

# Lighter Than Air

## *Aircraft Design Activity*

### Situation

A common method of classifying aircraft is in two categories: heavier than air and lighter than air. Examples of heavier than air aircraft are jetliners, gliders, and helicopters. Examples of lighter than air aircraft include dirigibles and hot air balloons.



Design and make a *controlled* lighter than air aircraft.

### Resources

Time	15-20 class periods
People	Two or three
Energy	Any for control
Information	Buoyancy, density, air pressure, atmosphere, control. dirigible, blimp, hot air balloon
Money	None
Tools	Any available in class than can be used safely with teacher approval
Materials	Any available in class or brought in from home
Space	No limitation

### Other Criteria

- The aircraft must maintain smooth controlled flight for an extended period of time.
- The aircraft must maintain elements of safety during operation.
- Attention must be paid to the aesthetic value of the aircraft.

### Required

### Documentation

*Refer to the documentation rubric for required elements of*

*documentation.*

