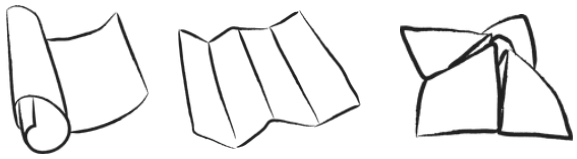
PLAY

PAPER EXPLORATION



FACILITATOR GUIDE
GRADES: K-5
TIME: 20-30 minutes
MATERIALS: construction paper, scissors (optional)

Designers take time to **play** and explore new ideas and materials, even when they're not sure what they want to create!

PROCESS

1. PLAY WITH PAPER!

Give each student one letter-sized piece of paper, or a few strips of paper. Any scraps you have available can also work here. Challenge students to spend 5 minutes as a whole group manipulating it. Ask them:

How can you change the paper?
Come back together and share a few strategies before moving to individual work.

2. HOW MANY WAYS CAN YOU CHANGE THE PAPER?

Challenge students to explore as many paper-changing techniques as they can. You might suggest folding, cutting, ripping, twisting, or scrunching. Remind students that these are just experiments, and we don't have to turn these into anything just yet!

3. REFLECT AND DISCUSS

Create an anchor chart using student strategies for changing the paper. As you build on the chart, ask students:

- *What was your favorite part about playing with paper?*
- *What was the hardest part?*
- *Why would a designer play with a material before building something new?*

SCAFFOLDING

- **Gradual Release:** You may want to spend the entire work time together as a group instead of asking students to develop many strategies over a longer period of time.
- **Scissors:** Cutting is not necessary if that is not a skill students have practiced yet. Ripping can provide a fun alternative.

EXTENSIONS

- Build in a variety of paper types, including tissue paper and cardboard. What is different about playing with these materials?
- Collect students experiments and use them again for something else. These paper experiments lend themselves especially well to a playground design, with lots of loops and folds and textures.

LEARNING STANDARDS

Common Core Math

- Kindergarten: CCSS.MATH.CONTENT.K.G.B.5; K.G.B.6 — model and compose shapes while building a prototype
- Grade 1: CCSS.MATH.CONTENT.1.G.A.2 — compose two-dimensional or three-dimensional shapes to create a new object

ELA (CCSS)

- Kindergarten–Grade 5: CCSS.ELA-LITERACY.SL.K.4; SL.1.4; SL.2.4; SL.3.4; SL.4.4; SL.5.4 — describe a prototype, design choice, material choice, or challenge clearly
- Kindergarten–Grade 5: CCSS.ELA-LITERACY.SL.K.5; SL.1.5; SL.2.5; SL.3.5; SL.4.5; SL.5.5 — use drawings, models, or visual displays to support ideas
- Kindergarten–Grade 2: CCSS.ELA-LITERACY.W.K.8; W.1.8; W.2.8 — recall information from experience to answer reflection questions about making, materials, and mistakes

Science & Engineering (NGSS)

- Grades K–2: K-2-ETS1-2 — develop a simple sketch, drawing, or physical model to show how an object's shape helps it function
- Grades 3–5: 3-5-ETS1-2 — generate and compare possible solutions based on criteria and constraints

Visual Arts (National Core Arts Standards)

- Kindergarten: VA:Cr2.1.K.a; VA:Cr2.2.K.a — experiment with materials and use tools safely while making
- Grade 1: VA:Cr2.1.1.a; VA:Cr2.2.1.a — explore materials/tools and use them safely to create a design
- Grade 2: VA:Cr2.1.2.a; VA:Cr2.2.2.a — experiment with materials/tools and follow safe studio procedures
- Grade 3: VA:Cr2.1.3.a; VA:Cr2.2.3.a — create with a variety of materials and use tools safely/proficiently
- Grade 4: VA:Cr2.1.4.a; VA:Cr2.2.4.a — invent techniques and care for materials, tools, and workspace
- Grade 5: VA:Cr2.1.5.a; VA:Cr2.2.5.a — develop skills through practice and use materials/tools with care and purpose