

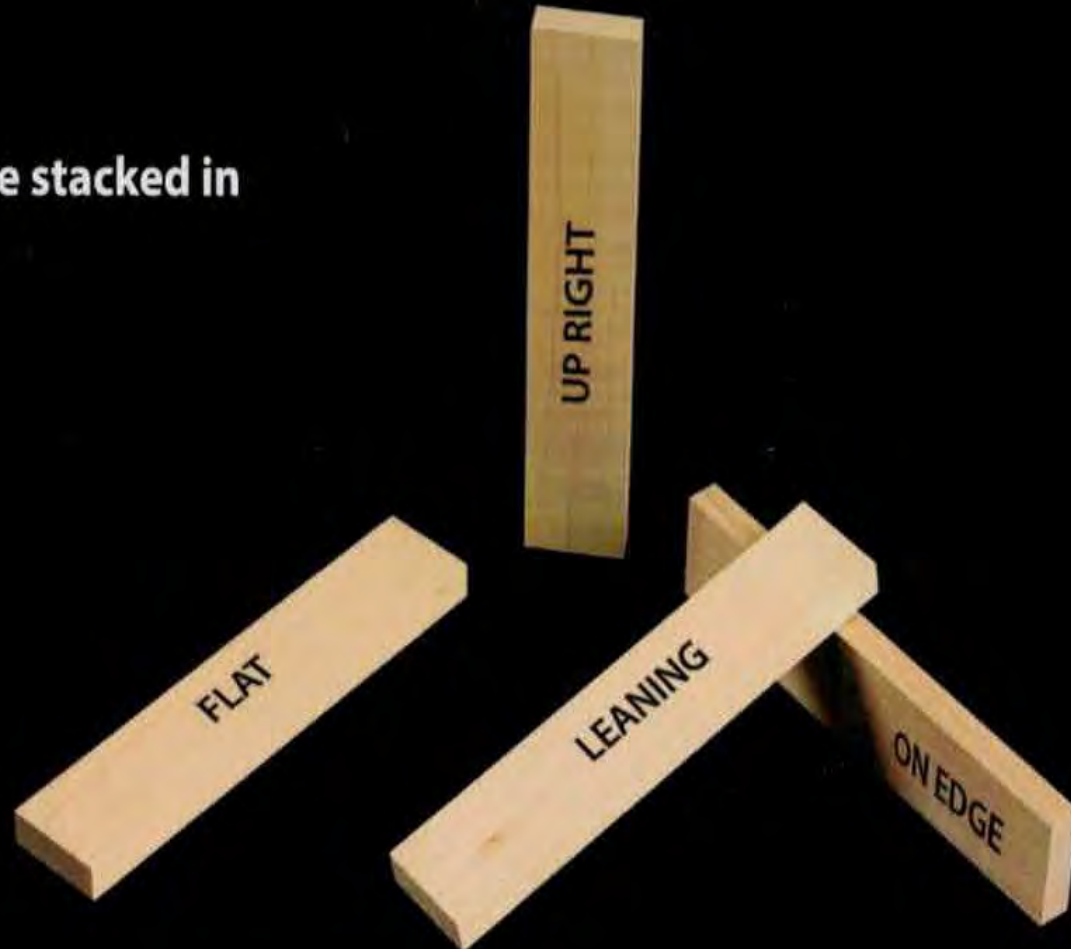
Design & Build: Team Building Challenges

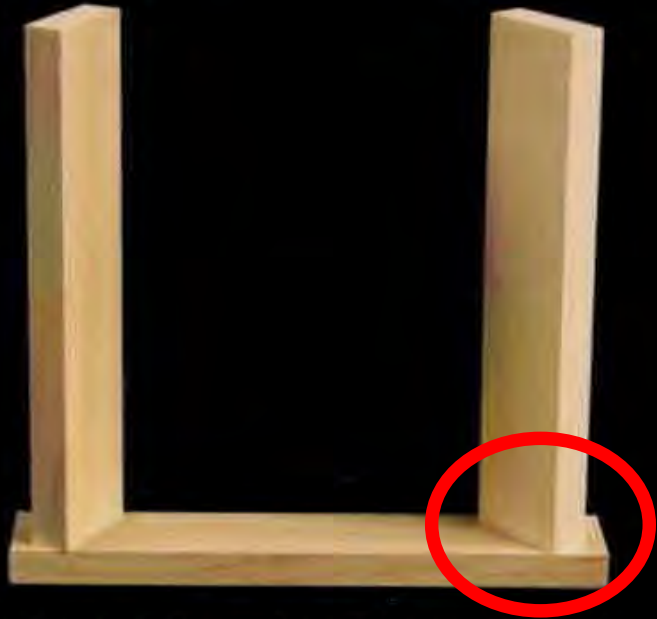
KEVA Planks

KEVA Planks can be stacked in

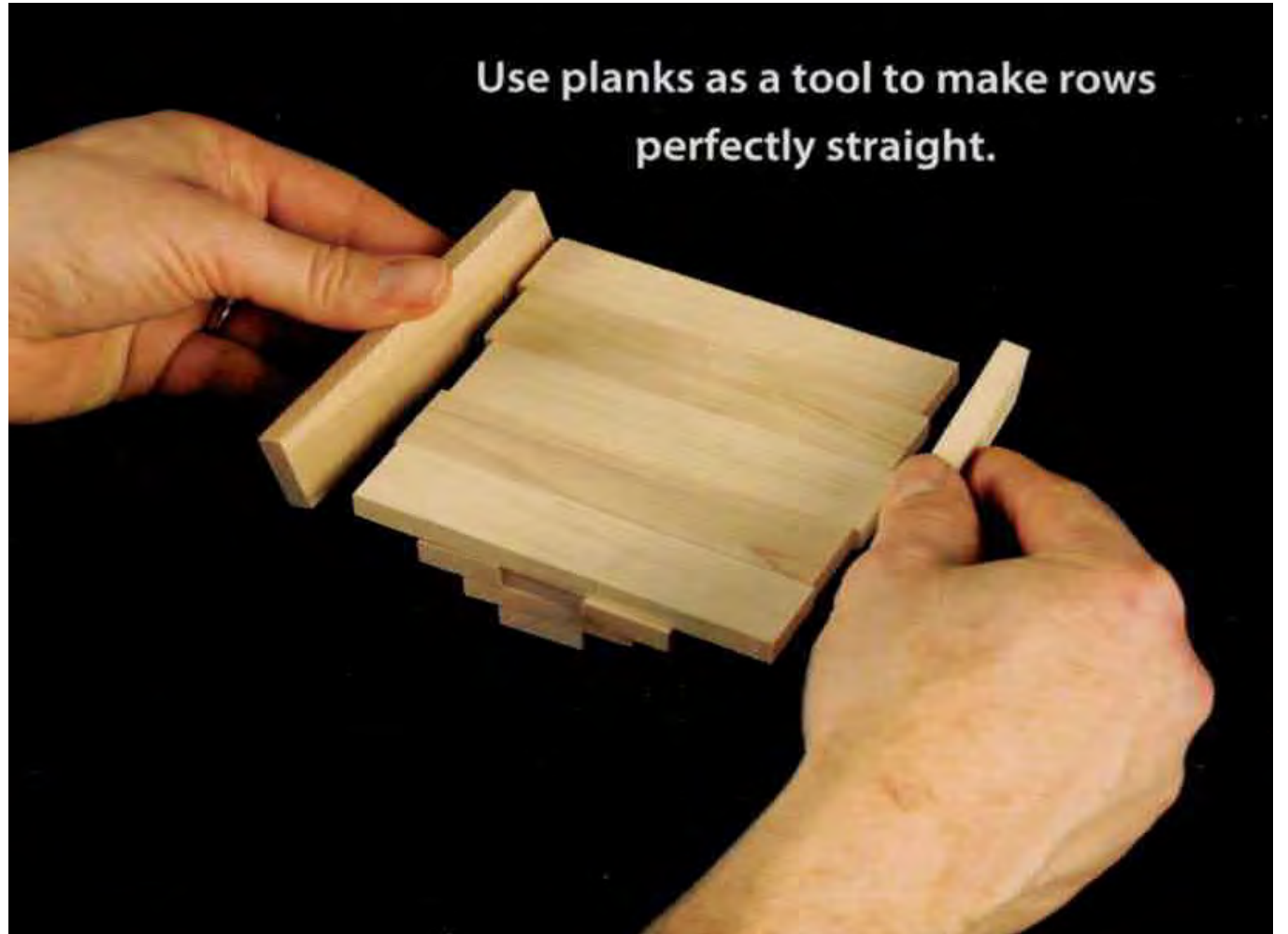
four ways:

