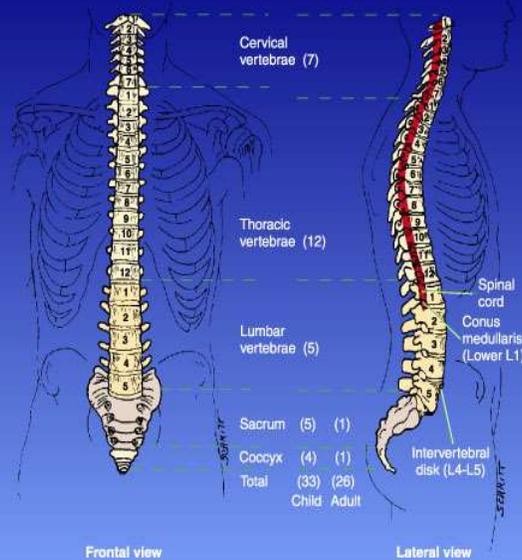


Thoracic and Lumbar Spine Anatomy

Reading Hospital School of Health Sciences
Medical Imaging Program
Clinical Seminar IV
2022

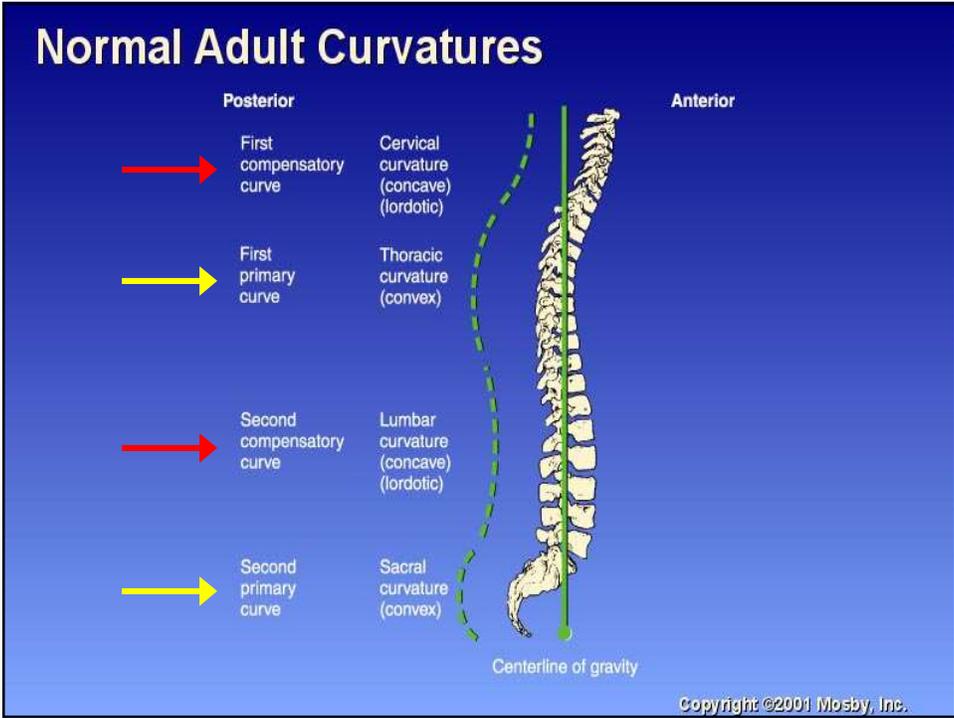
1

Vertebral Column

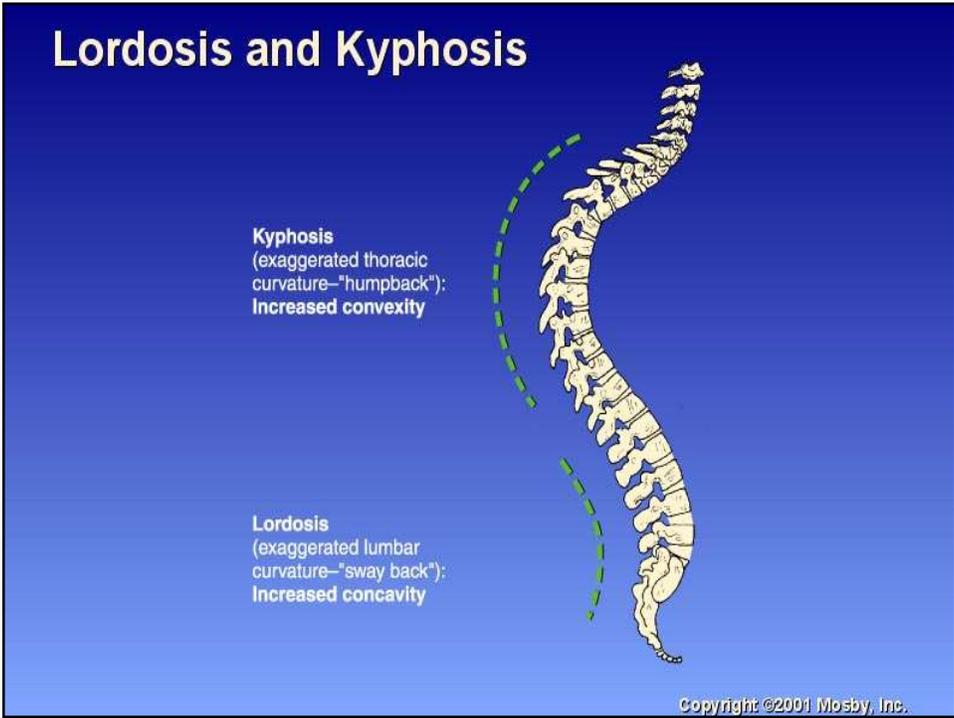


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2

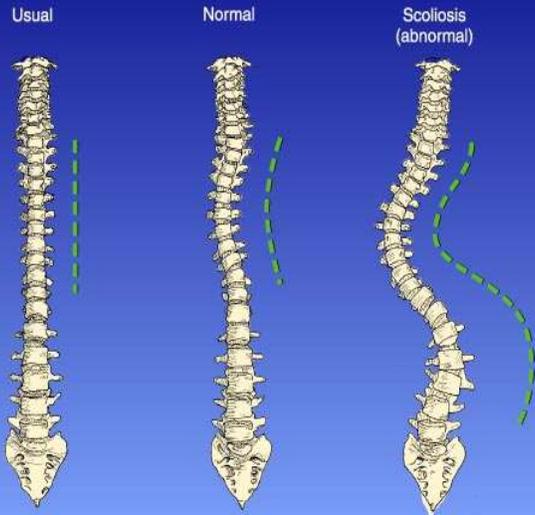


3



4

Scoliosis (Abnormal lateral curvatures)

