ENGINEERING & DESIGN
Scale & Structure

Houses
- "Mama Built a Little Nest"
- "Three Little Pigs"
- *Tell me about your home.*
- "Dreaming Up"
- *What do you know about building a house?*
- *How will you know if your house is strong?*
- *How do you know where to put the ___?*

Materials
- Recycled Materials
- Popsicle Sticks
- Playdoh
- Scraps of fabric
- Pipe Cleaners
- Cardboard Boxes
- Rocks
- Blocks

Chairs
- "Goldilocks and the Three Bears"
- "Peter's Chair"
- *How does a chair work?*
- *How can we build a chair?*
- *How do you know what size to make the chair?*

Beds
- "The Napping House"
- "The Princess and the Pea"
- "Llama Llama Red Pajama"
- *What is a bed?*
- *How can you fit more people in the bed?*
- *What can you do to keep people from rolling off?*

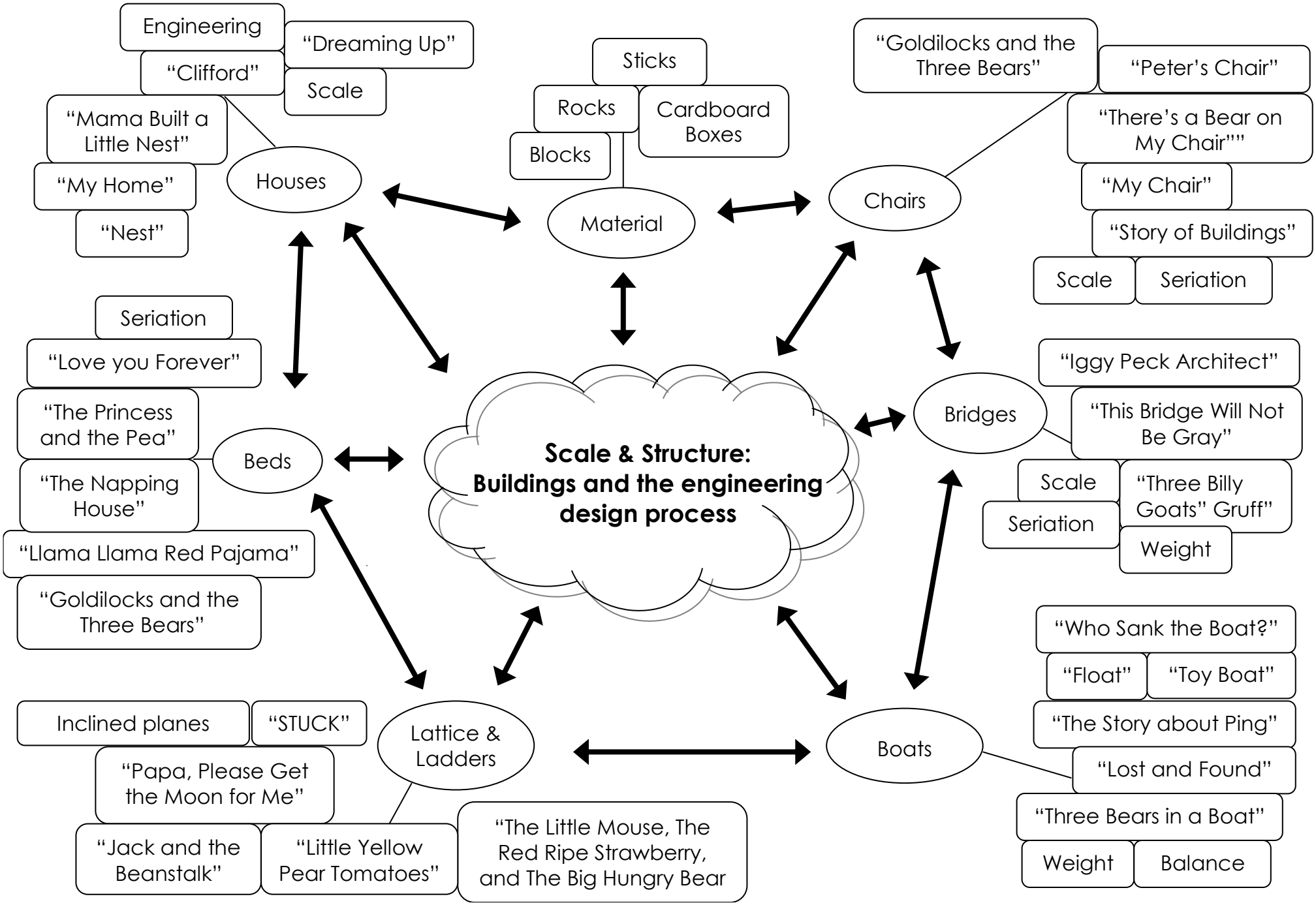
Bridges
- "Iggy Peck Architect"
- *How can you make the bridge reach the other side?*
- *How can you use this material to make a*
- *How can you tell how much your bridge hold?*

Concepts
- Design & Draw plans
- Real vs Pretend
- Spatial sense
- Weight / Load
- Measurement
- Sink & float
- Balance (leveler)
- Simple Machines (incline plane)
- Seriation (in order by size or position)
- Scale (size / dimensions)

Ladders
- "The Little Mouse, the Red Ripe Strawberry, and the Big Hungry Bear"
- "Jack and the Beanstalk"
- "STUCK"
- *What part of the story is real/pretend?*
- *How did the mouse/Jack get up there?*
- *What would happen if the ladder broke?*
- *Which rung/step is 1st, 2nd, 3rd? (DRDP)*
- *How many rungs are on the ladder? (DRDP)*

Boats
- "Three Bears in a Boat"
- "Who Sank the Boat?"
- "Float"
- *What makes something sink/float?*
- *Why do you think the boat sank?*
- *How can you help objects float?*

Family
- **Family**: Supplies from home
- **Family**: Photos or map of home
- **Family**: Count bridges & overpasses


Scale & Structure: Buildings and the engineering design process
Houses
Engineering
"Dreaming Up"
"Clifford"
Scale
"Mama Built a Little Nest"
"My Home"
"Nest"
Material
Sticks
Rocks
Cardboard Boxes
Blocks
Chairs
"Goldilocks and the Three Bears"
"Peter's Chair"
"There's a Bear on My Chair""
"My Chair"
"Story of Buildings"
Scale
Seriation
Bridges
"Iggy Peck Architect"
"This Bridge Will Not Be Gray"
Scale
Seriation
"Three Billy Goats" Gruff"
Weight
Boats
"Who Sank the Boat?"
"Float"
"Toy Boat"
"The Story about Ping"
"Lost and Found"
"Three Bears in a Boat"
Weight
Balance
Lattice & Ladders
Inclined planes
"STUCK"
"Papa, Please Get the Moon for Me"
"Jack and the Beanstalk"
"Little Yellow Pear Tomatoes"
"The Little Mouse, The Red Ripe Strawberry, and The Big Hungry Bear
Beds
Seriation
"Love you Forever"
"The Princess and the Pea"
"The Napping House"
"Llama Llama Red Pajama"
"Goldilocks and the Three Bears"