Year 5 Science Investigation
Forces

Helicopter Spinner

STEM
GENERATION CHARITY

Helicopter Spinner

To find out what happens when you change the size or shape of the rotor blades or the weight of a paper helicopter.

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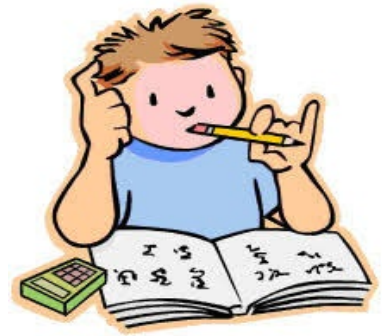
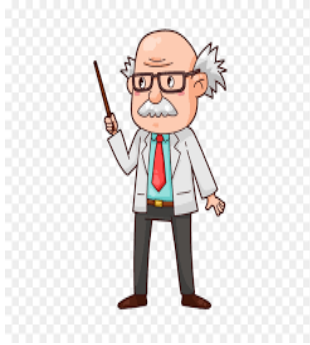
Gravity pulls the helicopter down, but air resistance pushes up on The rotor causing the helicopter to spin to the ground. We want to find out what will affect the way it spins.



Try to think how we can find out.
Talk with your friends and see if you can come up with an idea.

Your ideas.

Tell the rest of the class your idea for your investigation and decide who in the class has the best idea.



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Make a prediction

I think that the thing that will make the most change to the way the helicopter spins to the ground will be -

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DOING THE EXPERIMENT

- Use the template to make a helicopter and watch it spin as it drops.
- Time how long it takes for the helicopter to drop and count the number of spins.
- Change one factor at a time, such as length of wing, type of card, weight etc.
- Time the drop and number of spins with each change.
- Try to identify any relationships between design and speed.

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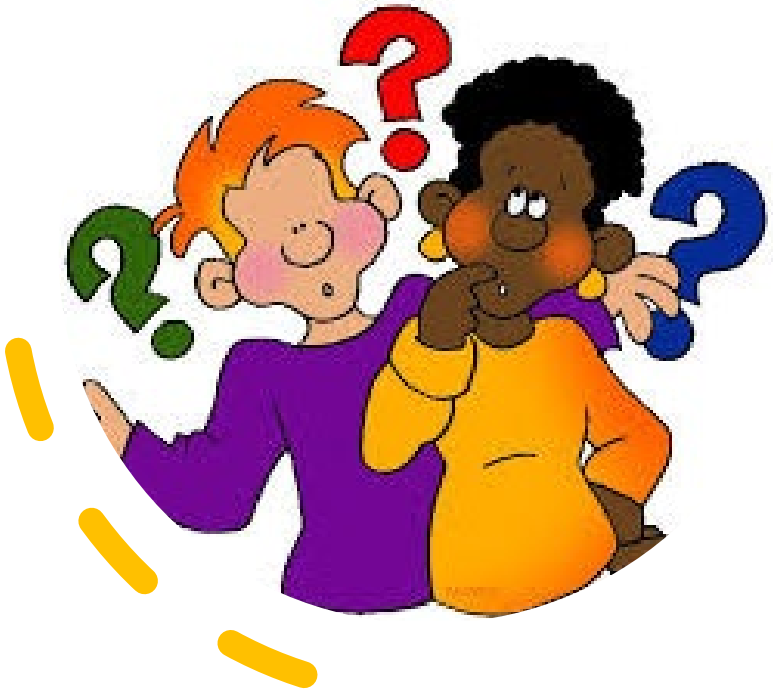

Do we need to release the helicopter from the same height each time?

How many times should we repeat the experiment for the results to be reliable?

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WHAT NOW?

Try different sizes of helicopter to see if it makes a difference.