Summer Learning: Straw Bridge

In this activity you will use drinking straws and tape to build a straw bridge.

You’ll need:

- Drinking straws (20 or more)
- Tape (masking tape or similar)
- Stronger tape (duct tape or similar)
- Small items to use as weights, such as pennies or marbles
- A plastic drinking cup or another similarly sized container
- String or yarn
- Scissors
- 2 stools (or chairs, tables, etc.) of a similar height

NOTE: Similar challenges can be done with other household materials like paper, cardboard, Legos, or even uncooked pasta.
What to do:

1. Set up 2 stools with about a 1-foot gap in between.

2. Use drinking straws and tape to design and create a bridge to span the gap. Note: Older participants or participants who need a greater challenge should have a limited number of straws (as few as 20) and/or a shorter time limit.

3. Test the bridge.

4. Position the bridge to span the gap.

5. Use string and tape to hang the cup from the bridge.

6. Count as you place marbles one at a time in the cup until the bridge fails. If the bridge does not fail, move on to Step 4 and at Step 5 add an additional challenge of limited time or materials.

7. Talk about what could be improved in your bridge design. Observe strong bridges in pictures, video, and real life (if possible). Note common features. Hint: Look for triangles.

8. Retry the challenge with a redesigned straw bridge utilizing your experience and observations to make it stronger.

9. Repeat as many times as you like!

Don’t forget to take a photo of part of your activity and share it on social media with #CCPLSummerSTEAM to get credit for our Summer Reading Game!