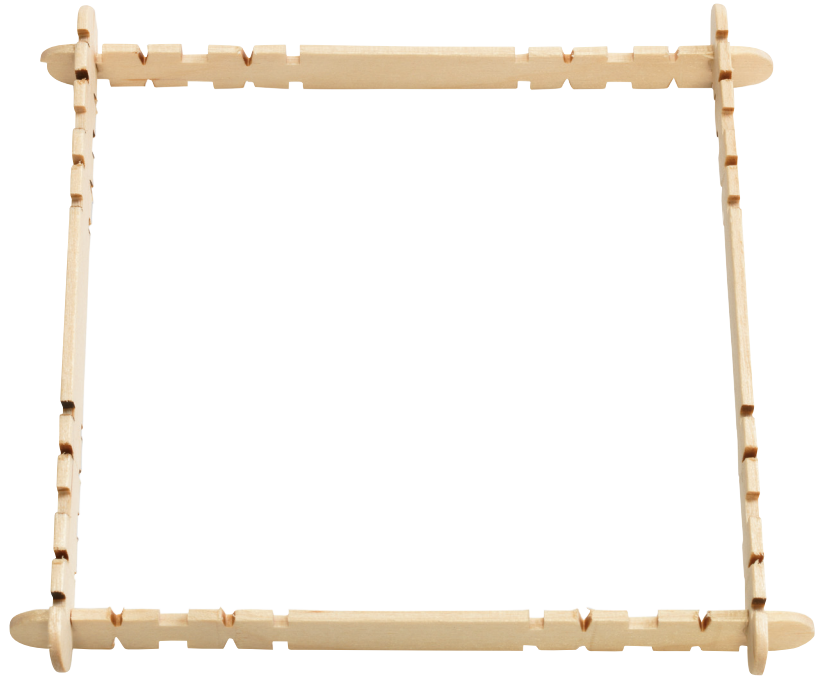


1

Basic Shape: Square



Basic Shape: Square

Pieces used



x 4



Variation:

Make a rectangle by snapping the ends of two sticks so that there are 2 long and 2 short sticks.

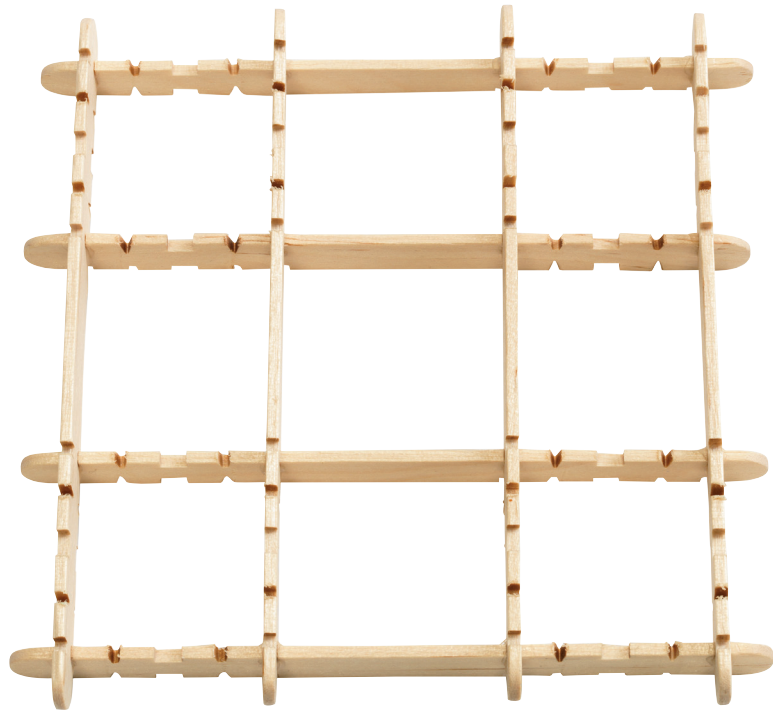


How the sticks break:



