



# Dot Day STEAM Challenge

## Materials Needed:

Construction Paper, Pencil, Scissors, Tape or Stapler, Colored Dot Stickers, Design Sheet, and Yard Stick, Ruler or Measuring Tape

Read the book, *The Dot*, by Peter Reynolds (available in the catalog at [metrolibrary.org](http://metrolibrary.org), or as an ebook, e-audiobook or movie on Overdrive or Hoopla Digital using your library card)

Challenge: Create the longest paper chain possible out of one piece of paper, scissors and dot stickers.

## Steps:

1. What is the problem you're being ASKed to solve? Write it on the Design Sheet. Brainstorm a plan for constructing the longest Dot Chain.
2. IMAGINE what your chain will look like and sketch it out on the Design Sheet. Think about each of the three questions listed in that section and PLAN how to address them. What will determine the length of each chain?  
Hint: + — — — — ness
3. Using the sheet of construction paper, scissors, tape or stapler and colored dot stickers, CREATE your dot chain.
4. Stetch out your chain to its fullest length and measure it with a yard stick, ruler or measuring tape. Record the length in inches on your Design Sheet in the TEST section .
5. Consider what would be needed to IMPROVE your design. If you have time, create a second chain and measure it to see if you can make an even longer one.

# DESIGN

# THE DOT STEM PAPER CHAIN

# SHEET

## Ask

What is the problem you're trying to solve?

## Imagine & Plan

Imagine the best way to solve the problem. Sketch out your design. Think about:

- How will you use your materials?
- How will you make your chain long yet strong enough to resist breaking?
- What possible problems could come up during construction?

## Create

Build your Dot Sticker Paper Chain



## Test

Measure your Dot Sticker Paper Chain and record the length.

Paper Chain Length (in inches)

\_\_\_\_\_

How many feet is that?

\_\_\_\_\_

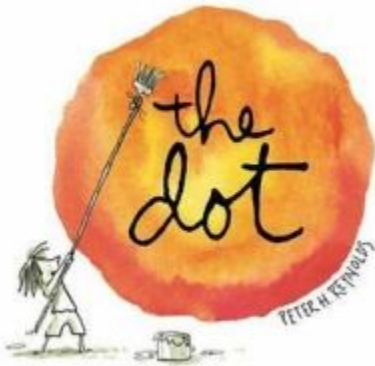
## Improve

What about your design worked well? What would you do differently next time?

If you redid a chain, NEW Paper Chain Length

\_\_\_\_\_ inches

\_\_\_\_\_ feet



# STEAM in September

## Dot Day Paper Chain Challenge

### What's in the Kit?

- Guided Instructions & Design Sheet
- 2 pieces of construction paper
- 24 colored dot stickers
- 12" (paper) ruler

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