



# Strawbees Maker Kit

## Guide

Strawbees are a simple, educational engineering toy that allow users to create anything from a bridge to a marble run using sturdy plastic connector pieces.

While there are prototypes and blueprints of objects to build online (see <http://strawbees.com/play/>), it is just as much fun, if not more, to create things completely from scratch.

Familiarize yourself with the pieces and build away! (See next page)

We've included 200+ blue straws of various lengths. Feel free to supplement the straws in the kit with some of your own. You can use different colored straws and even bendy drinking straws for really crazy creations.

## Troubleshooting

If you experience problems, please contact the Reference Desk at [cvref@wcpl.lib.oh.us](mailto:cvref@wcpl.lib.oh.us).

## Feedback

We would love to hear how your experience was! Please complete this survey:

<http://goo.gl/forms/CuU9efutyX>

Also, feel free share your creations with us on social media:

<https://www.facebook.com/wclibrary.info>

<https://twitter.com/washcentlibrary>

# Strawbees.

## FEATURE PALETTE

**Strawbee**

**Locking**

Study stress in structures  
Stress is easily observed due to the weakness of straws

One at a time  
Add Strawbees one by one  
for easy assembly

**2-Strawbee**

**3-Strawbee**

**5-Strawbee**

A friction lock  
is obtained by locking the connecting  
Strawbee into itself

**Limit angles**  
The friction lock feature can be used  
to constrain movement

**Triangles**  
The starting point of all static structures

Learn Euler  
Half the length,  
four times the strength

Build Sierpinski fractals  
And try to stop

Have fun  
With the Platonic solids

**Non-triangle polygons**  
Can move, suitable for  
dynamic structures

Use larger diameter straws  
As spacers in hinged structures

Use lockings  
To fix axes inside strawbee structures

Use many straws  
To multiply strength

Use lockings  
Or ordinary Strawbees to lock  
straw to Strawbee when needed

Variable length elements  
Makes it easy to find the optimal construction

Experiment  
With different straws

**no001**

This poster comes as a special to all of our brave backers supporting the Strawbees project as it was launched through Kickstarter in 2014. Once again, thank you! © Strawbees 2014

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