

ENGINEERING 2 DESIGN & INQUIRY

Science 8 January 2018
Mrs. Plyter plyter.com/science

Name _____

Period _____

Points

Genetics:

Engineering:

Watch:

Try It:

Google Classroom
Your O-Wing

Vocabulary On Back:

Quizzes:

Initial in COLOR
10 points _____

Tue _____

Wed _____

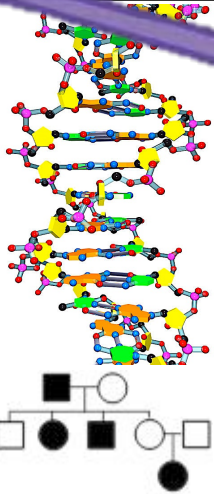
Thu _____

Fri _____

TOTAL _____

Tue

16



Genetics Leftovers

Sex-Linked Trait
In Class Punnett Squares

Genetics Timeline
Google Classroom
Move objects in order.

PROBLEM:

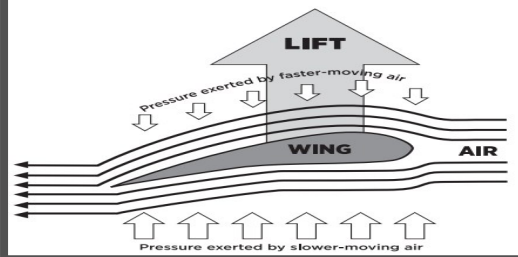
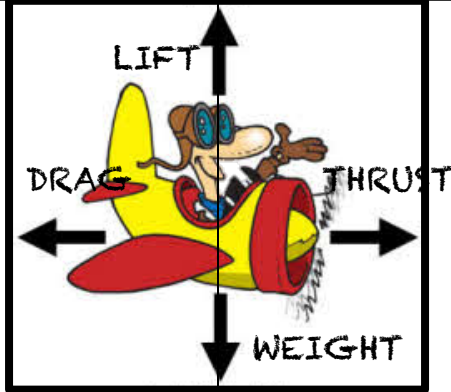
PRODUCE A LONG DISTANCE ATTRACTIVE O-WING HOOP GLIDER. TO TRANSPORT 1-2 PENNIES

RESTRICT MATERIALS TO:

- 1) CARD STOCK PAPER
- 2) DRINKING STRAW
- 3) CLEAR TAPE
- 4) 2 PENNIES

RESTRICT TRIALS TO:

DESIGNATED AREAS AND HALLWAYS.



LIFT:

LIFT is when less pressure above the glider & more pressure below the glider causes the glider or wing to rise, or LIFT.

Bernoulli's Principle:

As the speed of a moving fluid (liquid or gas) increases, the pressure within the fluid decreases. (It gets out of the way... and allows LIFT.)

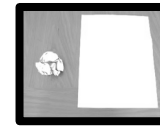
Demonstrate Bernoulli's Principle where it says

"Try it:" →

Fri
19

Try it:

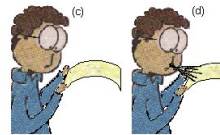
2 Sheets of Paper.
Drop Them.
Same height.
Same time.



?

Try it:

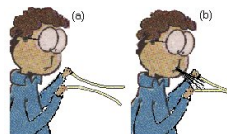
1 sheet of Paper



?

Try it:

2 sheets of paper



?



Central Science:

www.plyter.com/science

Google Classroom
Class Code = be5upi
O-Wing Hoop Glider

Data, Evaluation, Selection and Demonstration

Inquiry & Engineering →
The Wright Way →

Watch:

- 1) The 4 forces of Flight

Watch:

- 2) Newton's Laws

Physical Science →
Forces:

Watch:

Bernoulli's Principle



Try it:

Pop cans

Vocabulary: Terms to Know: Add a memory note to 10+.

1) Bernoulli's Principle
2) center of gravity
3) constraint
4) criteria
5) Design: To create for a particular purpose or effect (v); the graphic format of a creation (n).
6) drag
7) durability
8) Engineering: The application of scientific and mathematical principles to practical (useful) ends such as the design, manufacture, and operation of efficient and economical structures, machines, processes, and systems.
9) evaluation
10) evolve
11) gravity
12) lift
13) priority
14) rationale
15) solution
16) thrust
17) trade-off
18) viable
19) weight (vs. mass)

Objective:

 <p>1) Design, evaluate, collaborate and select the best design for your assigned variable of (circle yours):</p> <ul style="list-style-type: none"> a) O-loop width, b) O-loop length, c) fuselage length, d) cargo placement
<p>2) Redesign using the class determined variables, evaluate, select and demonstrate.</p>
 <p>To fly a Hoop Glider: Hold the straw in the middle with the hoops on top and throw it in the air similar to how you might throw a dart, angled slightly up.</p>
<p>If Time:</p>
<p>3) Design, evaluate and demonstrate a Weird and Wonderful "Concept Multi-Wing O-Wing"</p>

