

ATLANTA
SCIENCE
FESTIVAL

Lesson Title	Humpty Dumpty
Grade Band	Kindergarten
Submitted by	Debi Goodman-Cobb County Schools
Georgia Performance Standards:	
<p>SKCS5. Students will communicate scientific ideas and activities clearly.</p> <p>a. Describe and compare things in terms of number, shape, texture, size, weight, color, and motion. b. Begin to draw pictures that portray features of the thing being described.</p> <p>SKP1. Students will describe objects in terms of the materials they are made of and their physical properties.</p> <p>a. Compare and sort materials of different composition (common materials include clay, cloth, paper, plastic, etc.). b. Use senses to classify common materials, such as buttons or swatches of cloth, according to their physical attributes (color, size, shape, weight, texture, buoyancy,</p> <p>SKP3. Students will observe and communicate effects of gravity on objects.</p> <p>a. Recognize that some things, such as airplanes and birds, are in the sky, but return to earth. c. Explain why a book does not fall down if it is placed on a table, but will fall down if it is dropped.</p>	
Safety Considerations:	
<p>Scissor safety rules reviewed</p> <p>Fan—adult supervision at all times</p>	
Materials & Time Required:	
<p>Materials: Can be teacher discretion, but suggested materials are listed below:</p> <p>popsicle sticks, scissors, clay, Play-Doh, glue, tape, cardboard, watering can, fan, a wall to put Humpty on (30 DUPLO blocks), construction paper, foil, egg carton, yarn, plastic egg, straws, pipe cleaners, paper clips, water table with sand or plastic shoe box with sand to test in</p> <p><u>Humpty Dumpty</u> by Daniel Kirk</p> <p><u>I Fall Down</u> by Vicki Cobb (optional)</p> <p>Follow an engineering design process such as (see additional PowerPoint):</p>	

This material is created and submitted by individual authors as recommended lesson plans to incorporate engineering design challenges and to review key science concepts. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Atlanta Science Festival. For more info about the Atlanta Science Festival, visit <http://AtlantaScienceFestival.org>

Day 1 Design

Day 2 Create/Test

Day 3 Test/Evaluate

Day 4 Improve

Lesson Logistics (for teacher):

- Design challenge and criteria
- Background knowledge of the Nursery Rhyme
- Gather materials
- Set up water table and a parent volunteer to operate fan
- Discuss different types of seats in different places-chairs, car seats, high chairs, airplanes, school bus (let students brainstorm list) what do they have in common? What safety features do any of them have?

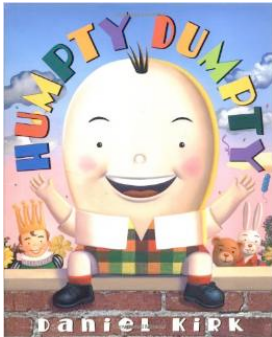
Oh no!! Humpty Dumpty keeps falling off of his wall on rainy or windy days. He needs your help to construct a safe seat for him to stay on his wall even in the wind or rain. You will need to come up with a design that uses at least 4 different materials. Remember to keep Humpty from falling!

Your design must:

- Be created with at least 4 or more different types of material
- Include your own Humpty Dumpty made from a plastic egg
- Be able to keep Humpty from falling in rain and windy weather

Our wall will be 30 blocks—layers of 10 like 3 tens frames on top of each other

View from top



Read the original Humpty Dumpty poem

Read the story Humpty Dumpty and compare/contrast

Read the challenge and the criteria-discuss

<p>Work Session: EXPLORE/EXPLAIN</p>	<p>Give students a chance to explore and discuss with team the materials suggested in water and wind</p> <ul style="list-style-type: none"> -use water table for water and have students use fan on low setting (teacher or adult will man this station) -groups can begin to plan and sketch their seat design -design being careful to use at least 4 different materials -test as you design with water/wind and wall
<p>Closing: EXTEND/EVALUATE</p>	<ul style="list-style-type: none"> -test in class 10 seconds of wind(fan) and 1 cup of water in small sprinkle watering can -after presentations-groups may have time to improve design and then retest
<p>Documentation of Resources:</p>	
<p><u>Humpty Dumpty</u> by Daniel Kirk</p>	

Include Handouts & Supporting Documents: (See attached Power Point)