|  |  |  |
| --- | --- | --- |
| **Structure** | **Adaptation** | **Advantage** |
| Foramen magnum | Located centrally in the base of the cranium, allows for the skull the balance over the vertebral canal | Skull is better balanced/less neck muscles  Brings centre of gravity over feet/upright posture |
| Jawbone | Small and non-protruding | Enables skull to balance on vertebral column |
| Vertebral column | Lumbar vertebrae is wedge shaped, producing an ‘S’ shaped curve | Brings the vertebral column directly under the centre of the skull |
| Pelvis | Broad/wide and shallow from top to bottom. Attachment of femur is wide apart | Provides support for abdominal organs  Supports developing foetus during pregnancy  Carrying angle increases due to the attachment of femur being wide apart, better for bipedal locomotion |
| Femur | Large head of femur | Contributes to carrying angle |
| Knee joint | Outer condyle ‘hinge’ is larger and stronger | Takes weight off the body  Knee is able to be straightened  Weight is on the outside of the body |
| Legs | Legs are longer than arms | Contributes to a low centre of gravity  Carrying angle allows the weight of the body to be kept close to the central axis |
| Foot | Large heel bone and big toe supports the body. Has **longitudinal** and **transverse** arches | Increased weight bearing  Weight distribution  Forward movement |