



纸语

只用两张报纸,你能建造的最高楼塔是什么样的?

材料

- 两张报纸
- 尺子

- 建造最高的楼塔。你可以将报纸弯曲、弄皴、扯碎,或者卷成筒
- 尽量将塔建的更高。不断重新设计直到你不能建的更高为止。
- 用尺子度量楼的高度。这个楼必须站立至少30秒而不倒下。 2 3



工作原理

如何使像报纸这样的柔软材料坚固得站立起来呢? 一个办法就是改变它 状,例如卷成筒状,弄皱,或者折叠起褶。你还要考虑对它起作用的不 力。塔的重量会将塔弄倒。塔所在的平面支撑着它。轻微的空气运动会. 到一边,也会将它吹倒。如果你建立一个宽的底部,这样就将重力分散 的地方,使塔更稳固。



设计扩展

如何让你的楼塔更高?如果你加一条20厘米(约8英寸)的胶布、会怎么样 呢?如果你用书来做塔基,去支撑结构的底部,会怎样呢?如果你用不同材料 的纸张、象纸巾、打印纸或者薄纸板、又会怎么样呢? 选择其中一个去改变你 的设计,做出预测。然后试验它,将结果寄给 ZOOM。

Sent in by Jen W. of Maple Springs, NY

ZOOM INTO ENGINEERING is a partnership of WGBH and National Engineers Week. National Engineers Week 2002 chairs: DuPont and the American Society of Civil Engineers. © 2001 WGBH Educational Foundation. All rights reserved. ZOOM and the ZOOM words and related indicia are trademarks of the WGBH Educational Foundation. Used with permission. ZOOM is produced by WGBH Boston. Funding for ZOOM is provided by the National Science Foundation, the Corporation for Public Broadcasting, and public television viewers. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.