- Flat
- Leaning
- On Edge
- Upright





Upright planks are more stable if they are angled toward each other rather than parallel. Place a plank on top of the uprights to stabilize them and prevent the "domino effect."





Count down from 10



Hands up!

Planks stacked in 10 groups of 5



Exploratory Play

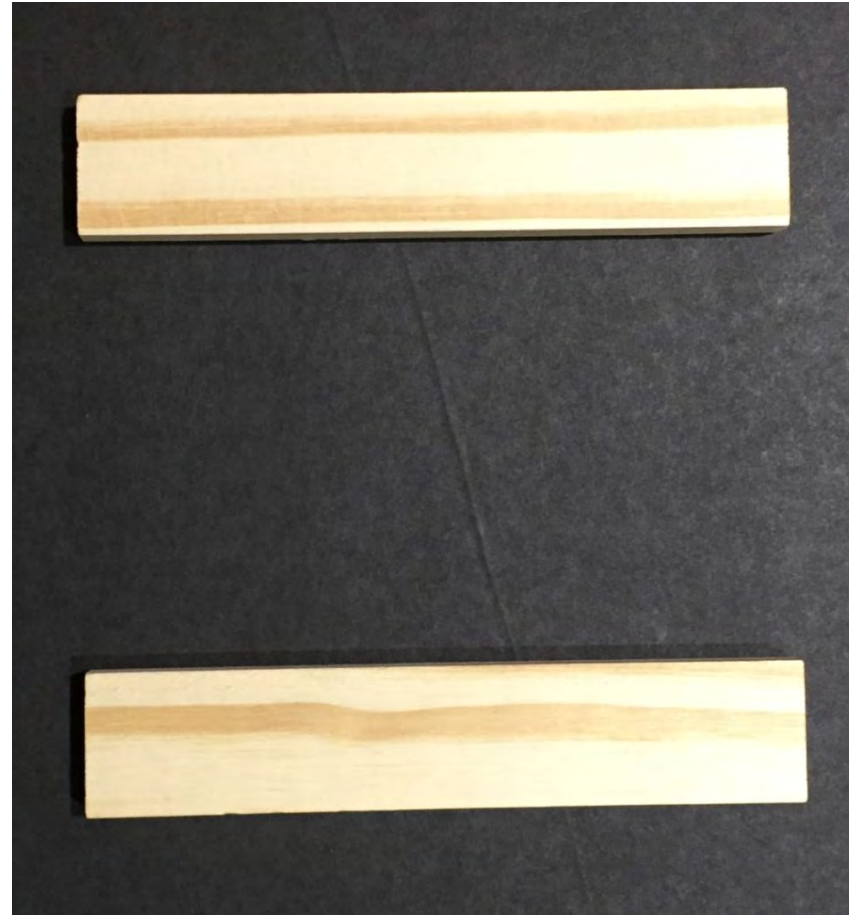


- You will each have 50 planks to borrow and work with for the next 10 minutes.
- See what you can build!
- Be careful not to bump the desks.

Build a Tower with a Partner

Planks on Flat Sides

Start by laying 2 planks flat, about a plank distance apart



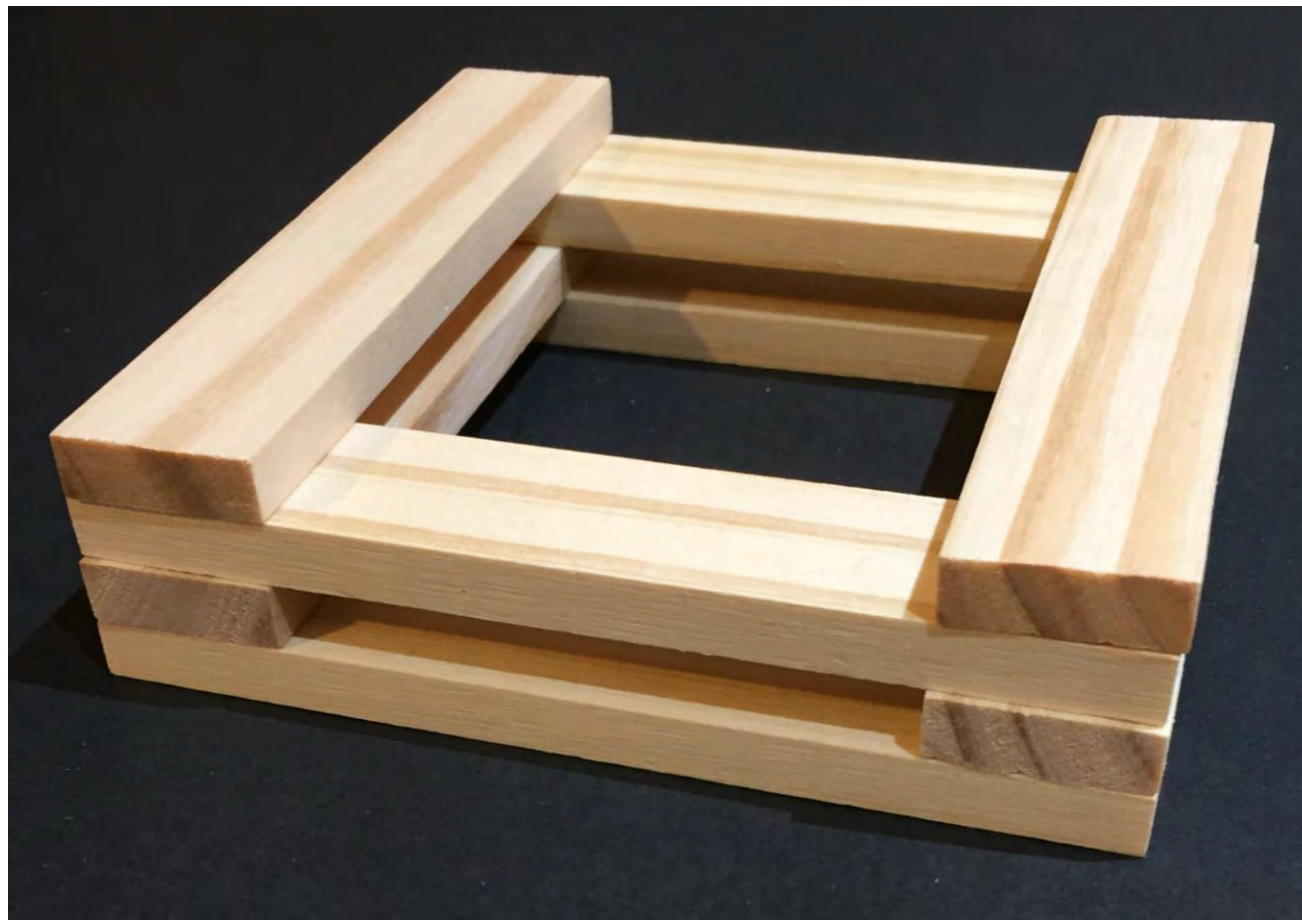
**Add 2 more planks, perpendicular
(opposite) to the first two**