2

Grid Shape

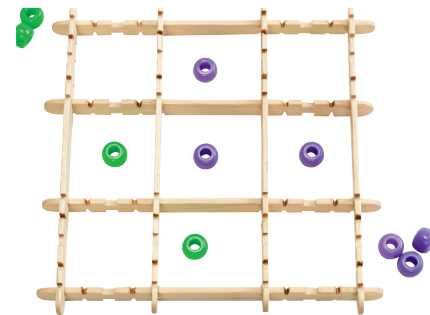


Pieces used



x 8 or more

Tic-Tac-Toe



Sorting Grid



3

Build a Box

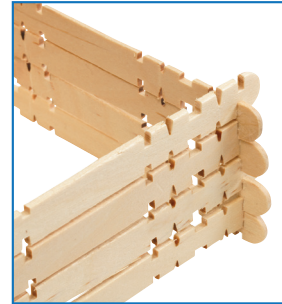


Build a Box

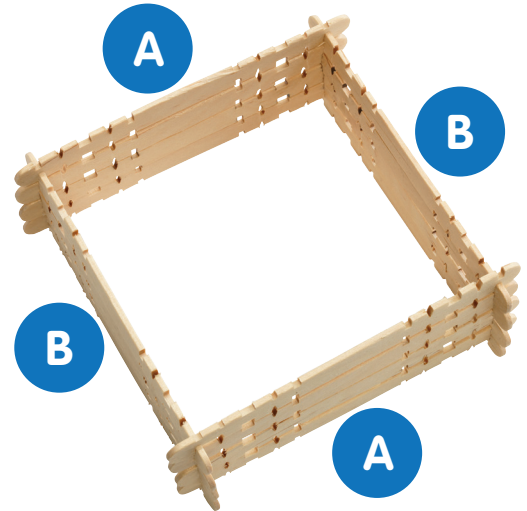
Pieces used



x 4 per layer



Stack sticks by adding the sticks two at a time in order. Add the A sticks to the B sticks, then add the B sticks to the A sticks until your box is the right height.



4

Zig-Zag Shape



Make a Snake!

