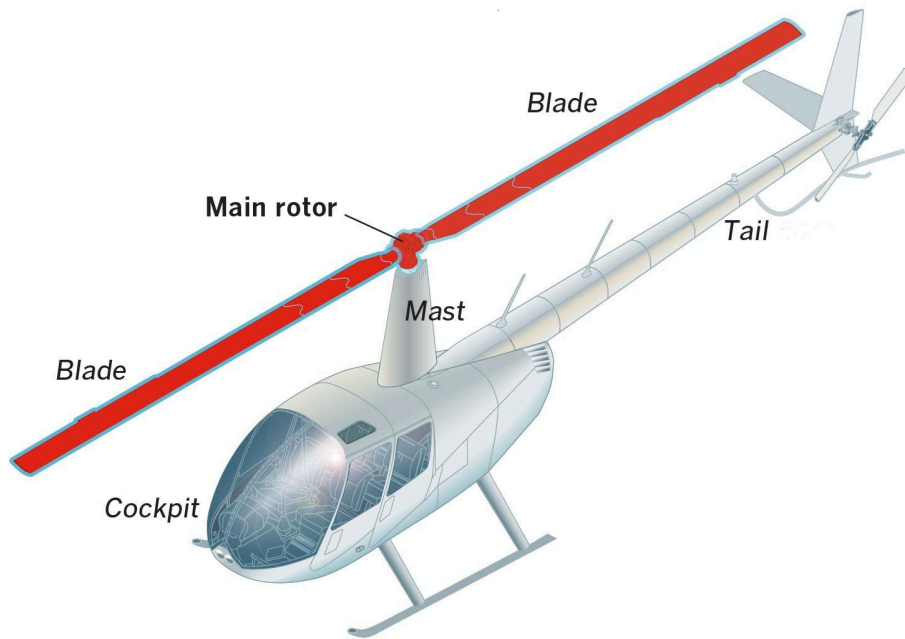


First Name: \_\_\_\_\_

Grade: \_\_\_\_\_

Your Teachers: Mr. Corr, Mr. Koch, Mr. LeClair, Mr. Vaughn



Danger spins from the sky: The Robinson R44, the world's best-selling civilian helicopter, has a long history of deadly crashes. (n.d.). Retrieved September 30, 2020, from <https://www.latimes.com/projects/la-me-robinson-helicopters/>

## Instructions

1. Cut along the dotted lines
2. Fold along the solid line of X and Y
3. Fold along the solid line of Z
4. Fold along the solid line of A and B in opposite directions
5. Drop it, and watch it spin

## Plain white paper

How many times does the white paper rotate? \_\_\_\_\_

How long does it take to fall to the ground (count in mississippi's) \_\_\_\_\_

Compare the time the helicopter takes to fall with a plain sheet of paper, which is faster?

\_\_\_\_\_

## Colored paper

How many times does the colored paper rotate? \_\_\_\_\_

How long does it take to fall to the ground (count in mississippi's) \_\_\_\_\_

Compare the time the helicopter takes to fall with a plain sheet of paper, which is faster?

\_\_\_\_\_

Do the two helicopters fall at the same speed? \_\_\_\_\_

Do the helicopters spin different amounts, if so, which spins more? \_\_\_\_\_

	Trial 1	Trial 2	Trial 3	Average
Flat Paper	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$
White Paper Helicopter	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$
Colored Paper Helicopter	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$
Custom Helicopter	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$	$\frac{\text{ \_\_\_\_\_\_ }}{\text{# of Rotations}} / \frac{\text{ \_\_\_\_\_\_ }}{\text{Time}}$

Feet per second to miles per hour conversion:

3600 sec = 1 Hour, 5280 ft = 1 mile

X = your numbers

Convert feet to miles:  $\frac{X}{5280}$

Convert seconds to hours:  $\frac{X}{3600}$

Divide miles by hours

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