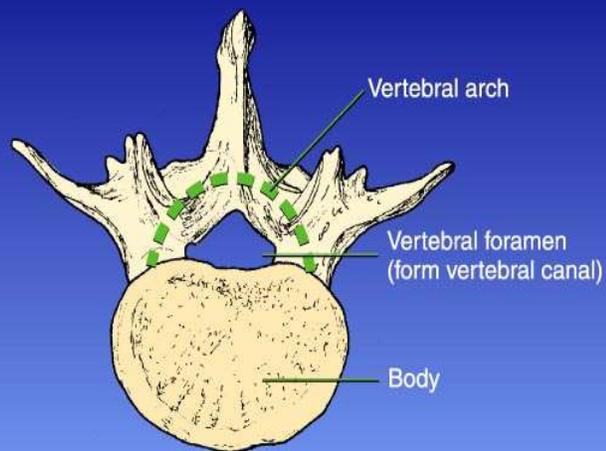


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5

Typical Vertebra

Posterior

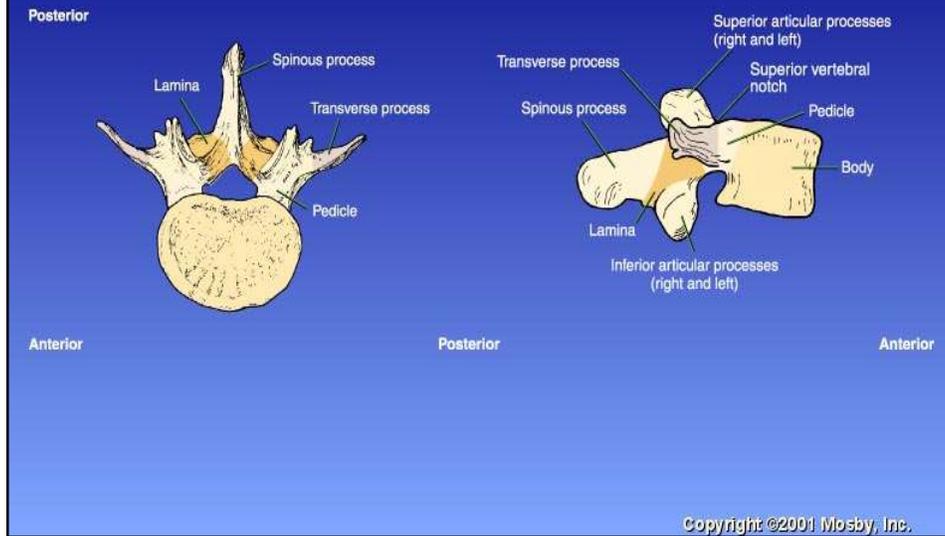


Anterior

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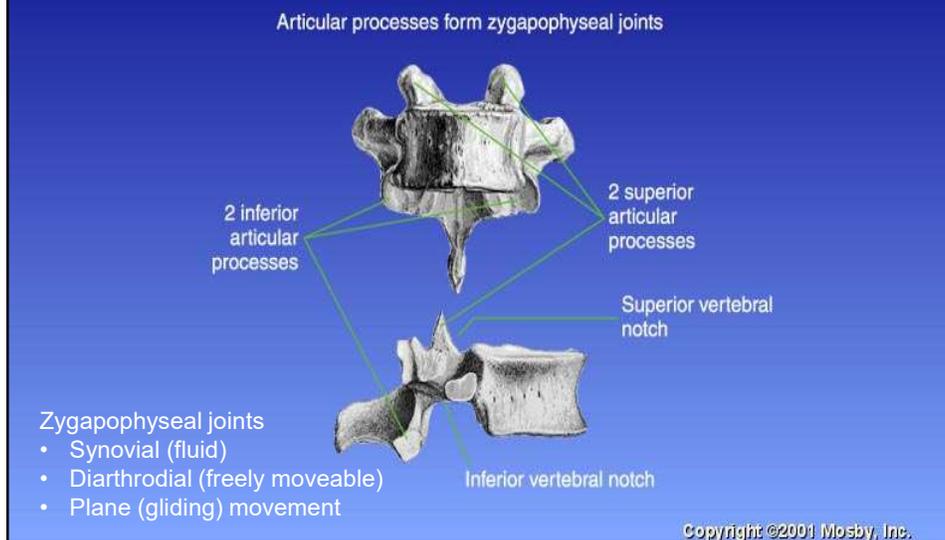
6

Typical Vertebra Anatomy



7

Typical Vertebra-Articular Processes (Anterior and Lateral Views)



8

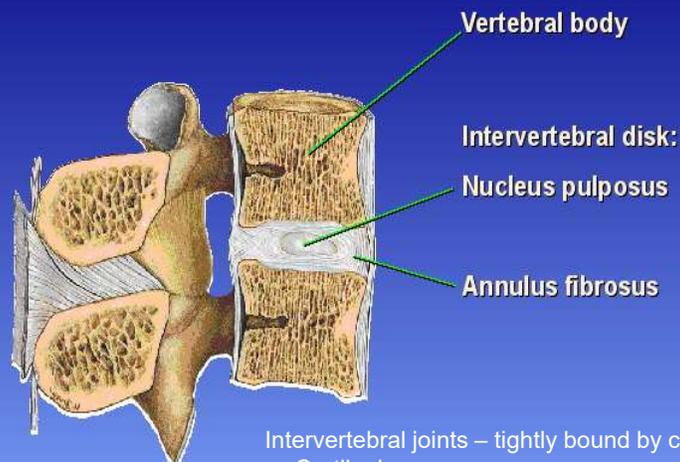
Zygapophyseal Joints and Intervertebral Foramina



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Sagittal View of Vertebrae



Intervertebral joints – tightly bound by cartilage

- Cartilaginous
- Amphiarthrodial (slightly moveable)

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THORACIC SPINE

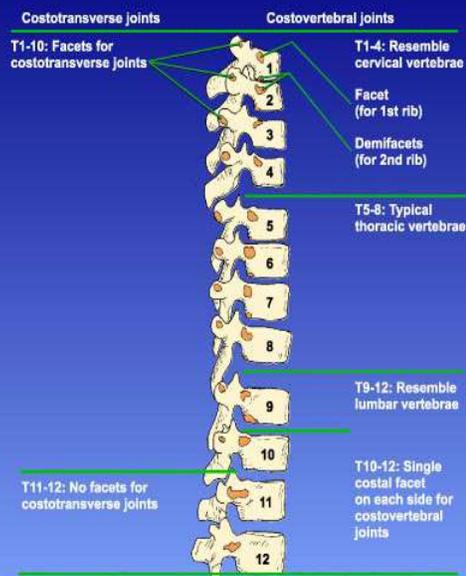


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Thoracic Characteristics

Distinctive features:

