Family Math & Science Night
List of Themes and Activities

"Build it! Engineering Design Challenge" (grades 4-6)

Opening Activity
Battle of the skyscrapers: attribute blocks game
Build a bridge out of paper
Building a structure from plans
Catapult Launch
Face-off: Square vs. Triangle Gumdrop structures
How long is the Statue of Liberty’s nose?
Levers #1 Lever Models
Levers #2 Can you lift your parent?
Tug Push Twist O War – Tension, Compression, Torsion

Extended Activity: Build it and Test it! Tower Challenge Activity
part 1: Build it Strong!
part 2: Build it Tall!

"Let’s Investigate! Backyard Creatures (grades K-3)

Opening Activity
Create your own insect and add it to our environment
How do insects grow? - Stages of metamorphosis
The Dirt on Worms – Living things
Insects and Flowers
Bug Behaviors, How do insects see?
Some bugs walk on water
Grasshopper Long Jump: Can you jump as far as a grasshopper?

Extended Inquiry: Become a Biologist
Ladybird Beetles Investigation

"Let's Investigate All About Birds" (grades K-2 or 3-5)

Opening Activity
Feathers - Feather adaptations
Feeding Frenzy – Bird beak adaptations
Flight Engineering
How fast can you flap?
What is your wingspan?

Extended Inquiry: Become a Biologist
Owl Pellet Dissection
Bird of Prey & Food webs
Junior Detective - Kitchen Chemistry" (grades K-3)

Opening Activity - Detective Training, Framework
Finding Patterns in Liquids
Candy Chromatography
Fingerprinting
Secret Messages – acids and bases
Roll that Dice: a probability game

Extended Inquiry: Put it all together
Solve the Mystery of the Missing Coffee Mug