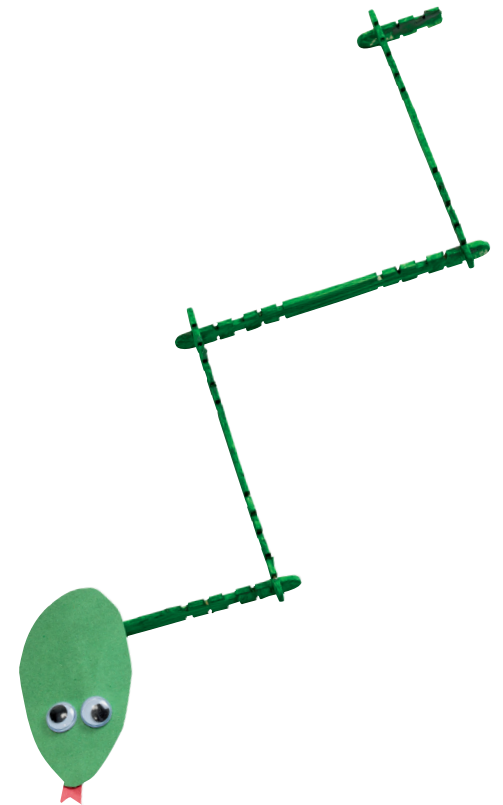
Pieces used



2 small

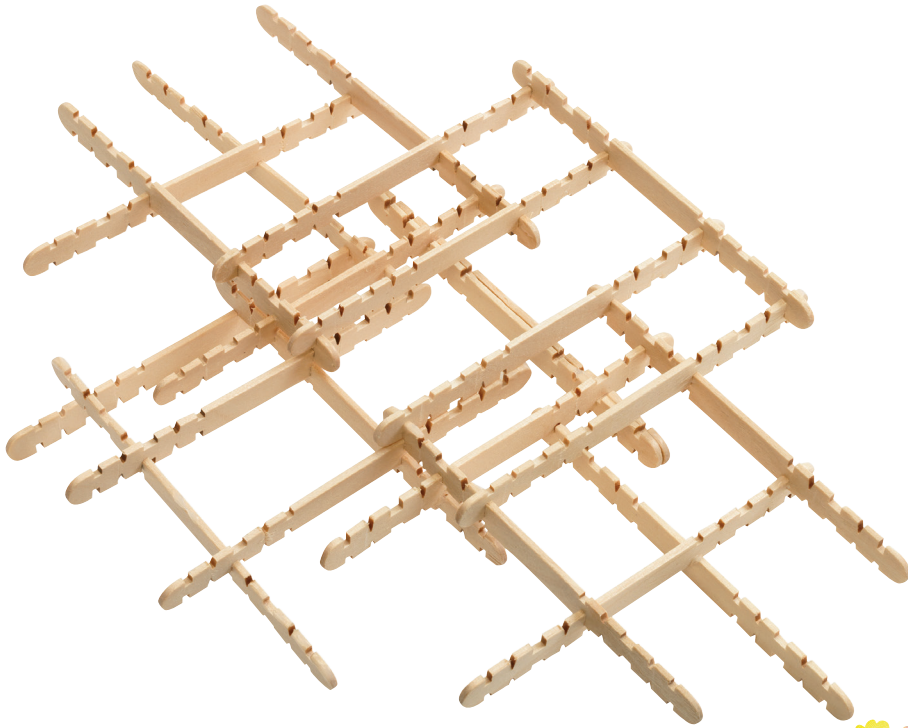
3 long

1 medium



5

Abstract Shape



Abstract Art Project

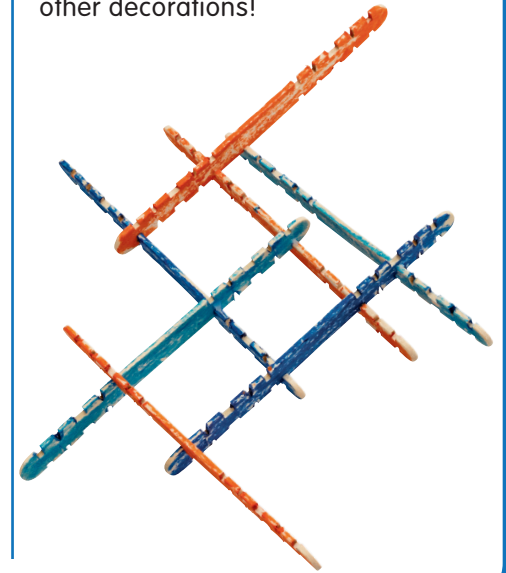
Pieces used



Abstract means: *Unique and not based on anything with an existing specific example.*

Abstract art is a great outlet for expressing feelings.

Create something that expresses your feelings! You can even paint the finished piece with paint, markers, or other decorations!



As many as you want!

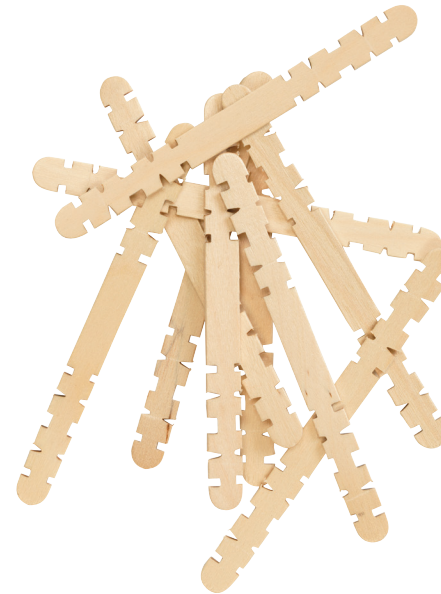
6

Build a Maze



Build a Maze

Pieces used



Learning Outcomes:

Problem Solving
Fine Motor Skills
Creative Thinking

Variations:

1. Glue the maze to the inside of a shoebox lid and use a bead to roll around and solve the maze.
2. Use a straw to blow a pom-pom through the maze.

As many as you want!

