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Whirly Birds 9/21/11

Mr. Heerschap

**Whirly Birds**

**Purpose:** To measure velocity (Fall Rate) of two unique whirly birds.

**Materials:** Small paper clip, Paper for a copy of Figure 1, Scissors, Timer (Stopwatch), Tape Measure

**Procedures:** draw one whirly bird outline out of the physics manual. Next, cut out the design and fold on the dotted lines. Now, put one paperclip on the bottom of the whirly bird. Drop whirly bird from the top of the classroom. But at the same time start the stop watch. Next, as soon as the bird hits the ground stop the watch. Finally, record the data.

Data and results:

|  |  |
| --- | --- |
| 1 Paper Clip on Whirly Bird | 2 Paper Clip |
| 1.57s | 1.17 |
| 1.48s | 1.17 |
| 1.65s | 1.20 |

1. Our wirly bird spun clockwise. Yes our bird was consistent in its spinning direction.
2. I believe that you would flip the sides the wings are on.
3. We got a velocity of 152.50cm/s for 1 paperclip. Then we got 206.77cm/s for two paperclips on the bird.
4. We increased the speed by putting two paperclips on the bird. And decreased by doing the opposite.
5. We changed the directional speed by flopping the wings.
6. One man made application would be would be the weight that you put on the bird. And natural would be the way that you cut the bird, maybe if it had a dent or something