



Activity 15: Propellers in Action

Question

What makes a good propeller?

Resources

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|-------------------------------------|-----------------------|
| • <i>Propeller Design Worksheet</i> | • straws |
| • paper | • tape |
| • cardstock or cardboard | • eye protection |
| • scissors | • stop watch or timer |
| • <i>Propeller Design Template</i> | |

Hypothesis

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

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?

Propeller Design Template

[illegible]