7

Build an Airplane

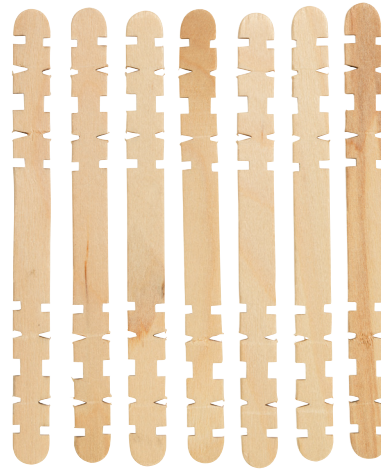


Build an Airplane

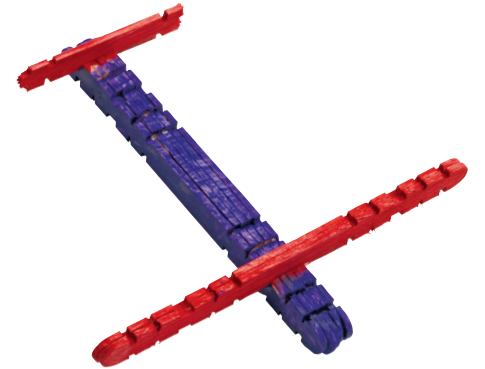
Pieces used



1 medium

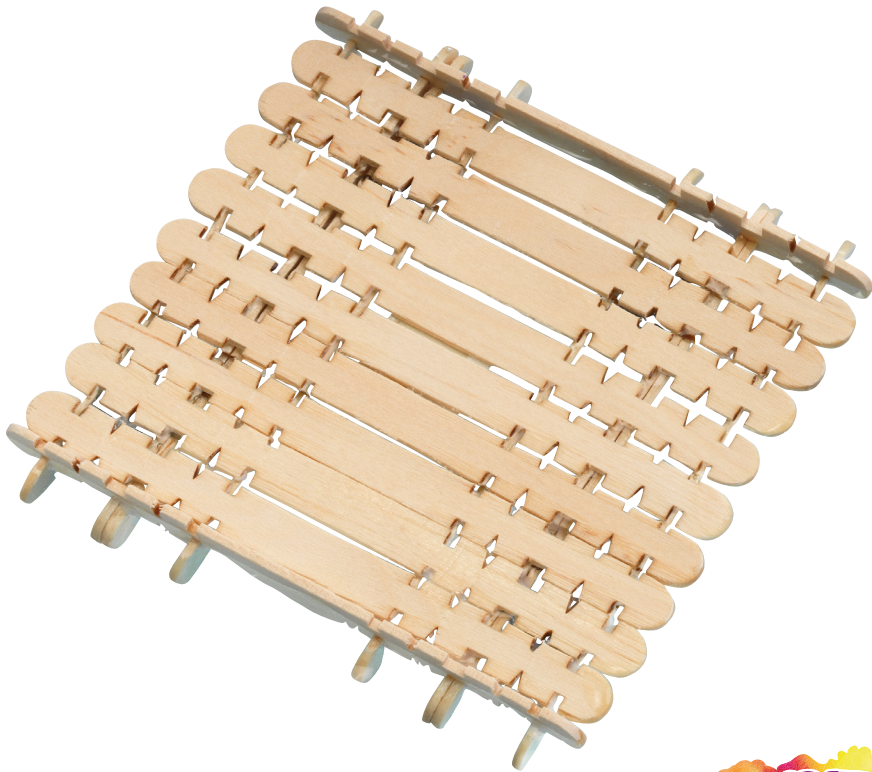


7 long



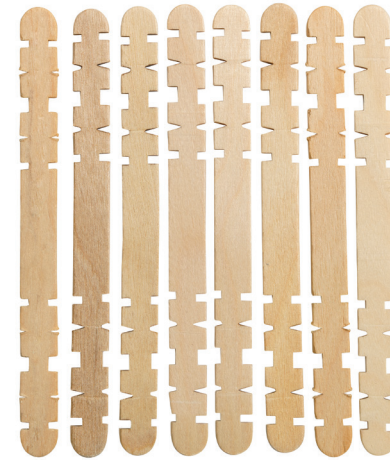
8

Build a Boat / Raft

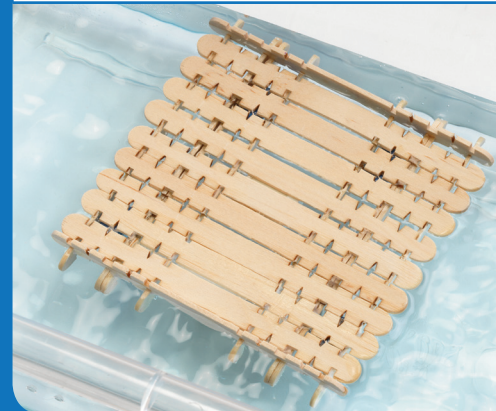


Floating Boat Challenge

Pieces used



8 long (base)
9 long (top)



**Build a boat base and
make it float!**

To reinforce, use waterproof
materials such as:

Foam pieces

Wax paper

Cork

Ages 5+

Printed in China

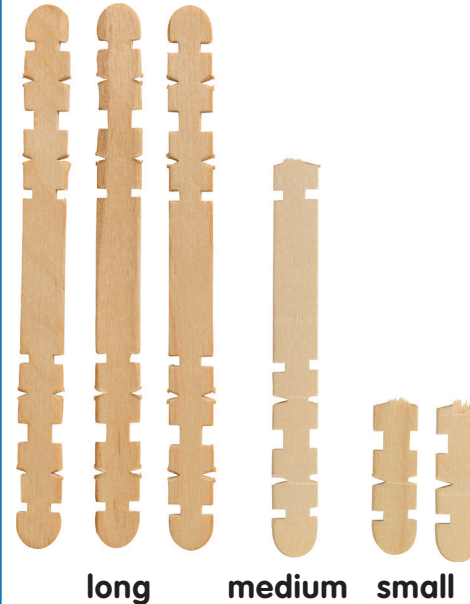
9

Build a Building



Build a Building

Pieces used



long

medium

small

Who makes buildings?

Architects & engineers make the building plan.

