use this box to make notes to help you create your earthquake-proof building.

- Shape (what shapes could prevent the building from twisting?)
- Walls (what could you use to strengthen your walls?)
- Base (how could you make your building more stable? How could your building absorb the shock waves?)
- Other (think about how you could protect your building's windows, gas and electricity supply.)

Use this list of features to help you make your notes:

- Deep foundations
- X-shape supports
- Emergency shut off switches
- Thin walls with steel bars
- Sprinkler system
- Shock absorbers
- Shutters on windows

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Draw your own earthquake-proof building below.

Remember to label the features you have included and explain why you have added them.