



Virtual **STEAM** Night

Engineering

Really Long Straw Challenge

Goal: I can make a really long working straw.

Indicator: 1.6.2.A Use materials to design a device that solves a specific problem or a solution to a specific problem.

Materials:

- 12 - Package of straws
- Scissors (not included)
- 12 - Address Labels / Tape
- Ruler (not included)
- Drinking glass (not included)
- Water (not included)



Instructions:

1. Watch YouTube Video for background knowledge:
<https://www.youtube.com/watch?v=wln8kEjCa4s>
2. On a sheet of paper, design your long straw.
3. Connect two straws by cutting a tiny slit in one straw and sliding a second straw into it.
4. Place tape over the slit where the two straws connect.
5. Test your long straw to see if you can drink water.
6. Hint: Try to add straws only one or two at a time to make sure they work and you have a good tight air seal.
7. If successful, try adding more straws and test again.
8. Measure your long, successful straw.
9. Document the challenge using video, photos, drawings, etc.
10. Have fun!

Book Extensions:

[Straw by Amy Krause Rosenthal](#)

[Have You Thanked an Inventor Today by Patrice McLaurin](#)





Extension Activities:

- Get different kinds of straws, smoothie straws, coffee straws, narrow, wide, paper, plastic, bendy/not bendy. Test which type of straw is the most effective as a long straw that actually works!
- Does water level in your cup make a difference?
- What have you found makes it easier when you have a long straw?

Ignite our Future Connection:

- **Peaceful Problem Solving** - The ability to get along with others while still having different opinions and ideas. Lessons for this important skill exhibit both the difficulty and the rewards of being able to peacefully work together to solve problems.

