

# **Shelter in a Storm**

Ready for a little Tech Challenge fun? Let's build a home for a bird!

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How do birds stay safe in a storm? Design and build a bird home that is strong and sturdy, even when it's windy!

#### You will need some building materials, materials to protect your bird and connectors.

Use what you have and be creative!



Building materials	Materials to protect your bird	Connectors	Something bird-sized
Paper and cardboard	Cotton balls  False:	Rubber bands     Remain alima	• Ball
<ul><li>Foil</li><li>Toilet paper rolls</li></ul>	<ul><li>Fabric</li><li>Foam</li></ul>	<ul><li>Paper clips</li><li>Binder clips</li></ul>	<ul><li>Stuffed toy</li><li>Small water bottle</li></ul>
Paper plates	Leaves	Twist ties	- Official water bottle
• Sticks		String	



**No tape or glue!** Why? Because building without tape or glue lets you change your designs faster and makes it easier to reuse materials.

### Ready, set, build!

- What do you think a bird needs in a home? Design and build a home that will protect a bird on a windy day.
- 2. Time to test!
  - Put your small item in your bird home.
  - Hold your bird home up high and shake it like a tree in the wind.
  - Did the home keep your bird safe? Did the bird stay inside?
     Did your home stay together?
     What can you change to make your bird home better?
- 3. Keep building and testing until you've met the challenge!



#### **Bonus challenges**

- Can your home stay safe during even stronger wind? Shake it harder to find out.
- Oh no! It's raining.
   Does your home keep the bird dry?
- Change your design to hold more birds. Test and rebuild to see how many you can fit!

## Questions to ask yourself:

- Why did you choose the materials you used?
- If you could use any material, what would you choose? Why?