FAMILY ACTIVITY: LET’S GO FLY A KITE

Using simple materials you can gather at home - create a kite and fly it! Through this activity, youth will explore basic concepts of aerodynamics and wind power.

MATERIALS AND INSTRUCTIONS

Materials
- 2 sticks
- A plastic garbage bag
- String and/or tape
- Ribbon or washer

Instructions
1. Take two sticks or wooden rods and place them on a flat surface perpendicular to each other (placed like a lowercase t).
2. Tie the two sticks together where they cross, making sure it’s tight enough. You can use tape if you cannot get the string tight enough.
3. Lay the garbage bag over the two sticks. Cut the garbage bag in a kite shape just slightly larger than the kite frame.
4. Tie the ends of the kite sail to the frame, using tape or glue if you cannot tie the string tight enough.
5. Flip the kite over so the back frame is facing you. Tie a new length of string from one side of the short crossing stick to the other, leaving slack to form a triangle when pulled.
6. Next, tie the end of a big ball of string to the bottom portion of the main stick, looping under the slack cross string and tie a simple knot at the intersection of the two strings (so it forms a triangular pyramid shape).
7. Measure a wingspan of ribbon, fold in half and tie to the bottom wood point of your kite. This helps the kite maintain its balance when flown. You can attach a small weight like a washer if ribbons don’t seem heavy enough to balance your kite.
8. Find some wind and let it fly!

QUESTIONS TO EXPLORE

1. What went well with your kite building? What didn’t? How could you have changed the outcome (flew, didn’t fly, somewhere in between) or the design?
2. How does wind impact our lives beyond flying kites? What do you know about wind energy?
3. What other things fly and how do their shapes/composition affect how they fly?

IDEAS TO INCLUDE YOUNGER SIBLINGS! (ADAPTATIONS FOR 0-5 YEAR OLDS)

- Once you are outside with the kite, talk with little ones about what they expect to see happen. Ask them to make a prediction. Have they ever seen a kite before? What makes it fly?
- Once your kite is in the air describe how it moves. Does it move quickly? Slowly? Does it cast a shadow on the floor ground? Shared attention and bringing language to what you observe builds important vocabulary and experiences that children draw from once they start reading and writing.
- Bring simple bubble soap (a 6:1 ratio of water to liquid soap will do – combine gently so the soap does not get foamy as you mix it. If you have glycerin or corn syrup add a spoonful as well).
Preschoolers will know to “blow” if you use a straw with your bubble soap. Smaller children won’t – and if they ingest the soap it could give them diarrhea. Try poking a hole in the bottom of a plastic cup. Dip the bottom of the cup into your bubble solution and try that as something they can blow into. Children who are walking will delight in chasing them around and popping them while your older ones fly their kite.

REFERENCES, MODIFICATIONS, & EXTENSIONS

References

- Activity adapted from Instructables.