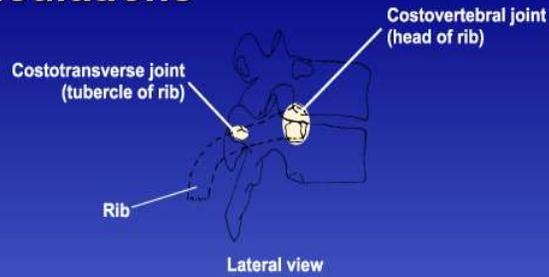
- Rib articulations
- Sharp, caudally pointed spinous processes



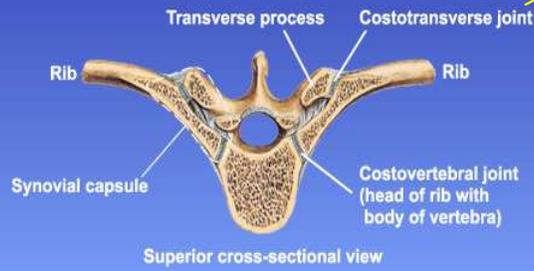
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Rib Articulations



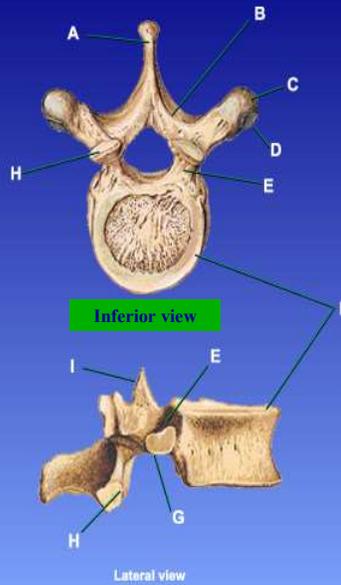
Not on T11 and T12!



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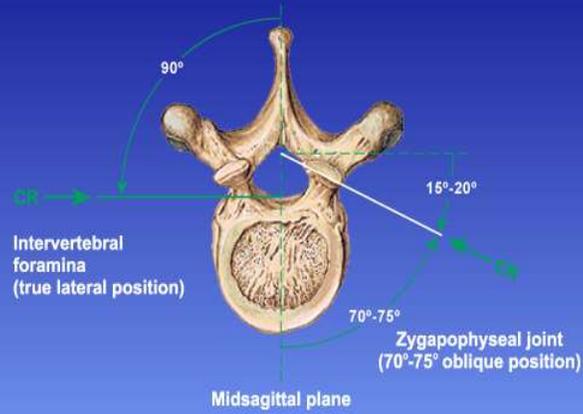
Typical Thoracic Vertebrae



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Intervertebral Foramina and Zygapophyseal Joints



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Intervertebral Foramina



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Zygapophyseal Joints

70°-75° LPO
(20°-25° from lateral)



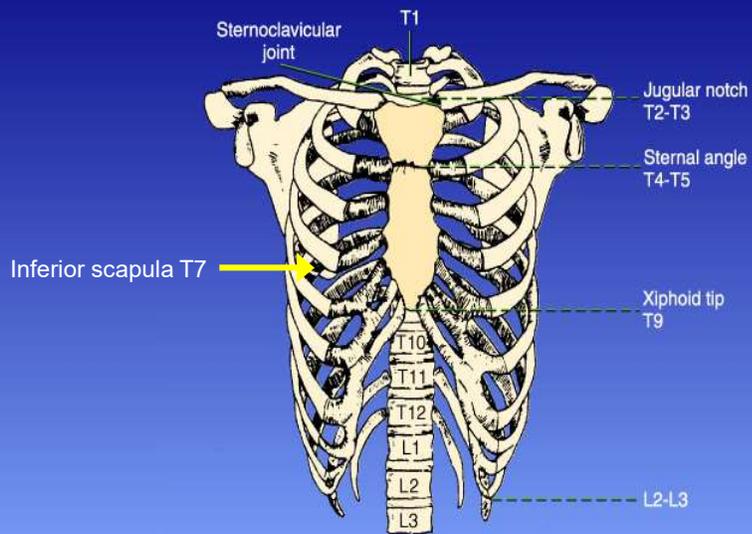
70°-75° LPO
(20°-25° from lateral)