Contractors follow the plan and hire the people to build the structure.

Builders & construction workers follow the plan and build the structure.

Now it's your turn!

1. Make a building plan (draw your plan)
2. Follow the plan and build your structure!

**number of pieces varies*

10

Build a Bridge



Build a Bridge

Complex Project

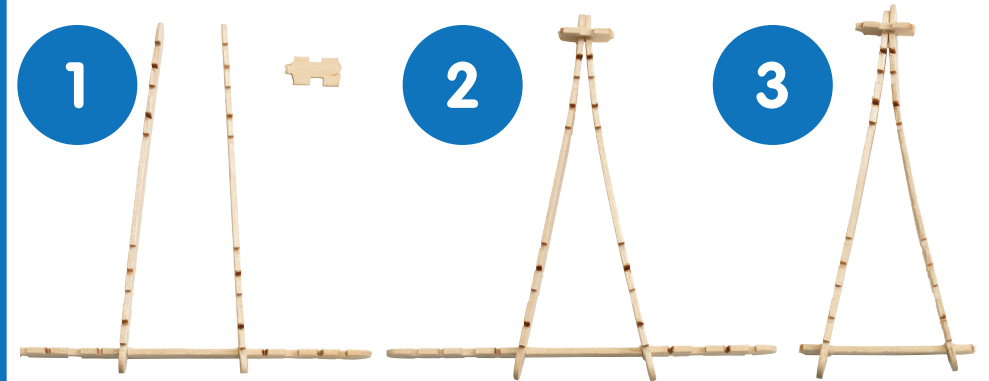
What is a bridge? It is a structure built to allow easy travel from one place to another. Bridges are built over water, ravines, or other obstacles.

You will use all different parts of the STEM sticks for this project.

Recommended activity:

Build a bridge that will allow a toy car to drive from one pile of blocks to another.

How to build the arch seen in the photo:



Ages 5+

Printed in China