



Secondary level Activity Sheet : Flight

- Leonardo da Vinci observed how birds, insects and even a flying fish could take flight. Have a look at these sketches and the flying machines which his studies inspired.
- Make a sketch of one of his flying machines. How was it designed to work ? If it were to be tested, would it work?
- Do any of Leonardo's designs remind you of what they might be today?

Make a sketch and note these.

- Find, date, and sketch Leonardo's parachute. Label the materials that this parachute was designed to be made from.
- What do you think Leonardo got right with this design and what do you think would cause problems?
- How did Leonardo imagine the parachute to be used during his lifetime?
- Leonardo's parachute design was tested and with a single, structural modification made it made a successful flight. What do you think the modification might be?
- What was the working principle behind Leonardo's aerial screw and what machine would it eventually evolve to be?
- Make a sketch of the aerial screw, indicating it's key elements. Do machines used today, based on the evolution of the aerial screw, function by the same working principle? Explain.