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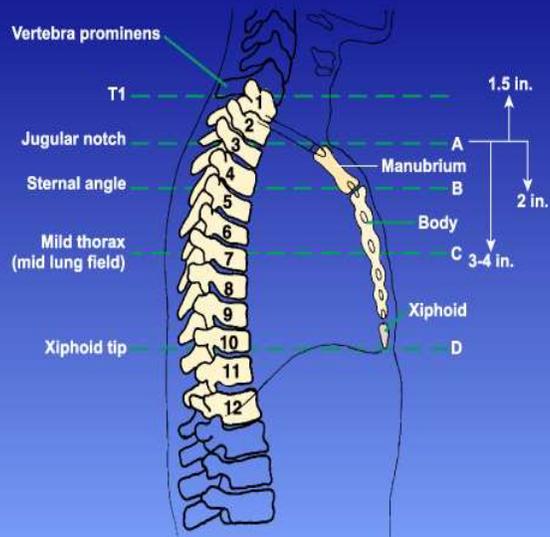
Sternum Landmarks



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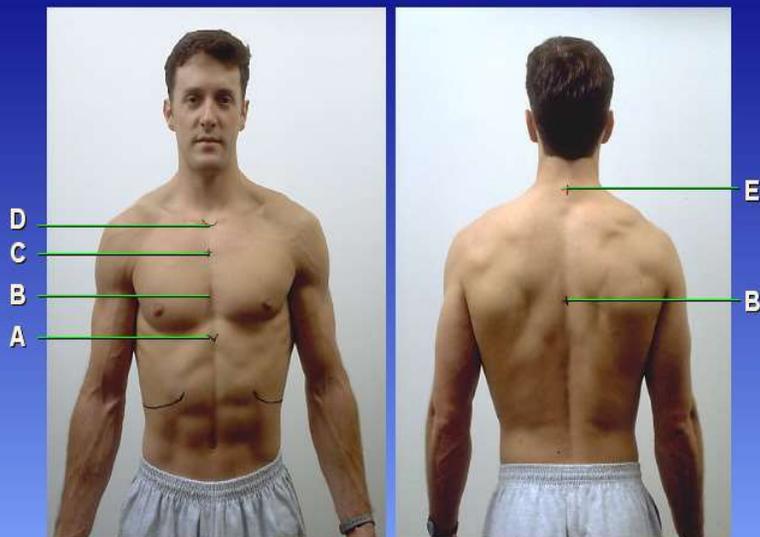
T-Spine Landmarks



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Topographical Landmark Quiz



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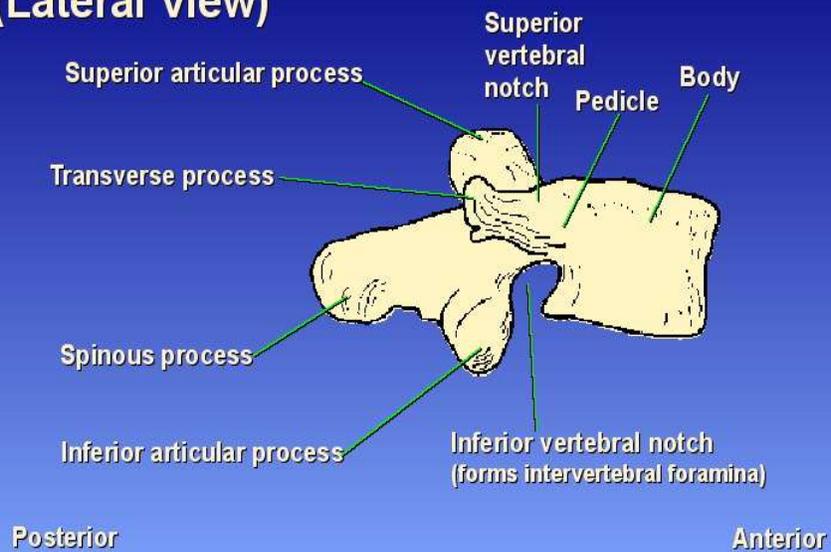
20

LUMBAR SPINE



21

Typical Lumbar Vertebra (Lateral View)

