



“Stare at spectrUM’s logo for 30 seconds and then look away to a blank wall. What do you see? The colors are reversed because of something called afterimage. **Pretty cool, huh?**”



# Strawbees

GRADES K-2

Build a crazy contraption using straws and connectors.



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# Strawbees



## What You Need:

- Straws
- Rubber Band
- Scissors and Paper (optional)

## Try it

- 1. Connect** two straws together with a connector. See the instructions to the right for tips on how to use the Strawbees connectors.
- 2. Create** a creature, object or fantastical creation using connectors of different types and straws of different lengths.
- 3. Add** other materials like paper, tape, cardboard, pipe cleaners, or recycled materials around your creation. What can you make using your imagination?

**Stuck on what to build? Start with a simple geometric shape like a pyramid, try to make your own puppy or create a catapult to launch something high!**

For more information on designs to try, questions to think about, and examples see our Instructable at [tinyurl.com/strawbeeskit](https://tinyurl.com/strawbeeskit) or scan this QR code:



# Strawbees.

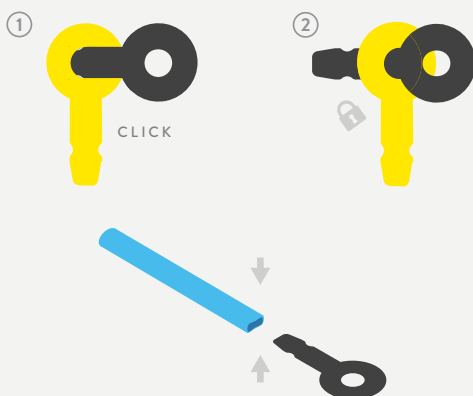
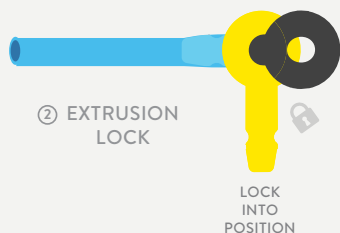
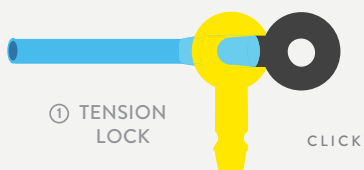
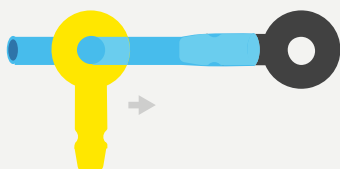
## BASICS

### CONNECT & LOCK

Strawbees are little pieces that connect to each other and to straws. To connect the Strawbees to each other, simply snap one into the other.

It connects to other Strawbees in two ways:

- 1) Snapped into the groove, or
- 2) Pushed all the way through.



### CONNECTING TO STRAWS

Squeeze the opening of the straw for easy insertion of the Strawbee.

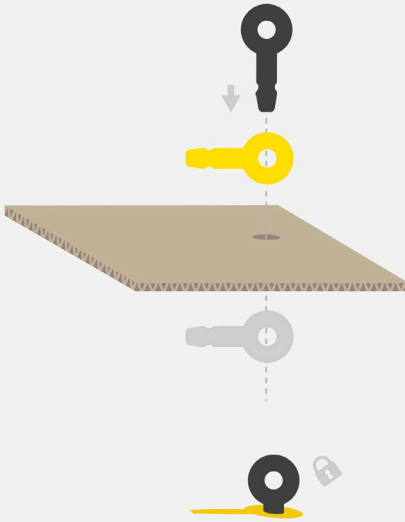
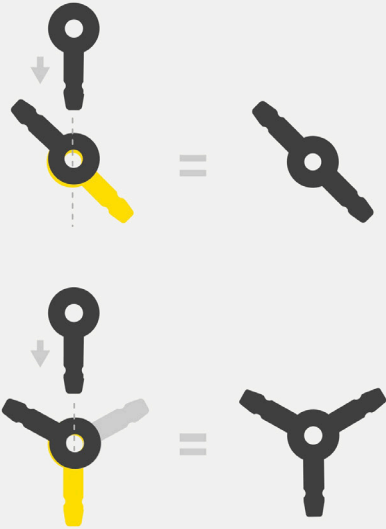
If your straws slide off the Strawbees, you can lock them with another Strawbee.

We call this the tension lock. Push a Strawbee on over the Strawbee that already attached to the straw.

Another way of attaching a straw to the Strawbees is a joint pushed all the way in and adding Extrusion lock - Perfect for extruding and sculpting.

## HOW TO REPLACE A PIECE

While building if you start to run out of certain types of Strawbees, you can replace them with a combination of other Strawbees (you can even cut them yourself!). You can put upto 20 Strawbees on a single Strawbee.



## CARDBOARD BASICS

Strawbees and cardboard are friends too. You can join two or more pieces of cardboard together by passing a Strawbee through them. Make the cardboards move by cutting out circular holes for joints, or lock the boards into position by simply fitting your Strawbees in a fixed place. Always remember to lock the Strawbees so they don't fall apart.

