**If They Build It, They Will Learn**

Sponsored by the Pre-High School Committee, AAPT

# The following Make-n-Takes were provided by Bill Reitz [wreitz@neo.rr.com](mailto:wreitz@neo.rr.com)

# 1. Straw propellers

# Literature: Isabella *Propeller and the Magic Beanie/*

# Karlson On the Roof/ The Glorious Flight

**Materials**

|  |  |
| --- | --- |
| * 2 plastic drinking straws,   One straw must be larger in diameter than the other. The larger one should also be larger than the hole made by a standard paper punch | * Standard paper punch * Cellophane tape * Scissors * Nail or Drill and small bit |

**2. Electric spiders/octopus**

**Literature:** *Boris the Spider* (D. Harvey & D Postgate)

*Diary of a Spider Anansi the Spider*

**Materials**

|  |  |  |
| --- | --- | --- |
| * Thread | * Hot glue gun | * Glue sticks for gun |
| * Nail or drill with small bit | * Foam cup | * Wax paper |
| * Drink bottle cap or * Film can lid or * Plastic poker chip | * Mylar plastic film or * Mylar plastic candy wrapper or * Aluminum foil | * Scissors |

**3. Film can (pill bottle) Leyden Jar**

**Literature:** *Who Really Discovered Electricity?* (Amy Jane Leavitt)  **Materials**

+Pill Bottle +Paper Clip +Glue Stick

+Aluminum Foil cut to height of bottle & slightly longer than its circumference

+Cup of Water +Charging Device such as Fun Fly Stick or a PVC rod & fur

**4. Bristle Doll Dancers**

**Literature:** *White Snake: A Tale from the Chinese Opera*

**Materials**

|  |  |
| --- | --- |
| * Plastic water bottle | * Scissors cellophane tape |
| * Template for cutting the “bristles” | * Metal pie plate or cookie sheet |
| * Large screw driver, table knife or wooden spoon as a “tapper” | |
| * Bristle Doll Patterns | |

**5. Pill Bottle Submarine**

**Literature:** *Papa’s Mechanical Fish*

**Materials**

|  |  |  |
| --- | --- | --- |
| * **Pill Bottle with hole in lid** * **Graduated cylinder** * **Pennies or washers** * **Alka-Seltzer tablets** | **or items to right as substitute for Alka-Seltzer** | * **Baking powder (approximately 10 mL)** * **Baking soda (approximately 10 mL)** * **Citric acid (approximately 10 mL)** |

**6. Mini stomp rockets**

**Literature:** *The Rocket Book* (Peter Newell) *Sheep Blast Off*

**Materials**

+Plastic Pipette or dropper +“Bendy” straw

+Straw that fits over “bendy” straw +clay

**7. Straw divers**

**Literature:** *Monsters Don’t Scuba Dive*

**Materials:**

Straws (clear preferable) clay plastic drink bottle w/lid

**PLEASE CONTACT ME FOR SPECIFIC DIRECTIONS FOR ANY OR ALL OF THE MAKE-N-TAKES ABOVE**

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