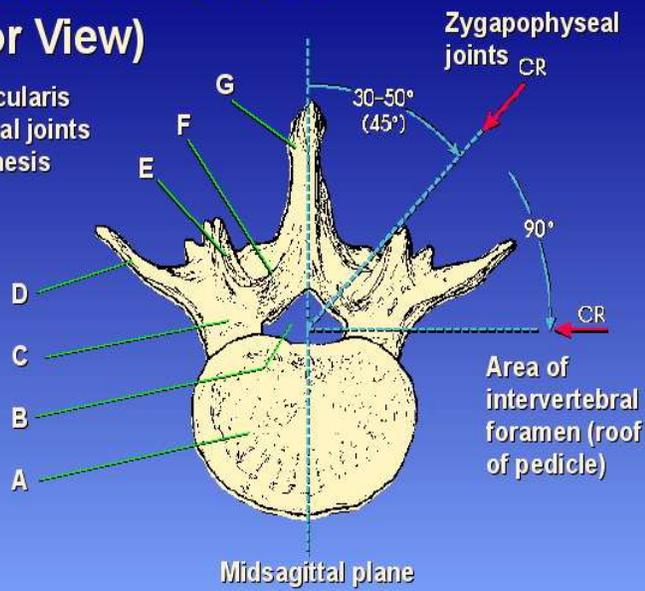


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Typical Lumbar Vertebra (Superior View)

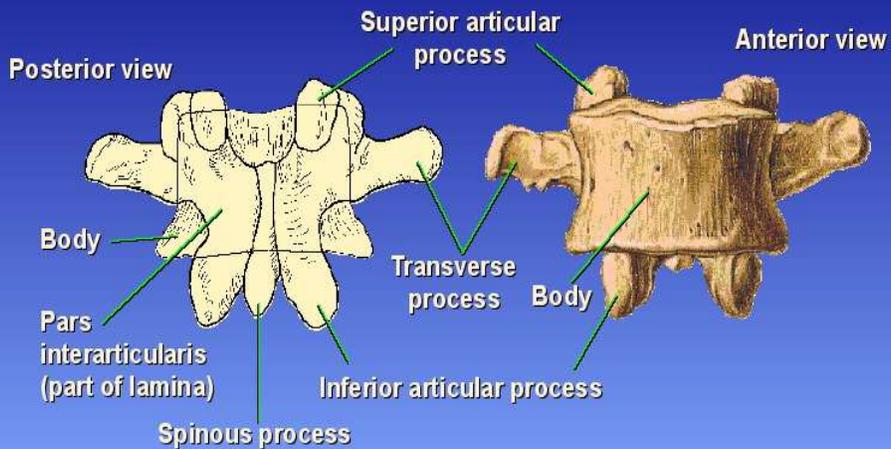
- Pars interarticularis
- Zygapophysseal joints
- Spondylolisthesis



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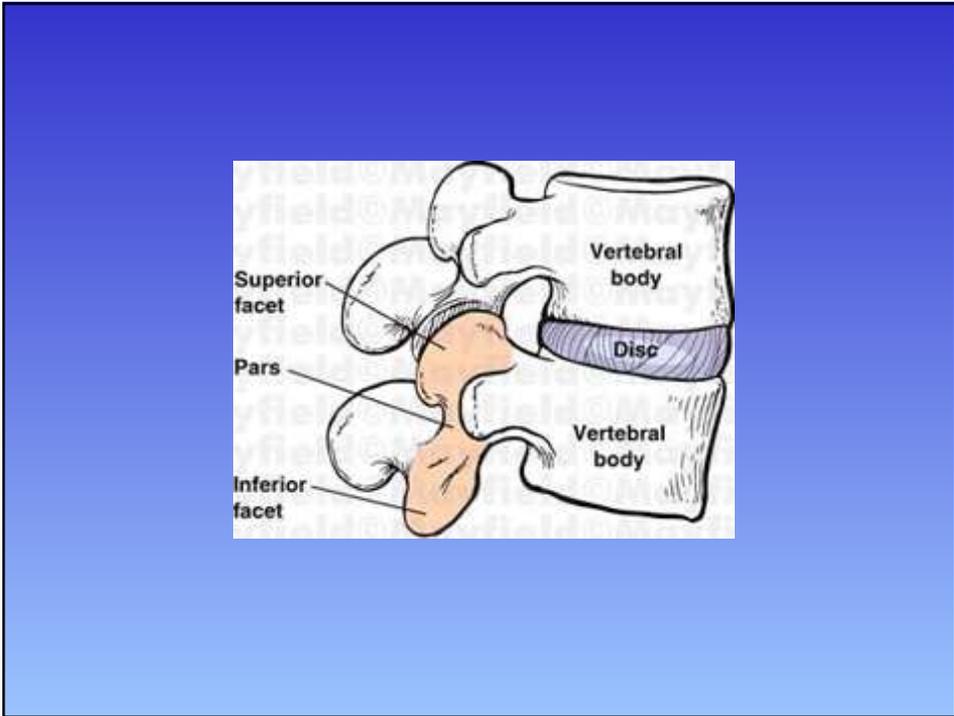
23

Typical Lumbar Vertebrae (Posterior and Anterior Views)

