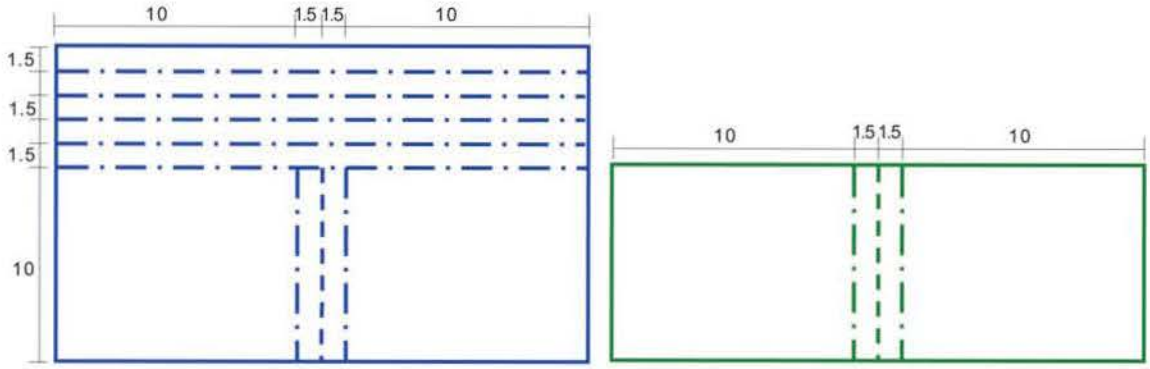
How do birds glide?

The shape of birds' wings is very special. They are curved on the upperpart and flattened at the lowerpart. When moving forward, air flow faster over the upper surface than the lower surface, thus the pressure is lower above the wing. The differences in pressure formed an uplifting force. Based on this finding, aeroplane are invented which make our lives more convenient.

21.1.1 With reference to the ratio (cm) of the illustrations, make two different paper planes step by step.

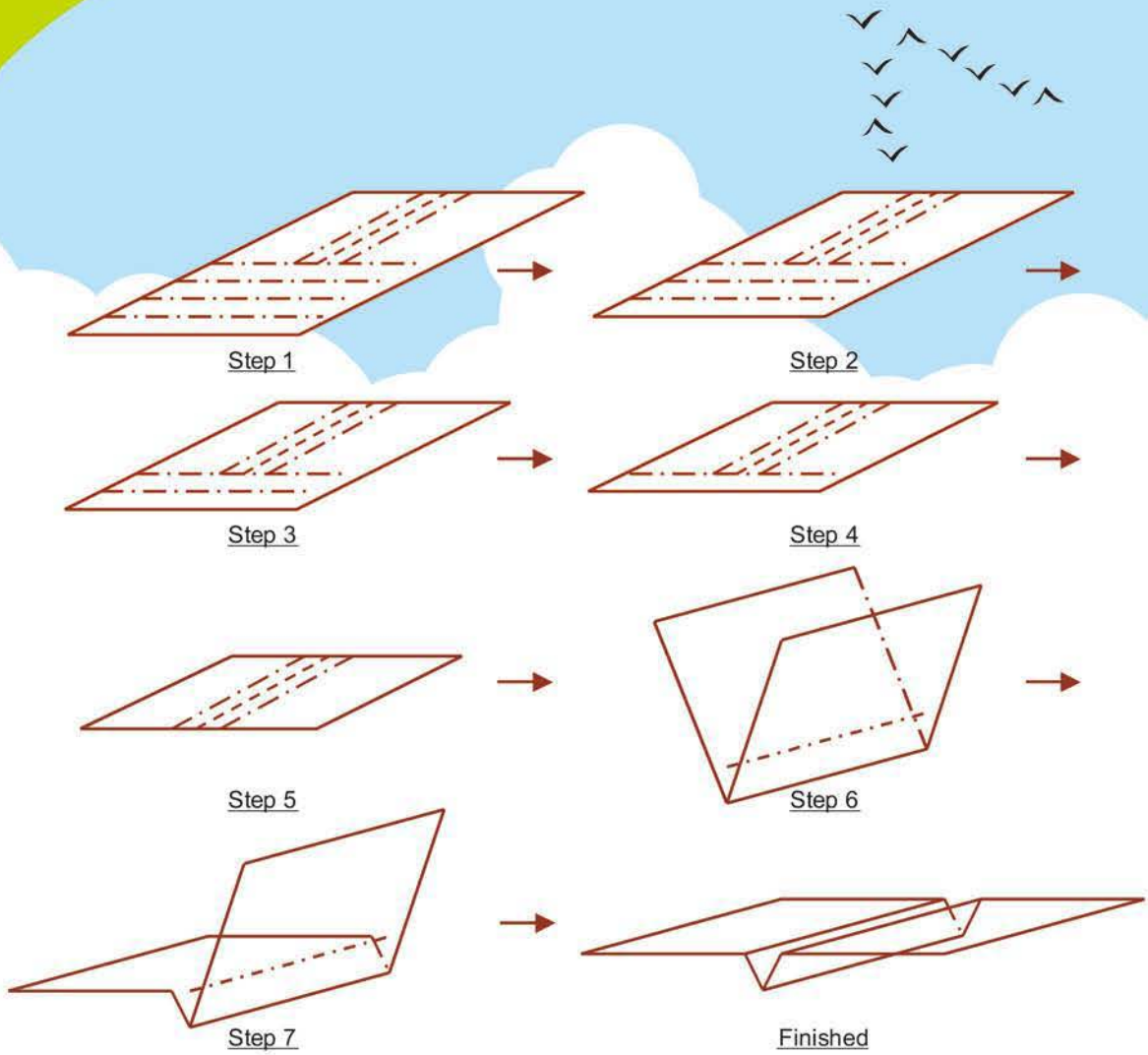
dotted line represent a valley fold.

consective dashs and dots represent a mountain fold.



Plane simulate the features of birds' wings

Plane do not simulate the features of birds' wings



21.1.2 Throw the paper planes forward in an open area for three times. Record the average distance and the duration of plane stay in air.

Plane simulate the features of birds' wings:

	1st	2nd	3rd	Total	Mean
Gliding Distant (cm)				+ + =	/ 3 =
Duration (sec)				+ + =	/ 3 =

Plane do NOT simulate the features of birds' wings:

	1st	2nd	3rd	Total	Mean
Gliding Distant (cm)				+ + =	/ 3 =
Duration (sec)				+ + =	/ 3 =

21.1.3 Delete the inappropriate wordings and make the conclusion.

The plane that simulates the features of birds' wings, stayed in air for a **(longer / shorter)** time. In brief, the curvature of birds' wings **(do / do not)** facilitate gliding.