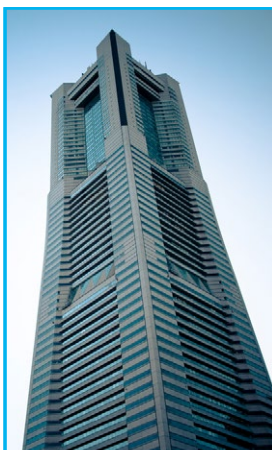


Design an Earthquake-Proof Building

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
- Base
- Walls
- Other

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

- Deep foundations to add stability to the building.
- X-shape supports prevent the building from twisting and make it stronger.
- Emergency shut off switches for gas and electricity to prevent fires.
- Thin walls with steel bars help to reduce the movement of the building.
- Sprinkler system to put out any fires.
- Shock absorbers in the base can absorb the shock waves produced by the earthquake.
- Shutters on windows to stop any falling glass.

Design an Earthquake-Proof Building

Draw your own earthquake-proof building below.

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

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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
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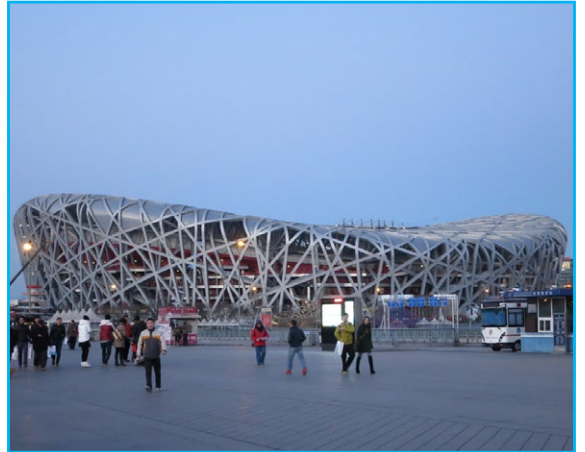
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