Add 2 more planks in the same direction as the first row

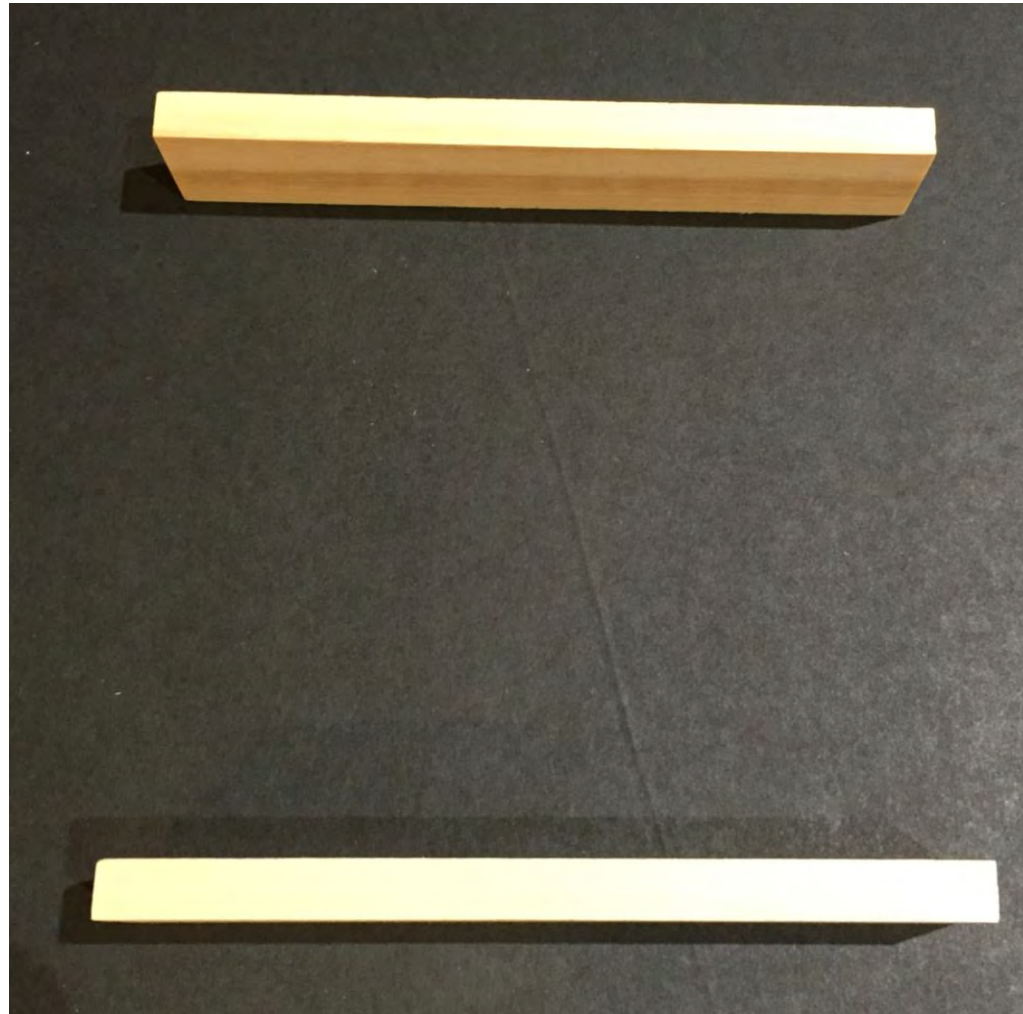


Follow this pattern and go as high as you can!

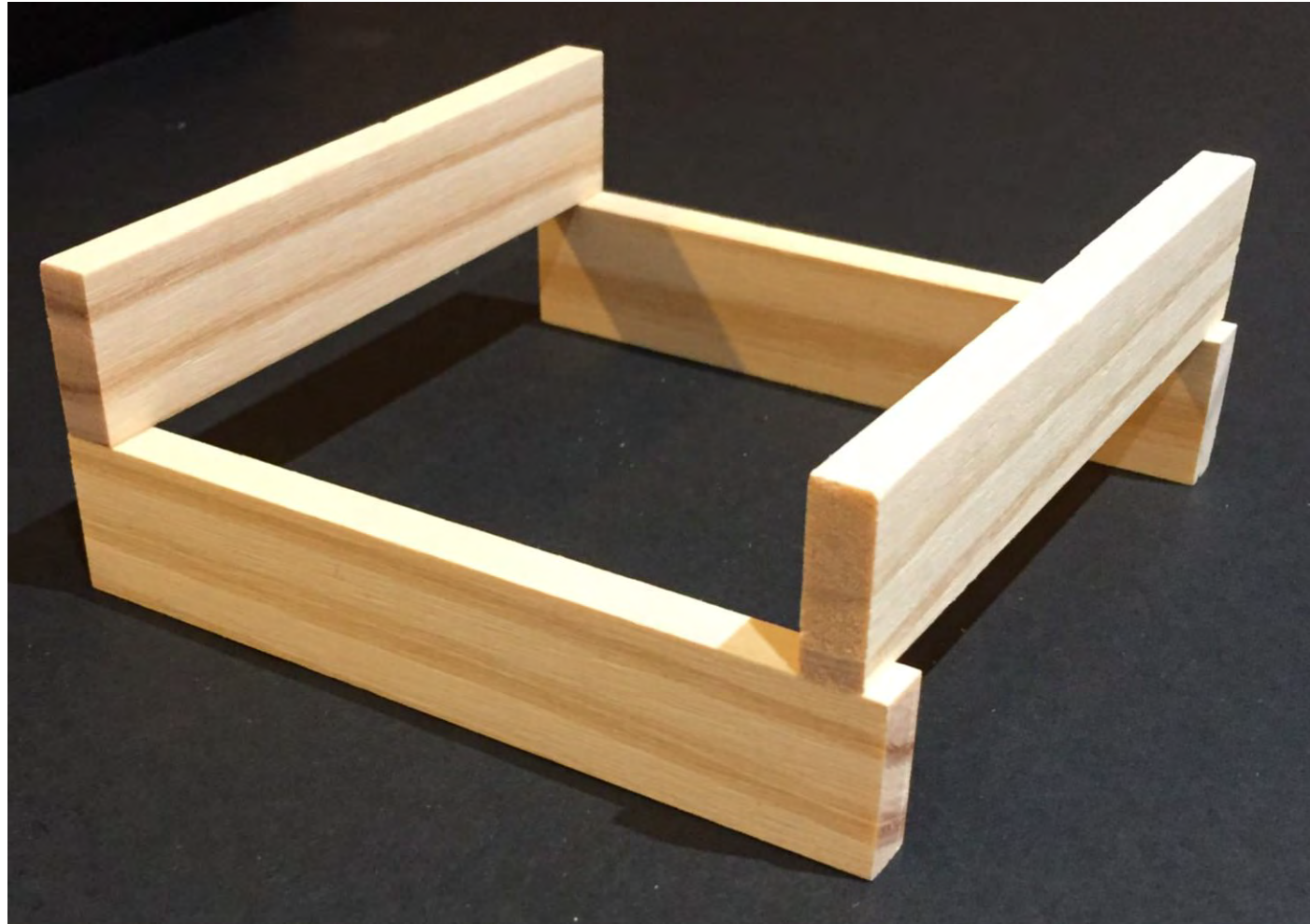


Planks on Edge

Start by laying 2 planks on edge, about a plank distance apart



Add 2 more planks, on edge, perpendicular (opposite) to the first 2 planks



Add 2 more planks, on edge, in the same direction as the first row



Follow this pattern and go as high as you can!



