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Wildwood After-School: Workshop Lesson Plans

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Wildwood After-School: Workshop Lesson Plans

Created by Maya Hareli, assistance from Sharon Edwards

Lesson 1:

- Read *Flotsam* by David Weisner
- Activity: "What Floats"
 - Wrote in our "I Wonder" journals our predictions of how many coins we thought the paper boats could hold
 - Created paper boats, tested their buoyancy in water by adding coins into boats
 - Wrote in our journals our predictions of how many coins we thought tin foil boats could hold
 - Created tin foil boats, tested their buoyancy in a tub of water by adding coins into boats
 - Continued to make boats that students took home

Lesson 2:

- Partnered up, traced each other's full-body shadows outside
- Read *Journey* by Aaron Becker
- Activity: "Watching the world" (exploring the magic of shadows)
 - Went back outside with students to retrace our shadows to see how they move & to learn about the Earth rotating around the sun
- Wrote our observations in "I Wonder" journal

Lesson 3:

- Read *Bartholemew and the Oobleck* by Dr. Seuss
- Activity: "Solid or Liquid?"
 - Tub of water in middle of table, made predictions in our "I Wonder" journals about whether straws & paperclips would float or sink in it, then tested it out
 - We made our predictions in journals about whether straws & paperclips would float/sink in oobleck
 - Each student got a separate bucket to make their oobleck + container of cornstarch & 1 cup water
 - Played around with it, tested it's properties (solid + liquid), were all fascinated, tested out the straws & paperclips as well
 - Learned that oobleck acts like solid when lots of force is applied, but acts like liquid with less force
 - Gave kids plastic baggies of oobleck to take home

Lesson 4:

- Threw pieces of paper (2D), then paper plates (which are somewhat 2D & 3D)
- Read *The Three Pigs* by David Wiesner
- Activity: "Flying"
 - Started folding paper to create paper airplanes (showed them a couple ways of folding), tried adding paperclips to add weight to see if it made a change in how airplane flew
 - Continued testing out different folding techniques and adding paperclips and straws to see how they influenced flight
 - Wrote reflections in "I Wonder" journals

Lesson 5:

- Read *What Do You Do with an Idea?* by Kobi Yamada

- Activity: “Candy Structures”
 - Showed students the marshmallows & gumdrops, and toothpicks & cut-up straws. They drew in their “I Wonder” journals the design they planned to make, and what they thought would be strongest
 - Used different materials for comparisons, learned that toothpicks worked well with marshmallows & gumdrops, but straws didn’t work well with marshmallows but well with gumdrops (although harder to stick in)
 - Students placed stack of paper journals on top of their structures to test out how much weight it could hold →they then modified their structures + tested it out again
 - Kids tested out different shapes of structures with some encouragement
 - Drew in their journals the design(s) they made in the end
 - Took home structures & candy

Lesson 6:

- Outdoor activity
- Read *Chalk* by Bill Thomson
- Started drawing with chalk, drew pictures from the book and created our own storylines
- Drew our pictures in our “I Wonder” journals

Lesson 7:

- Read *The Red String* by Margot Blair & Greg Colson
- Activity: “Zip Lining”
 - Decorated cardboard cut-outs with markers & construction paper
 - Hole-punched cardboard, put paperclip through it, put string through paperclip and zip lined it down
 - Varied: weight (paper clipped on some quarters), height (changed the height of the release point from the wall), string (fishing line vs. twine)

Lesson 8:

- Read *The Three Ninja Pigs* by Corey Rosen Schwartz
- Activity: “Constructing”
 - Posed question: “Can we build as nature build without connectors?” (Can we build things like animals do in nature without having to rely on glue or tape? Think of beavers building dams, birds building nests, etc.)
 - Drew in journals what we thought would be a strong structure that would resist blowing down, without using tape/glue
 - Kids started stacking cardboard boxes + tubes on top of one another, then blowing them down, and restructuring their towers each time
 - One student had idea of putting markers in boxes to make them heavier and more resistant to wind →she was creating something on her own and figuring out a solution
 - Drew in journals the towers we had created + wrote down why they worked to resist wind

Lesson 9:

- Read *Deep in the Forest* by Brinton Turkle
- Created truss bridges from popsicle sticks and hot glue