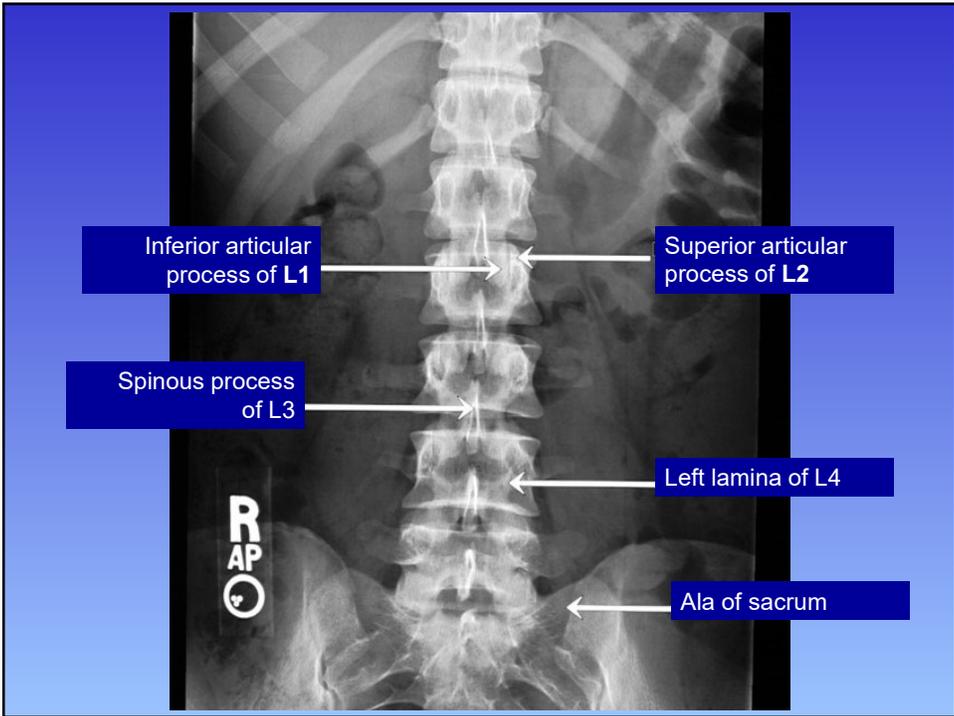


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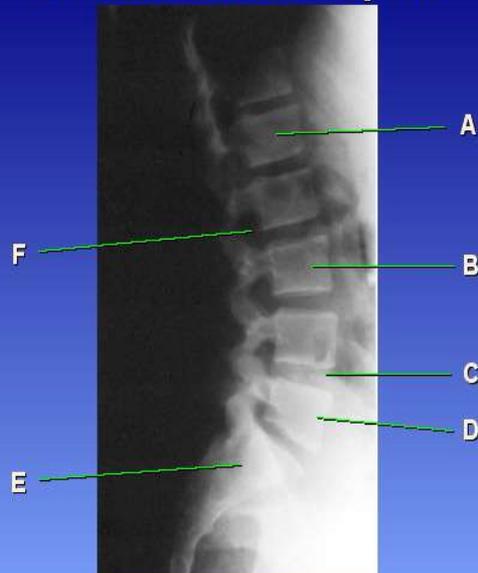
26

Count the lumbar vertebrae.



