



T

Tinker



1

Points

KEVA Planks

Ramp Up

Build a ramp that something round can roll down. How fast can you make it roll?



MackinMaker

T

Tinker

1

Points

Materials:

- KEVA planks
 - Something round from your classroom
 - Other supplies for ramp building from your classroom (optional)
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Quick Start:

1. Gather as many KEVA planks as you can.
2. Start by stacking one KEVA plank on top of another. Make a set of “stairs” using only the KEVA planks. How steep of a ramp can you make?
3. Make sure that you put KEVA planks over the top of the KEVA plank stacks. This makes a ramp instead of stairs.
4. Test out your ramp. Does it work? Can you make it longer? Wider? Safer? Smoother?

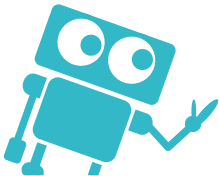
Hints and Tips:

- If you're not sure where to begin, start by making stairs using your KEVA planks.
 - Where can we find ramps in real life? Talk about it with an adult or someone you know and look at pictures of real-life ramps to help you build your own.
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Extended Challenges

Science: Find a variety of round objects to test using your ramp. Which object moves down the ramp the fastest? Slowest? Why do you think that is?

Social Studies: Find a ramp that helps someone or something in your school. Draw a picture of that ramp and talk to an adult about why the ramp is important.



S

Skill-Up

6

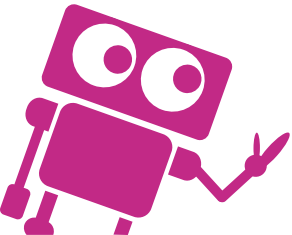
Points

KEVA Planks

Name It!

Make your name using
only KEVA planks.

MackinMaker



S

Skill-Up

6

Points

Materials:

KEVA planks

Quick Start:

1. Gather as many KEVA planks as you can.
2. How do you spell your name? Build your name letter by letter.
3. Can you make a letter uppercase? Lowercase? Try practicing different letter shapes!

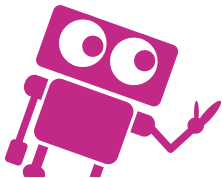
Hints and Tips:

- Start by making the letter shapes with just a few KEVA planks. Then, build on from there. Can you make them closer to 3D shapes?
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Extended Challenges

English/Language Arts: What is a word you have recently learned the definition of? Spell out that word.

Social Studies: Think of a famous person you admire. Find out how to spell their name, and build it using KEVA planks.

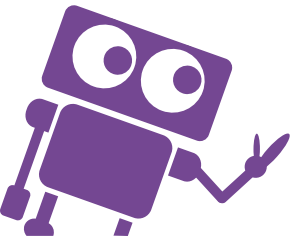


D

Design

12

Points



KEVA Planks

Patterns with KEVA Planks

Can you make a pattern using your KEVA planks?
What shapes will you include in your design?

MackinMaker

D

Skill-Up

12

Points

Materials:

- KEVA planks
 - Additional classroom materials (optional)
-

Quick Start:

1. Gather as many KEVA planks as you can.
2. Make a pattern with your KEVA planks. Will it be 2D or 3D?

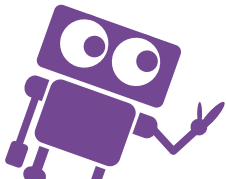
Hints and Tips:

- Did your pattern creation fall down or get messed up? Just keep trying, testing, trying and testing some more—engineers call this “iterating.”
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Extended Challenges

Art: Draw the pattern you made using paper and coloring supplies. Add to it if you would like!

Math: How many planks did you use to make your pattern? Count them all! Can you add more?





G

Global



16

Points

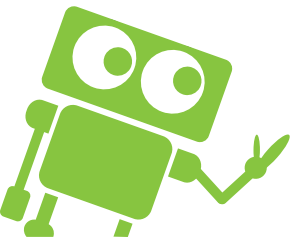
KEVA Planks

Lovely Library

Build a library that you would want to explore. How many rooms will it have? Will there be a reading fort?



MackinMaker



G

Global

16

Points

Materials:

- KEVA planks
 - Additional classroom materials (optional)
-

Quick Start:

1. Gather as many KEVA planks as you can.
2. Think about what you want in your dream library. How many different rooms will there be and how will you get into each room?
3. Start to build your library. How will you stack your planks? Will it be a bird's eye view of your library or will you make your library have a roof?

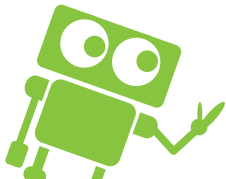
Hints and Tips:

- Triangles are strong shapes and crisscrossing the planks helps too. Try some different techniques to see what works the best.
 - Did your library structure fall down? Just keep trying, testing, trying and testing some more—engineers call this “iterating.”
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Extended Challenges

English/Language Arts: What books would you make sure to include in your library? Make a list of your favorites and tell an adult or a friend about it.

Science: Instead of a library, build your dream bedroom.



1

Innovator

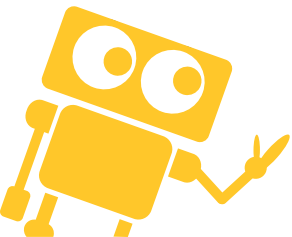
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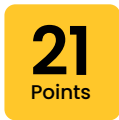
Points

KEVA Planks Tallest Tower

Build the tallest
tower you can.

MackinMaker





Materials:

- KEVA planks
-

Quick Start:

1. Gather as many KEVA planks as you can.
2. Start to build your tower. How will you stack your planks to make the tower strong?
3. Does it stay standing? Can you do anything to improve your tower?

Hints and Tips:

- Triangles are strong shapes and crisscrossing the planks helps too. Try some different techniques to see what works the best.
 - Did your tower fall down? Just keep trying, testing, trying and testing some more—engineers call this “iterating.”
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Extended Challenges

Science: Can you make your tower using different shapes? Try a hexagon- or triangle-shaped tower! Build a tower that is a single plank wide. How tall can you make it before it falls?

Science: Can you make a window in your tower? A door?

