

STEM

starts now

Humpty Dumpty Safety

Recommended Age: 53–60 Months

STEM concepts: Science (physical science), Technology (simple tools), Engineering (Engineering), Math (patterns and classification, shapes and spatial identification)

Materials: real or plastic eggs (if you use real eggs – prepare for mess), aluminum foil, wax paper, string, cotton balls, glue, scissors, different types of tape, and recycled materials you may have lying around the house. The book – *After the Fall* by Dan Santat

What to do: This activity is designed to introduce the engineering design process to your child. Talk about the problem – Humpty Dumpty cracks when he falls off the wall and he needs a way to be safe. Talk about some solutions to the problem. See if your child can draw or verbalize different solutions before the designing begins. This is the brainstorming process and it is important to successfully solve a problem. Once they have some ideas allow them to begin to build a suit or device to help Humpty Dumpty from breaking after his fall. Place the egg in the suit or device if it was not designed on or around it. Test their solution and troubleshoot their failures and successes. What did they think worked and what didn't work.

Language and Communication: Encourage conversation about the different materials. What do they feel like? What do they look like? What can they be used for? How can you attach the materials together? Exploring the types of materials and their properties allow students to store these things in their heads to solve future problems. Discuss how many types of materials they used or needed.

Expand the Activity: Add literacy and meaning to this activity by reading *After the Fall* by Dan Santat with your child! This activity was inspired by this book. If you choose to read the book first it will provide a challenge for your child. Can they design a suit to keep a real egg from cracking? How can Humpty sit using this suit or device?