# Draw a Black Swan: S-Curve Neck and Reflection Check

Ordinary topic reference / separately checked pixels



# Draw a Black Swan: S-Curve Neck and Reflection Check

Original worked example / unchanged complete key

Prompt: A student draws a waterline at 10 cm from the top of a 20 cm page. They sketch a body ellipse 6 cm wide and 4 cm deep, tilted so the tail is higher than the chest. The neck base is 1 cm thick and tapers to 0.5 cm at the head. The lower neck arc rises 5 cm and leans forward; the upper arc rises 4 cm and leans back. The head sits at the top of the upper arc, and the bill extends 2 cm forward. The reflection mirrors the body and neck below the waterline. Check whether the construction is consistent.

Answer: The construction is consistent. The waterline divides the page evenly. The body ellipse is tilted and reads as a deep, heavy body mass rather than a circle or thin oval. The neck tapers from 1 cm to 0.5 cm, which is a smooth reduction. The two arcs lean in opposite directions, creating an S curve. The reflection mirrors the body and neck below the waterline, so the contact points align. The only adjustment is to keep the reflection lighter than the swan so it reads as a check rather than a second bird.