

Wings for Flight

Birds

King vulture

The high aspect ratio wings allow king vultures to spend hours in flight, soaring slowly without flapping their wings. They search for carcasses while riding thermals.



Albatross

Wandering albatrosses have the longest wingspan of any bird. The long, narrow, pointed wings coupled with low wing loading enable the birds to glide effortlessly on updraughts – sometimes for months at a time.



Falcon

Falcons are the fastest animals on earth (with the peregrine falcon reaching speeds of over 320 kph). They can tuck their wings in to reduce drag.



Hawk

Hawks' wings are wide and rounded at the ends. This low aspect ratio, elliptical shape with separated or slotted feathers at the end allows them precise manoeuvrability.



Hummingbird

Hummingbirds have the ability to hover in one place by rotating their wings in a figure 8.



Godwit

Migratory birds like godwits have high aspect ratio wings equipped for long ranges and endurance at a relatively fast speed.



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Planes

Spy plane

The high aspect ratio wings of a spy plane allow it to move slowly, not using much energy. This means it can stay airborne for some time while spying out the land.



Glider

A glider's long, slim wings and low wing loading maximises lift, enabling the gliding action.



Swing-wing bomber

This B-1B swing-wing bomber has adjustable wings that can be swept back for high speed. The tight angle of the wings helps to reduce drag, giving it supersonic speed capability.



Spitfire

The elliptical shape of the wings (short and rounded low aspect ratio) give the Spitfire excellent manoeuvrability. They allow the plane to turn sharply while still flying at speed.



Helicopter

The helicopter has the ability to rotate its wings, enabling it to hover in one place.



Airbus

Aeroplanes such as the Airbus or Boeing 747 with high aspect ratio wings have long ranges and endurance times at fast speeds.



Wings for Flight

Soaring	Gliding	Speed
Manoeuvring	Hovering	Endurance

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Different wing sizes and shapes allow fliers to have specific flight capabilities, such as gliding and manoeuvrability. Planes that have wings similar in shape and comparable size to wings of certain birds can achieve similar flight capabilities.

Instructions:

- 1. Find the closest match of birds and planes by comparing their wing size (compared to their body) and shape or capability.**
- 2. Place the matching bird and plane into the designated squares according to their flight pattern.**