Tower Building Challenge

Balancing Act

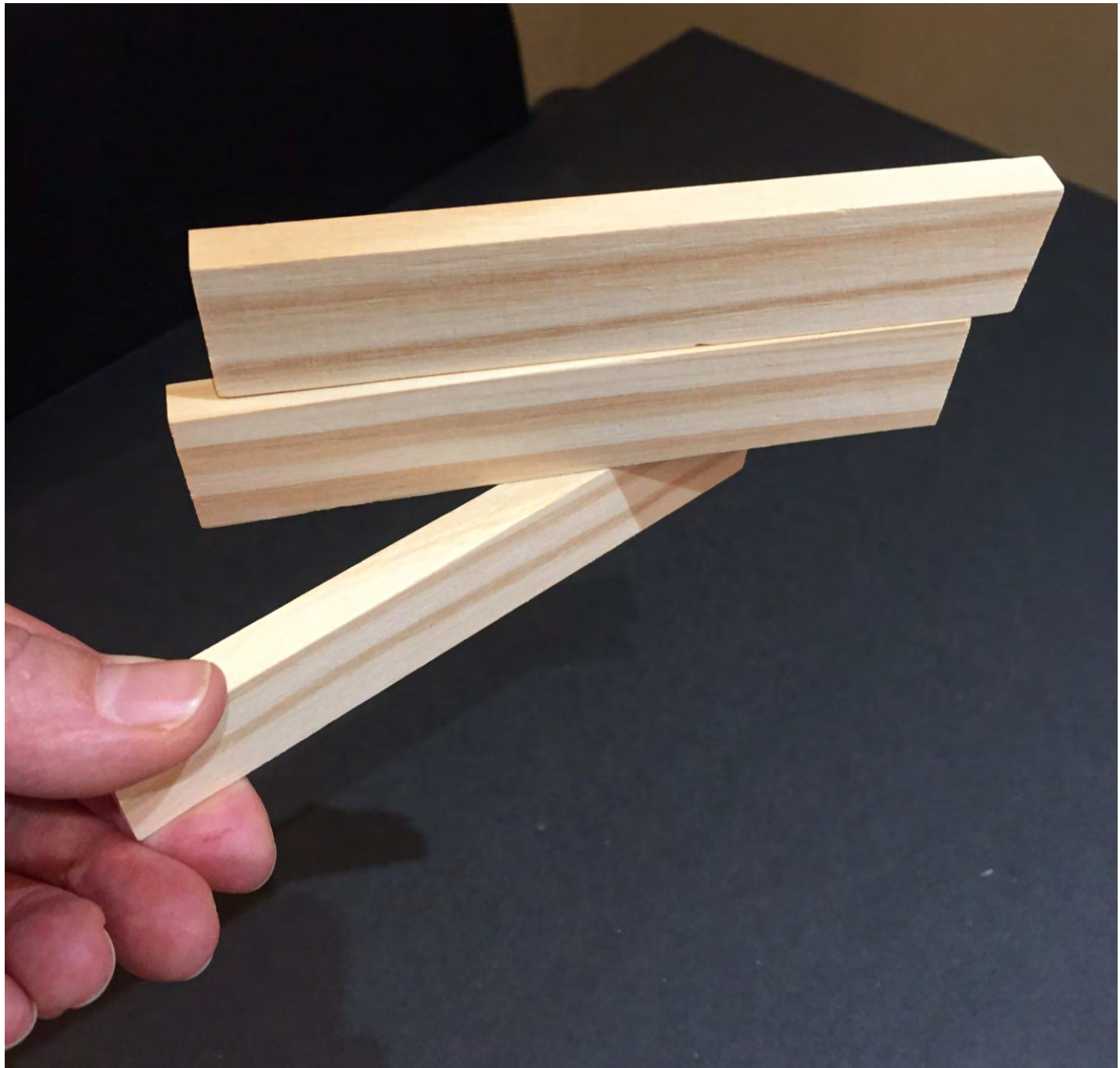


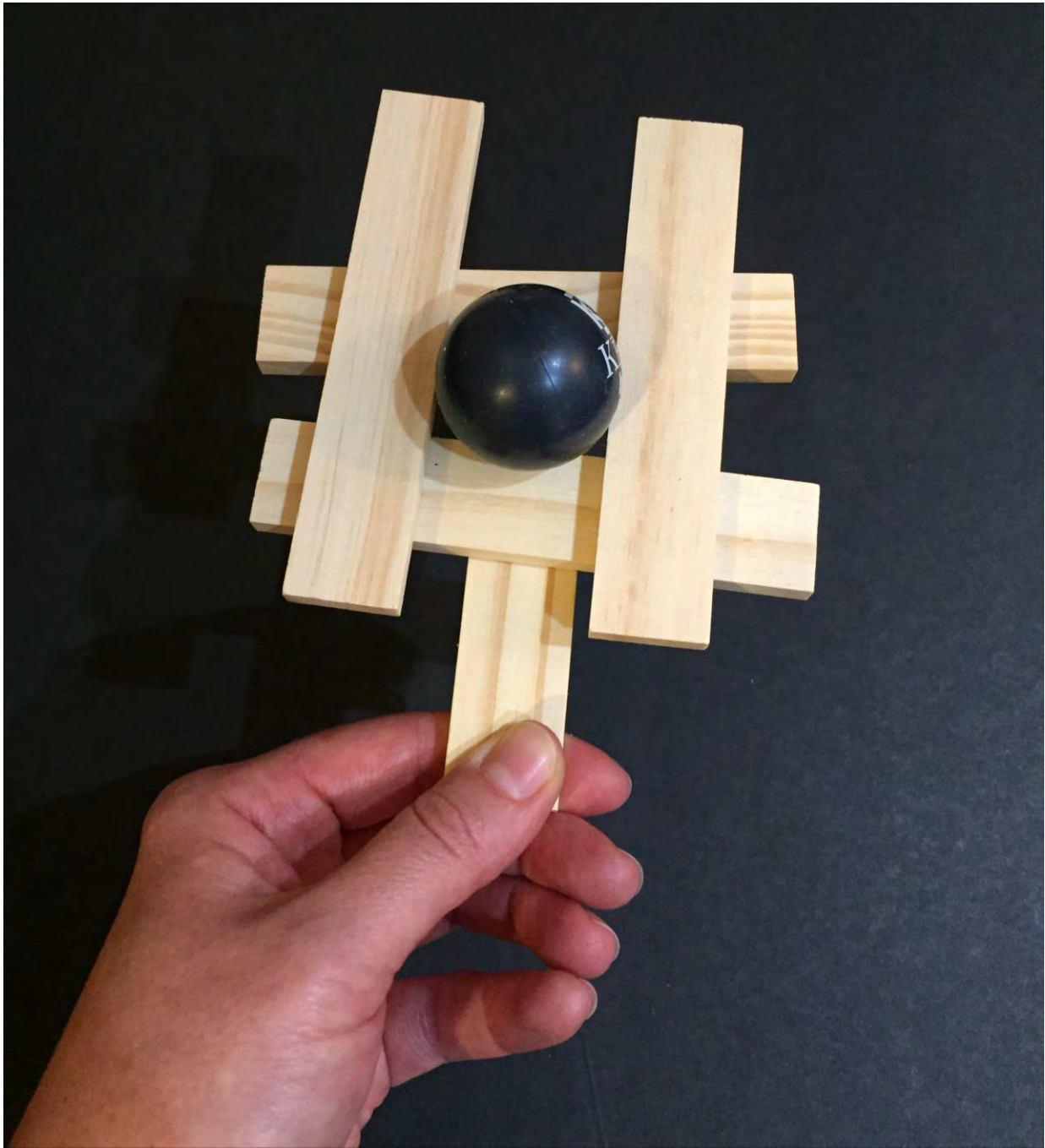












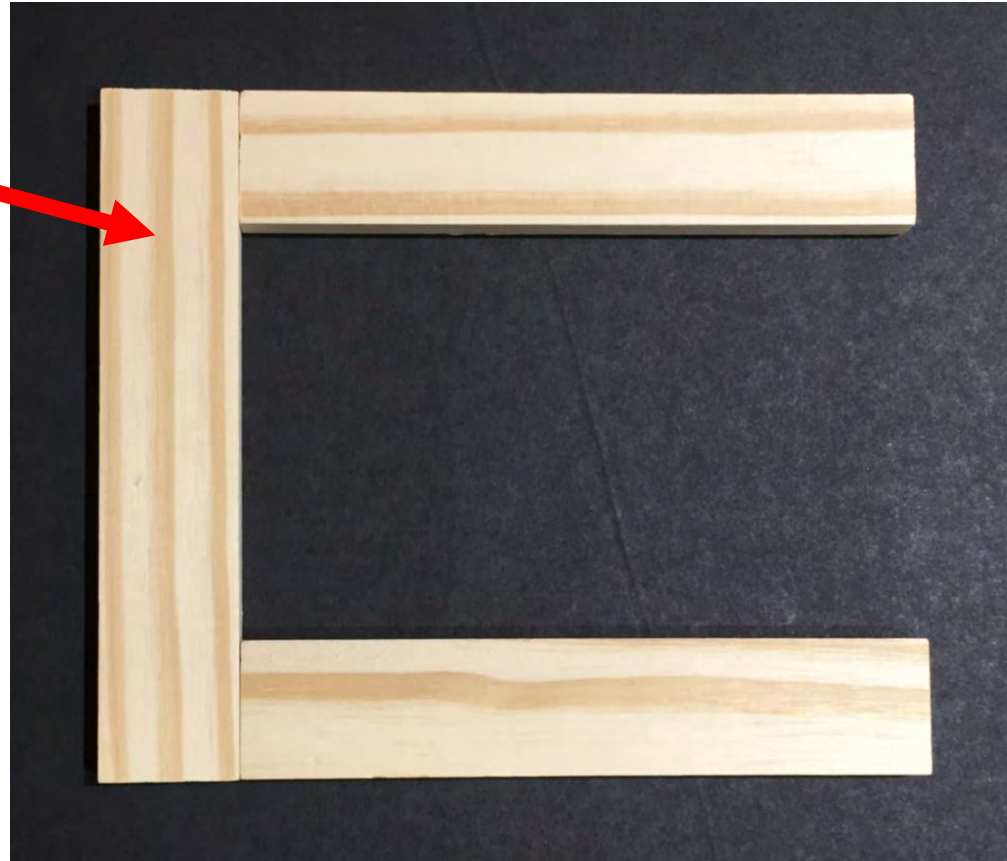
Relay Challenge

Interconnected Building

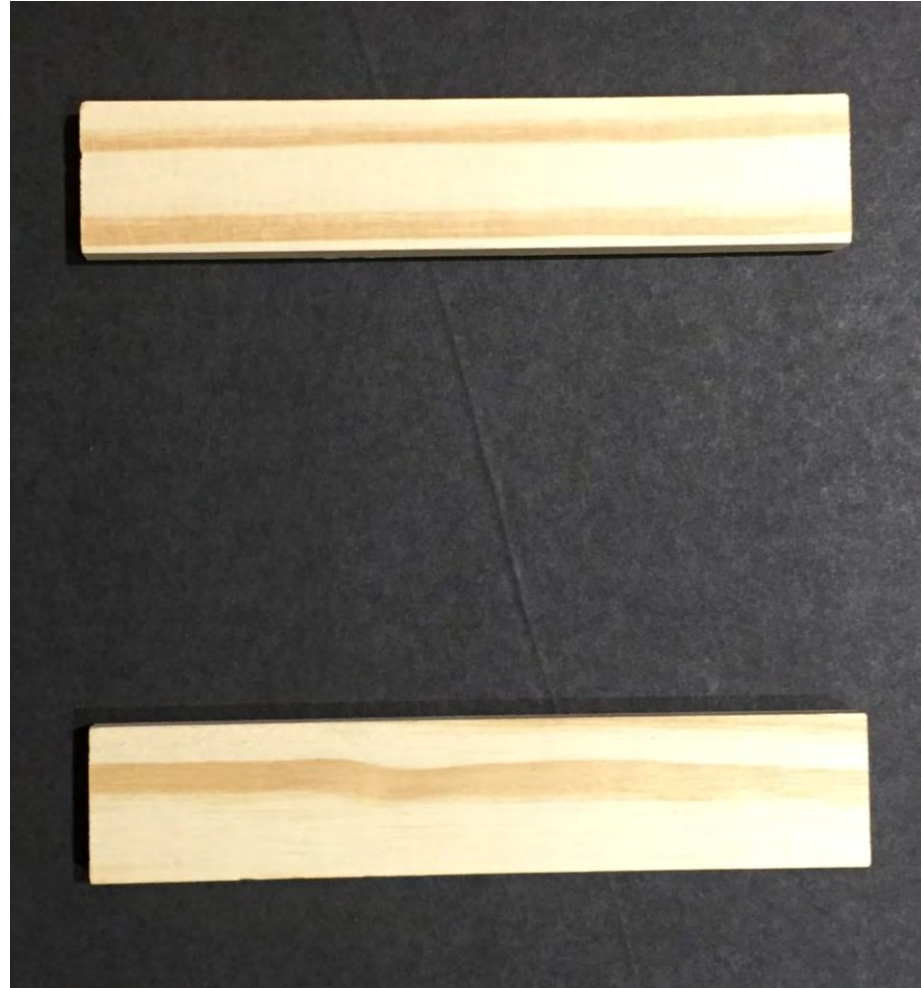
