skull vault versus face & jaw

Which is bigger?

• Which is bigger?

• Place a ruler from the brow ridge (over the eyes) across the ear hole, splitting the skull in two sections

  • the face & jaw part is compared to the part of the skull where the brain is housed—larger skull vaults accommodate a larger brain
foramen magnum “big hole”
centre where the skull attaches to the spine

• Where the hole is helps determine if a species is upright or not

DYK
If the hole is under the skull and mid way it helps support a larger or heavier skull on a spine to enable us to walk upright

A hole back further in the skull means the specie walked on all fours
brow ridge present

- Ridge across the top of the brow
- Absorbed stress from chewing action and provided strength to weaker facial bones
- Possibly provides protection for the eyes from branches
saggittal crest

if present it indicates a herbivore or plant eater because...

To be digested, raw plants need to be chewed a lot which developed muscles and these were attached across the top of the skull – causing a pronounced saggital crest or ridge
upper dental arches

Figure three. The box-like spaced tooth row in gorilla and the closed catenary shaped dental arcade in homo sapiens.
Aggression was shown through the baring of canine teeth, but we don’t do that to scare off our enemies anymore, we show a weapon for instance, they have lost their purpose and may not have been attractive to females as they may not like the aggression either – lost through selective evolution.
The chin jutting forward may be to assist with balance, the lower jaw which has become smaller through time or may just be more attractive.
sloping forehead

Neanderthalensis       Homo Sapien Sapien

the larger the reasoning part of the brain the higher & steeper the vault