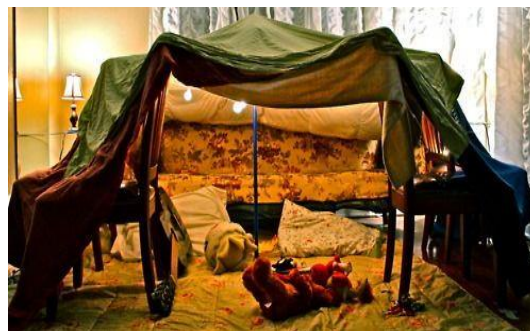
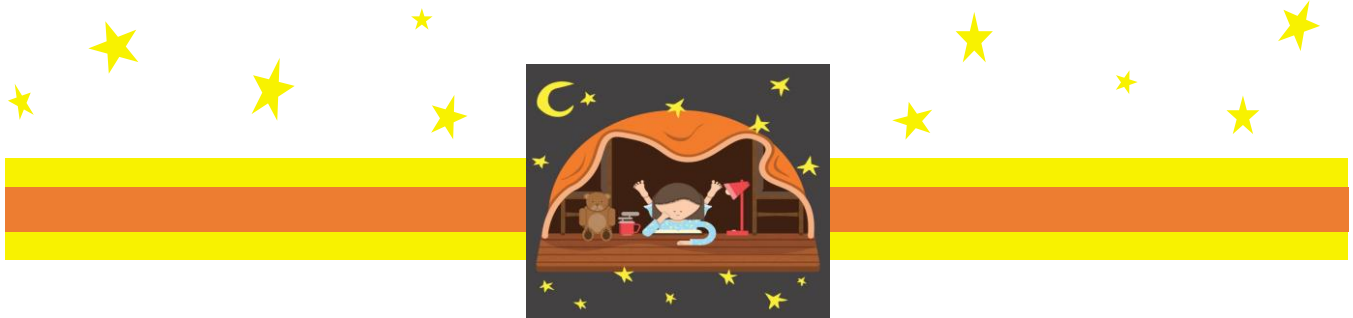


Fort Building Challenge

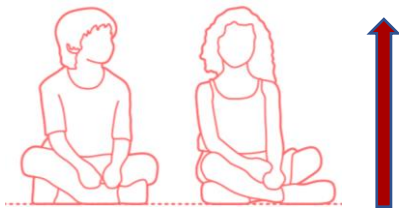


Indoor fort building is a favorite pastime for many. Both, young and old alike, have had the pleasure of building cool forts out of pillows and sheets. Now, what is a better way of creating a fun STEM challenge, than testing out your fort building skills.



Objective:

- 1) Design, builds and make modifications to improve your design when creating an indoor fort.**
- 2) The main part of your fort must stand at least 3 feet tall or big enough to allow the tallest person building the fort to sit up straight when they are inside. (Builders must first measure the height of each person in a seated position to be able to add that to their plans.)**



Hint: Measure everyone participating in the fort building. The tallest person standing, is not always the tallest person when sitting. The height and proportion of our legs and torso vary.

- 3) Your fort must be able to fit at least two people (increase the challenge, if more people building the fort).**
- 4) Your fort must include at least two solid walls.**
- 5) You must incorporate at least five different materials when building your fort.**

Bonus challenge to add:

- 6) Create fun mood lighting for your front. Holiday lights, flashlights...be creative. Note: Safety first, do NOT place any hot lightbulbs from lamps up against sheets or blankets.
- 7) Create two separate rooms inside your fort.
- 8) Add a secret passageway.
- 9) You can stand up inside your fort.