Collect 23 planks

**Lay 2 planks down flat, 1 plank
length apart**

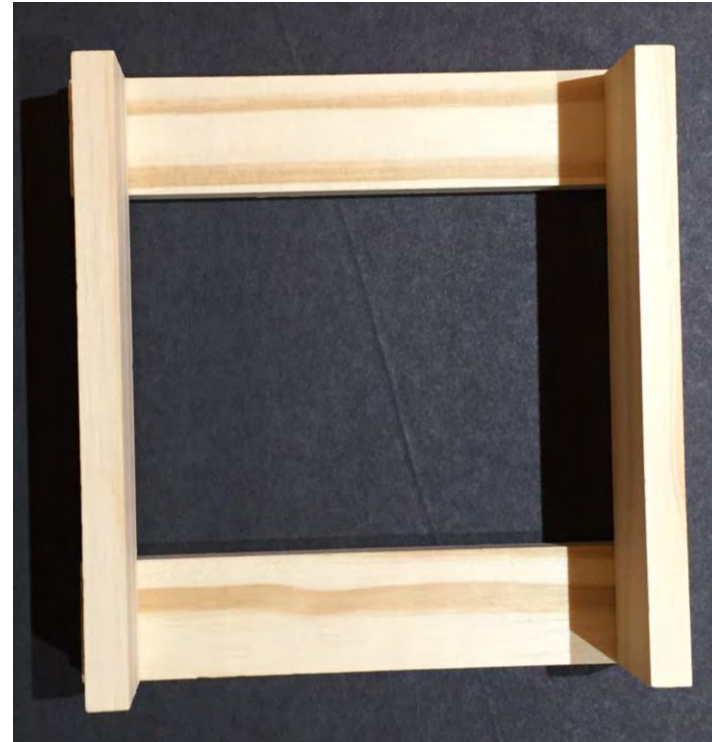
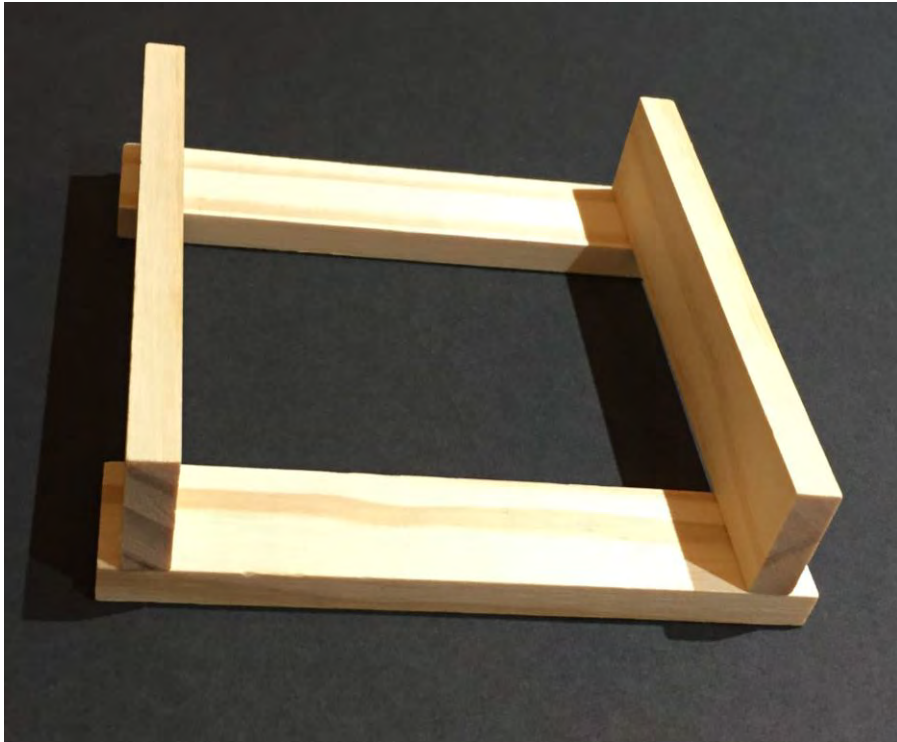
Spacer Plank



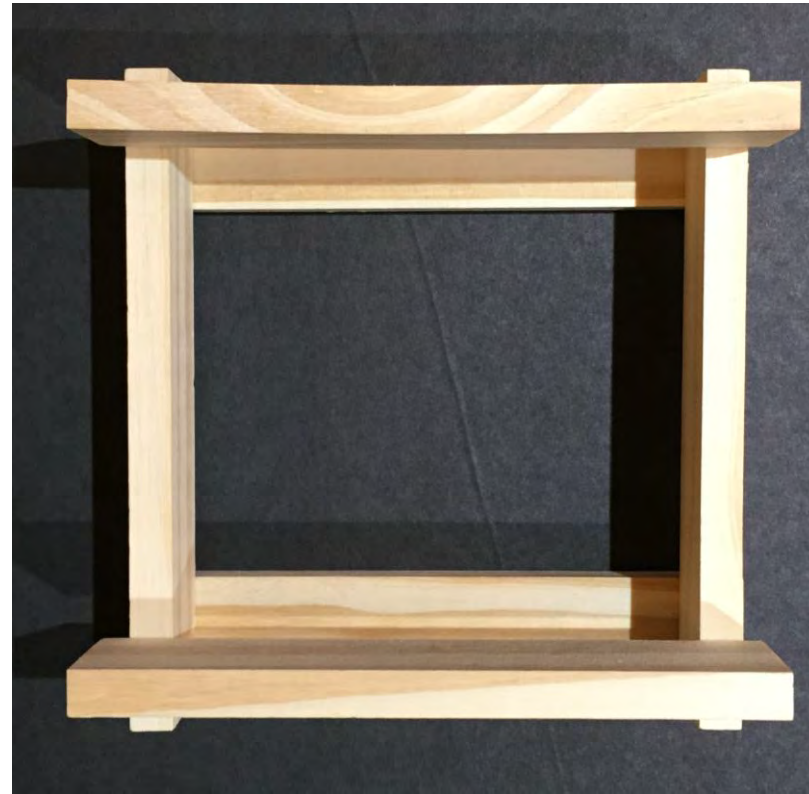
Remove spacer plank



**Add 2 planks, on edge, perpendicular
(opposite) to the first 2**



Add 2 more planks, on edge, in the same direction as the first 2 planks



Continue this pattern..



Until..



You have..



5 planks left..



And your tower looks like this!



