

Materials

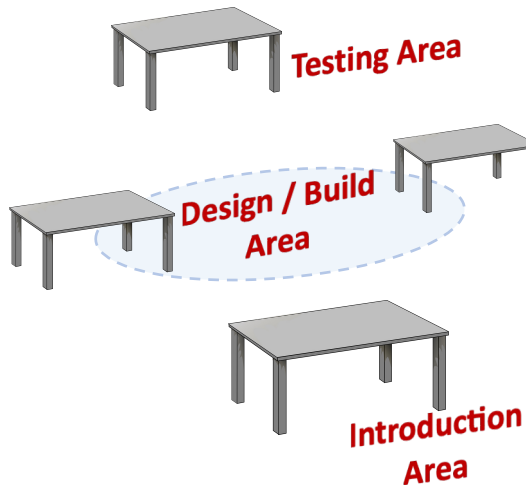
- ✓ Dry Noodles
- ✓ Masking Tape
- ✓ Puzzle cube
- ✓ Measuring Tapes
- ✓ Fan

Tip: Set up Testing Table near an electrical outlet for fan usage.



Tower Challenge

Families work together to **design, build, and test** a free-standing tower. They are challenged to meet engineering **constraints** and **specifications** as part of the **design/build** process.



Room Layout

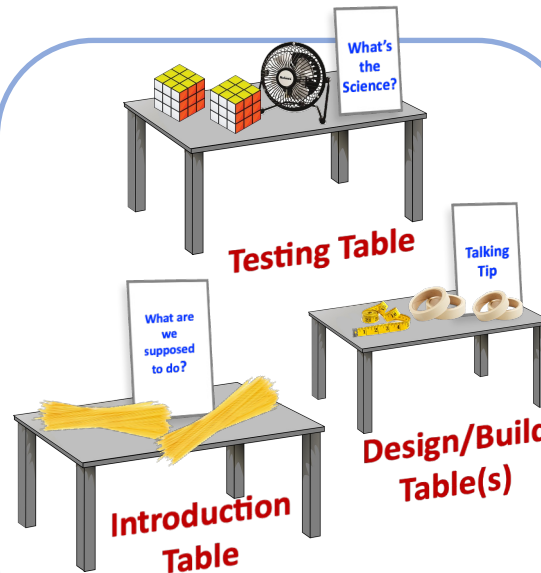


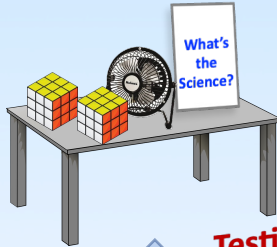
Table Setup



Signage

3

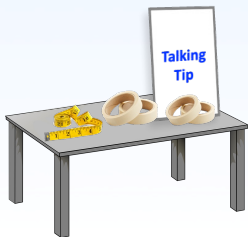
After build is complete, families test their designs



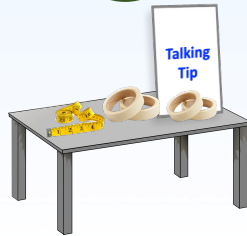
Testing Table

Families use materials and Event Guide to design & build

2

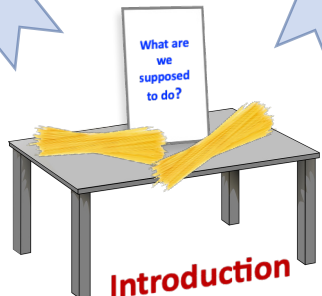


Design/Build Table



1

Families are provided with details on the challenge



Introduction Table

1

Introduction Table

Provide activity directions to families, either through a facilitator or a tabletop sign. Provide **one noodle bundle per family** for designing and building their tower. Direct families to use the **Event Guide** to facilitate engagement.

2

Design/Build Table(s)

Place “**Talking Tips**” signs on design/build tables to encourage conversation. Facilitators should circulate among families, encouraging them to use their **Event Guide** for each specific activity.

3

Testing Area

Place “**What’s the Science?**” signs on testing table. Place fan and cubes on table. Facilitators should encourage families to **redesign** as needed after testing to encourage **engineering design thinking**.