# Strawbees.

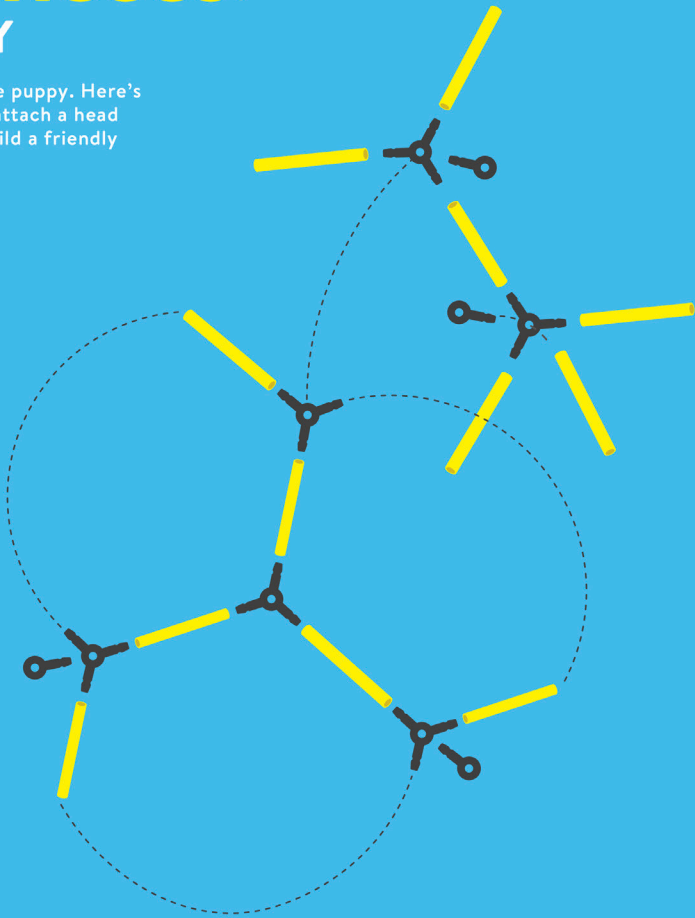
## PUPPY

'WOOF!' says the puppy. Here's a simple way to attach a head to a body and build a friendly companion!

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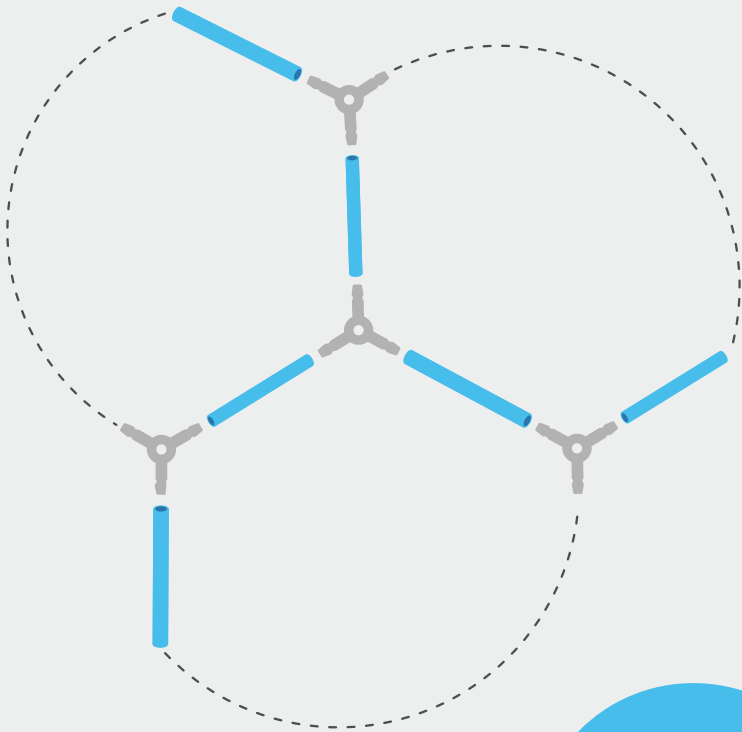
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# PYRAMID



Pyramids are also known as tetrahedrons, fancy name for this pointed fella. Pro tip: Bend the Strawbee arms to make the edges sharper.



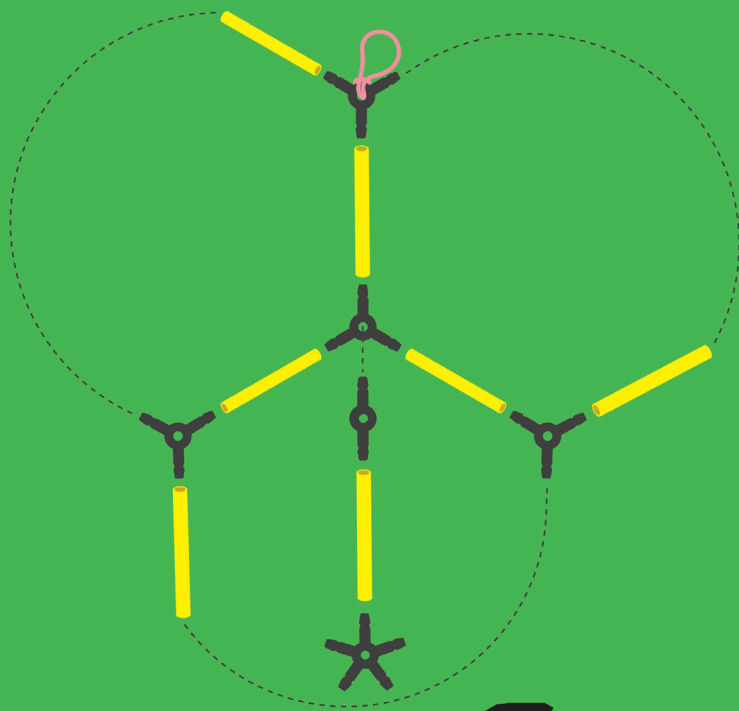
*It looks like this in the end! →*



# Strawbees.

## CATAPULT

Use your Strawbees to make a catapult that can fling something really far! Use the tetrahedron you've already built or create this one from scratch.



# Directions

spectrUM Discovery Area is located on the Children's Floor of the new Missoula Public Library at 455 East Main Street, in downtown Missoula.



Science. Try it.

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