



WALDEN family PLAYHOUSE

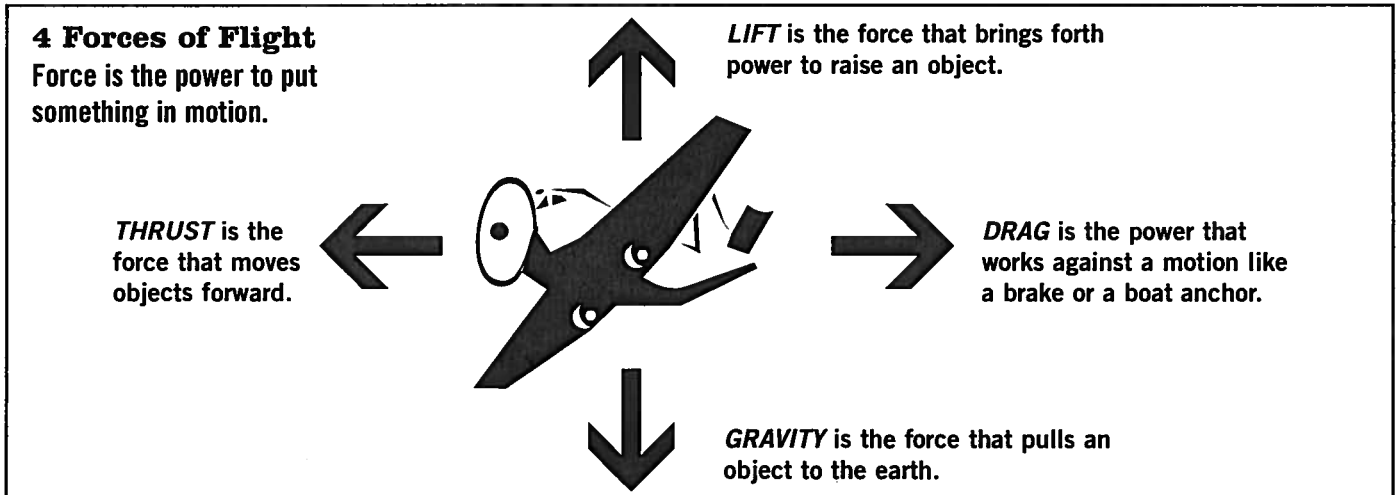
STUDENT WORKSHEET

Four Forces of Flight

NAME _____ DATE _____

DIRECTIONS:

Study the diagram below. Then answer the questions following.



1. What two forces are needed to work against gravity and drag in order for a plane to fly? _____

2. In order for a plane to fly what force needs to be greater than the force of gravity? _____

3. Give an example of how drag can be reduced. _____

4. For a plane to fly from one location to another the force of thrust must be greater than or less than the force of drag? _____

Your Own Flying Machine

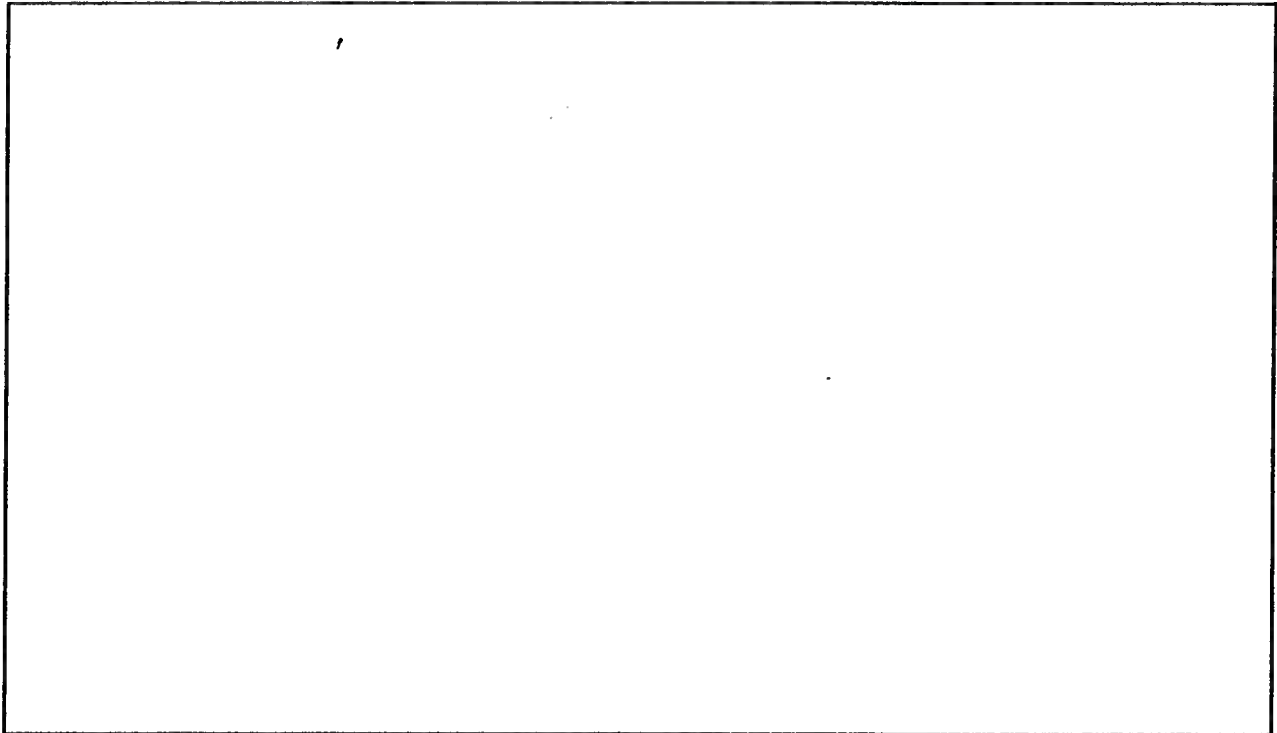
On a separate piece of paper design your own "flying machine." Keep in mind the four forces of flight: gravity, lift, thrust, and drag. Use your imagination. Underneath your drawing, write one paragraph explaining the parts of your design that will help create lift, thrust, and minimize drag and the effects of gravity.

Date: _____ Name: _____

Forces in Flight *-Flying Machine*

Draw a labelled diagram of an airplane showing these forces that act upon it in flight:

thrust	lift	drag	gravity
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Describe how these forces act upon *Your Flying Machine* ~~an airplane in flight~~. Be sure to use all four terms in your description. _____
