Engineering Flight: Copters

In this experiment, your child will learn how to engineer a simple flying machine: a paper copter.

First, cut out all three copter templates, or design your own.

Have your child predict which copter design will spin the most. Which one will fly the fastest? The slowest?

Once the predictions have been made, test each copter. You can drop all three copters at once, or you can use your cellphone to time the fall. Record your observations in the chart below. Have your child make a hypothesis about what make each copter fast, slow, or the best at spinning. Based on your child's hypothesis, make modifications to each copter design to improve its flight and record your new observations.

Word Bank: Fast Slow Spins Falls Time

	Prediction	**Initial Observations**	**Modified Observations**
Rectangle Shape 			
Hourglass Shape 			
Triangle Shape 			
Create your own Shape			
Create your own Shape			