Encreasing Stability

In our last investigation we discovered that short structures are more stable than tall structures. However, tall structures are found all over the world. How do engineers design these structures to remain stable?

For today's experiment, you will be provided with some supplies that may be used to make the cardboard tubes more stable. You will not be told what to do with the supplies, so you will need to plan your investigation. You are not allowed to damage the tube in anyway.

Equipment:

• Tray

• Tissue paper

 Cardboard Tubes

- ElasticDried Beans
- Cardboard
- Tape

Procedure:

In the space below, write out the steps that you will follow to make your structure more stable, and how you will test to see if it worked. You can include a drawing at the top of the back of the page. Don't forget that a procedure is a numbered list of the steps you need to take.

Observations:

Trial Number	When did it fall?		Other Observations
	Normal Tube	Altered Tube	Other Observations
1			
2			
3			

1. What are some of the things other groups did?

Discussion:

1. How can a tall structure be made more stable? Use your observations from your and your classmates' experiments to explain.