 Activity 15: Propellers in Action

**Question**

What makes a good propeller?

**Resources**

 *Propeller Design Worksheet*

 paper

 cardstock or cardboard

 scissors

 *Propeller Design Template*

 straws

 tape

 eye protection

 stop watch or timer

**Hypothesis**

Which propeller do you think will stay in the air longer - the paper propeller or the cardstock propeller? Explain why.

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**Instructions**

**1.** Use and print the **Propeller Design Template** at the end of the document to trace and cut out a propeller from paper.

**2.** Tape a straw carefully to the bottom of your propeller.

**3.** Construct another propeller the same way, but use heavier weight cardstock or cardboard to make the propeller.

**4.** Put on your protective eyewear before you test your propellers. Be sure you are in a clear open space with no one around you.

**5.** Spin each propeller between your hands and record how long they fly before hitting the ground.

**6.** Test each propeller three times.

**Observations**

**Propeller Time in the Air (s)**

**Test 1 Test 2 Test 3**

**Paper Propeller**

**Cardstock Propeller**

**Conclusion**

Which propeller worked best for you? Why do you think that was?

**Need a Hint?**

How does the propeller overcome gravity?

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Propeller Design Template

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