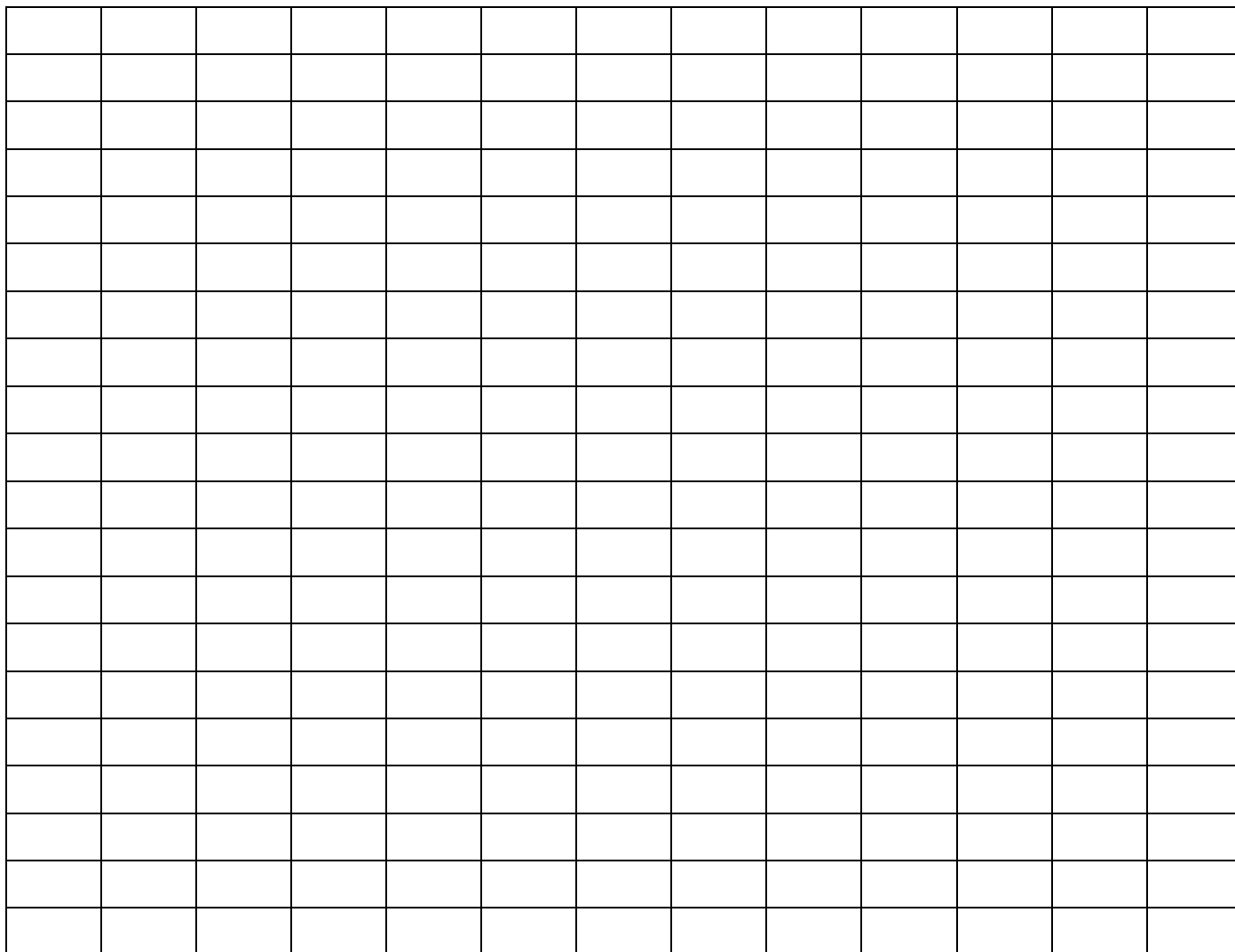
Materials:

Here are some possible materials. However, kids are very inventive and can be creative with what they can find around the house.

- Cardboard Boxes
- Sheets
- Blanket
- Chairs
- Pillows
- Cushions
- Clothespins or clips
- Ruler/tape measure
- Books
- Hula hoop
- Rope/ yarn
- PVC Pipe (if you have some leftover pieces) or dowels
- Umbrella
- etc. ...

- 1) Gather materials you plan to use.
- 2) Using measurements, design and plan out your front design.
- 3) Build
- 4) Test
- 5) Make modifications to improve your design.
- 6) Enjoy your fort...have a slumber party, read a book, watch a movie. Have fun!

Before you start to build, plan out your fort (like an architect). Take measurements of the room. Also, measure the furniture you will be building your fort around and incorporate it into your design. Label the materials used for each part of your fort. Each square equals a foot.



Materials:

- | | |
|----|-----|
| 1) | 6) |
| 2) | 7) |
| 3) | 8) |
| 4) | 9) |
| 5) | 10) |