Use your last 5 planks to add a platform



Collect 17 planks

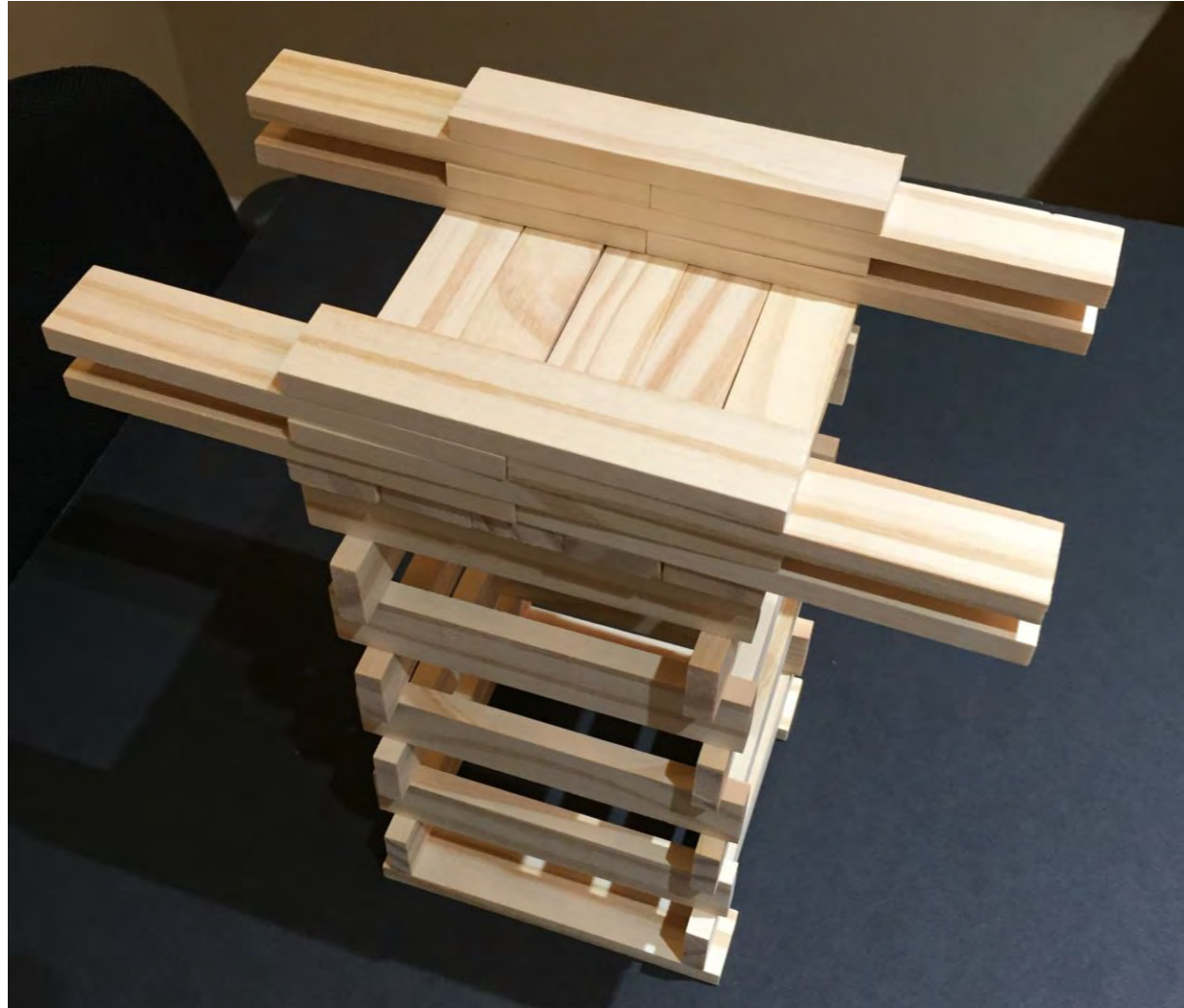
Stagger 3 planks on their flat side



Repeat with 3 more planks



Repeat on the other side of your platform



Use your last 5 planks to add a platform



Collect 10 planks

Use your last 10 planks to connect your tower to the tower on your left and on your right.

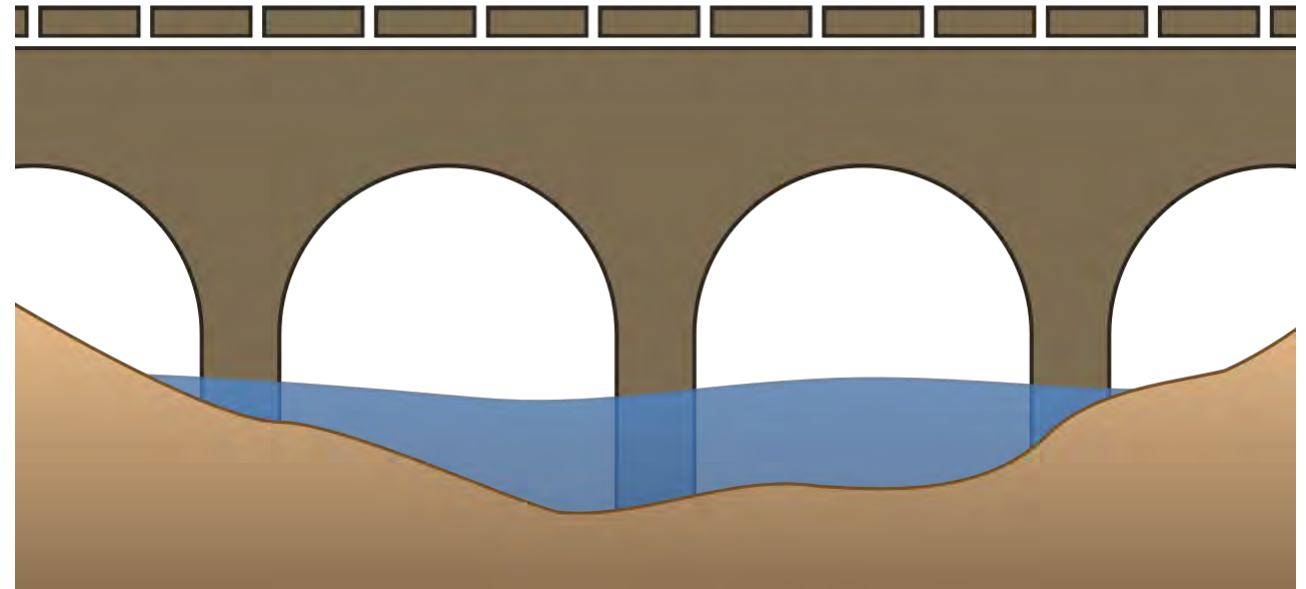
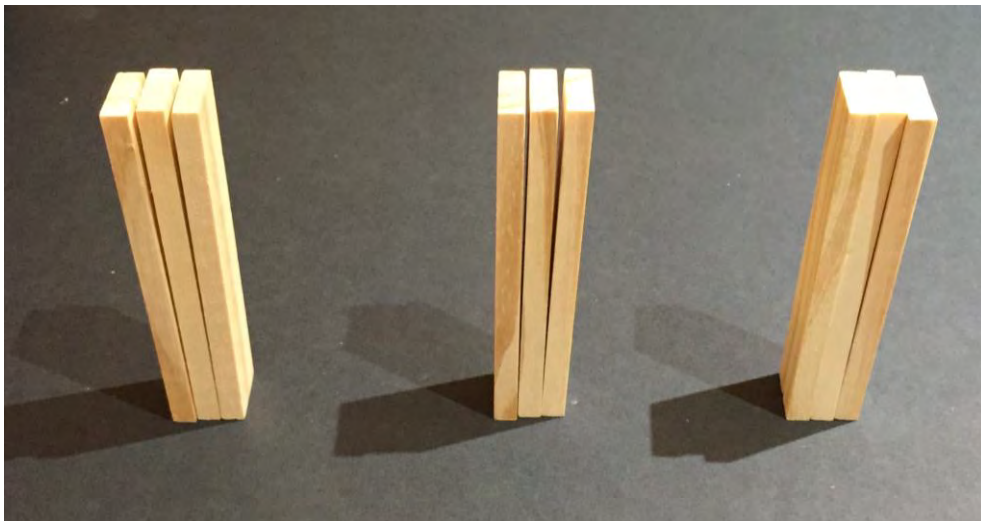
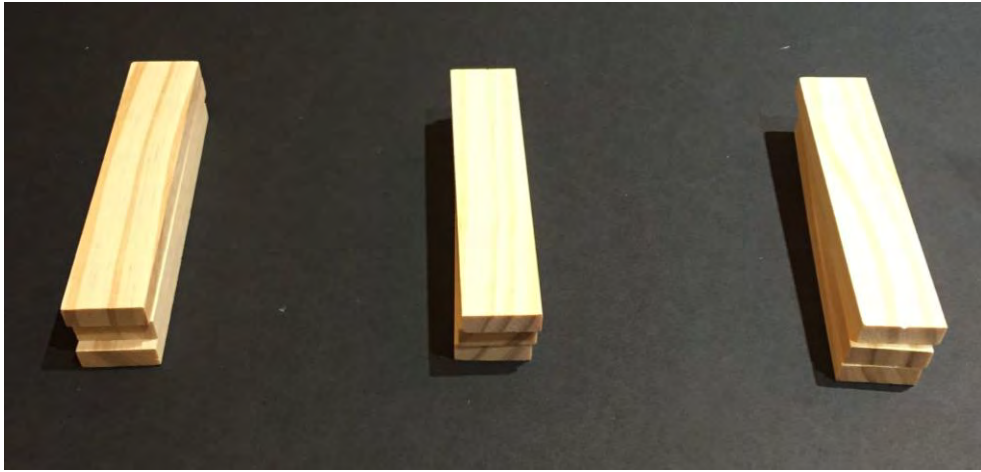




