Name: $\qquad$

## How Does a Kite Work? <br> SPH4C

When kites fly, they are changing the normal
$\qquad$ -.

They are blocking it, forcing the air to go
$\qquad$ the kite.

When a kite first meets the air, it
$\qquad$ , which
creates an upward $\qquad$ and
$\qquad$ the kite.

The air passing over the top of the kite is actually going $\qquad$ than the air going under it.

Wind pushes


This fast air is creating $\qquad$ than the air underneath the kite, which forces the kite upward again.

Kites contain $\qquad$ lines, which are attached in two places on the kite. The line the kite flier holds is the $\qquad$ and should be attached to the bridle line at the point where the kite is balanced. (Usually, this is in the $\qquad$ .)

A $\qquad$ can also create $\qquad$ , slowing down its $\qquad$ movements and showing more of the front of the kite to the wind.

More drag = More $\qquad$
Note that there are many different kinds of possible shapes you may construct.


## Kite Construction

## SPH4C

Materials: paper, popsicle sticks/straws, string/fishing line, tape/glue
Construct a kite according to one of the models shown. (You may use to start with a flat kite and construct others as time allows.)

Show your completed kite to your teacher and have your teacher initial this space:
Sketch your kite design in the space below, labelling all materials used:

Fly your kite. Does it work? $\qquad$
What improvements could you make to your design to improve its function? (Identify at least two.)
$\qquad$
$\qquad$
$\qquad$
Demonstrate your final version in flight to your teacher and have your teacher initial this space: $\qquad$
If you have a secondary design, draw it here:

Demonstrate your secondary design in flight to your teacher and have your teacher initial this space: $\qquad$