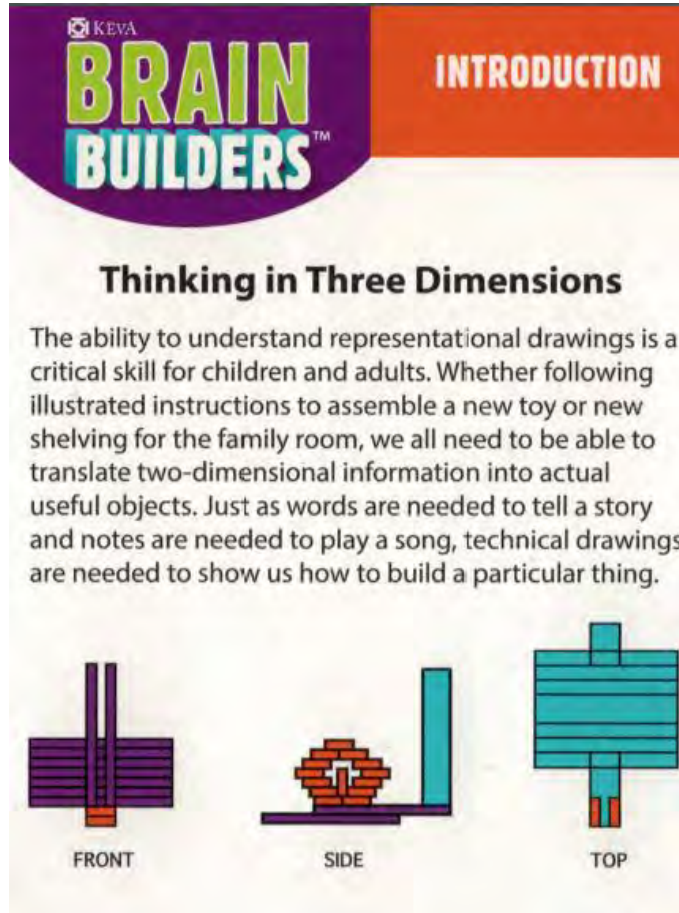
Extensions

Bridge Challenge

- Build one bridge, with your group, that spans AT LEAST 3 columns



Brain Builders

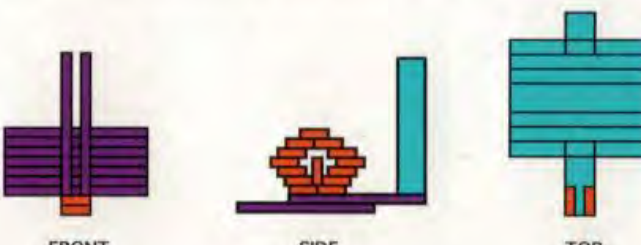


KEVA
BRAIN BUILDERS™

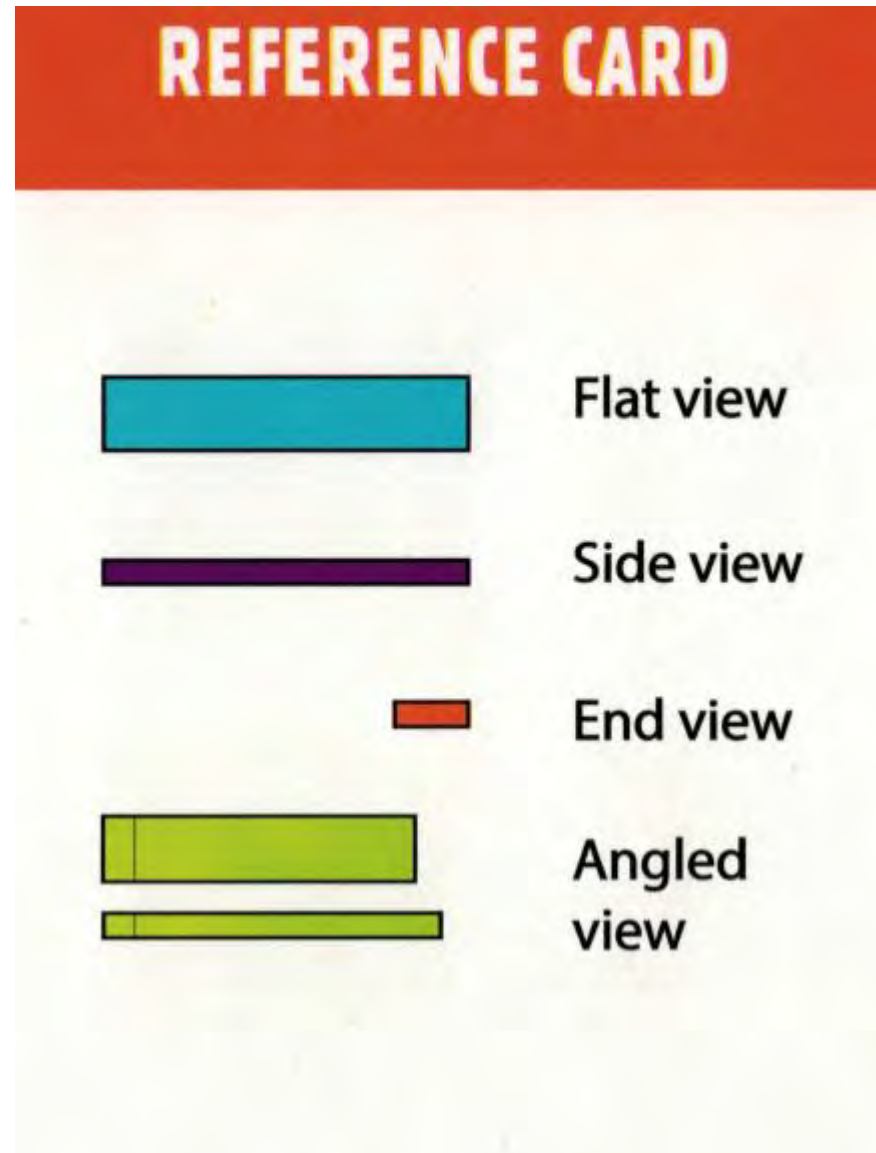
INTRODUCTION

Thinking in Three Dimensions

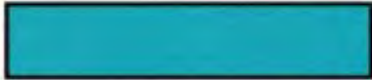
The ability to understand representational drawings is a critical skill for children and adults. Whether following illustrated instructions to assemble a new toy or new shelving for the family room, we all need to be able to translate two-dimensional information into actual useful objects. Just as words are needed to tell a story and notes are needed to play a song, technical drawings are needed to show us how to build a particular thing.




FRONT SIDE TOP




REFERENCE CARD




Flat view



Side view



End view



Angled view



KEVA
BRAIN BUILDERS™

INSTRUCTIONS

Color Coded Drawings

KEVA planks have three distinct surfaces. Each one is color coded on the technical drawings so you can rely on color as well as shape when determining how to position each plank. The broad flat view of a plank is **blue**. The narrow side view of a plank is **purple**. The small end view of a plank is **orange**. Planks that are angled are **green**.

Don't Peek!

The back side of each card features a photograph of the solution. Resist the urge to look at this side of the card which makes the construction of the puzzle obvious.

Start Easy

The cards are numbered and grouped into three levels. The higher the number, the harder the challenge. If you get stuck, it may help to hold the card beside your structure to compare the drawings to the planks you have stacked. Move around your structure so you can see it from all directions.

Clean Up

- Create 10 stacks of 5 planks to be sure you have 50.
 - Put the planks into a Ziploc bag.