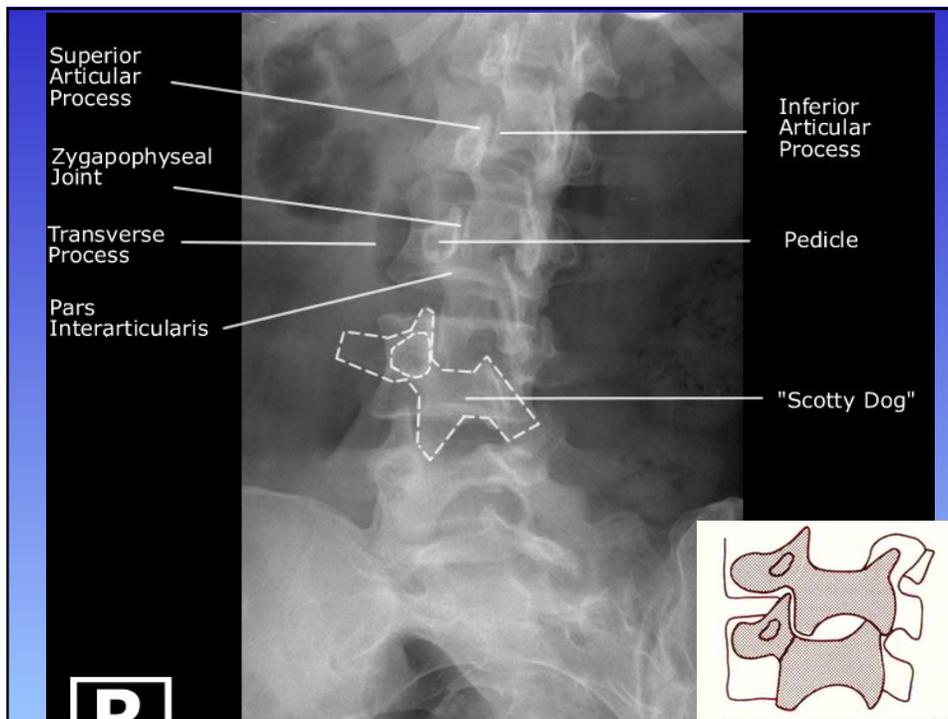
27

Lateral Lumbar Spine

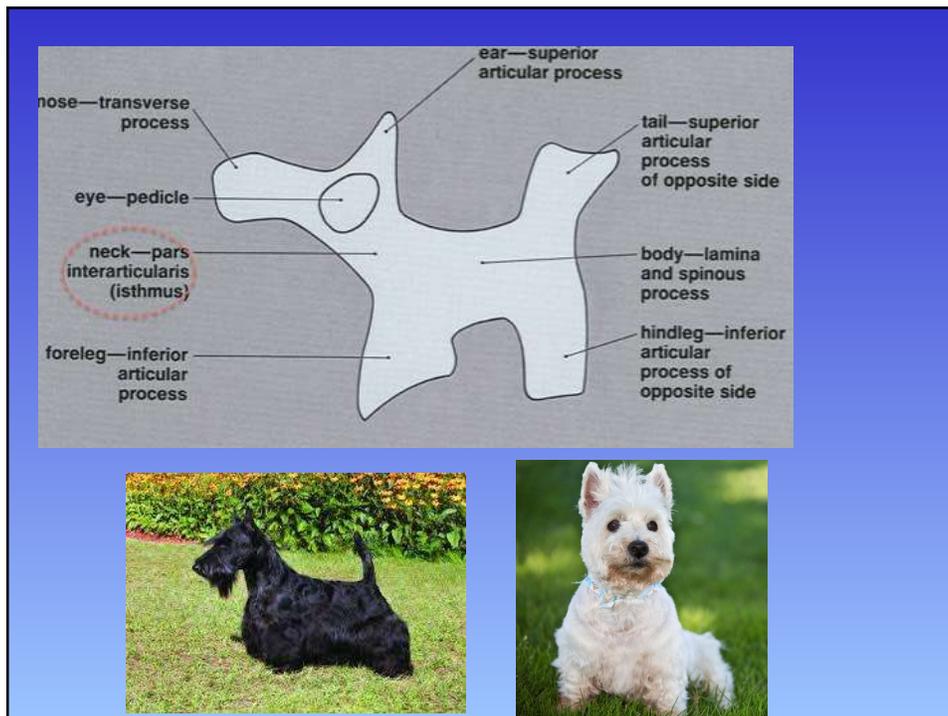


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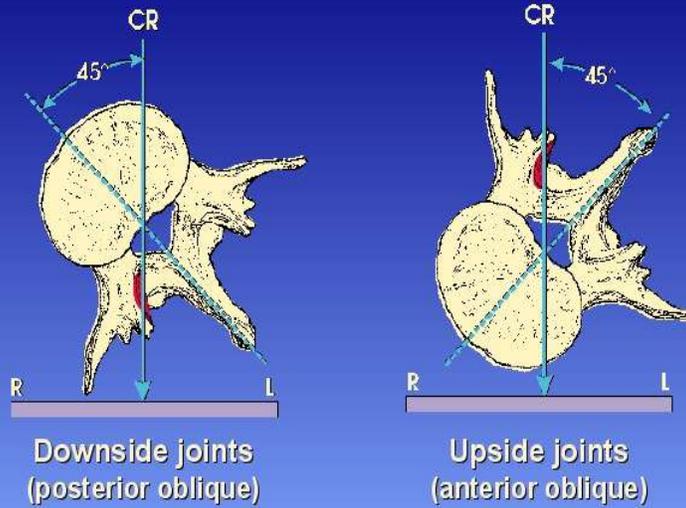


29



30

Zygapophyseal Joints



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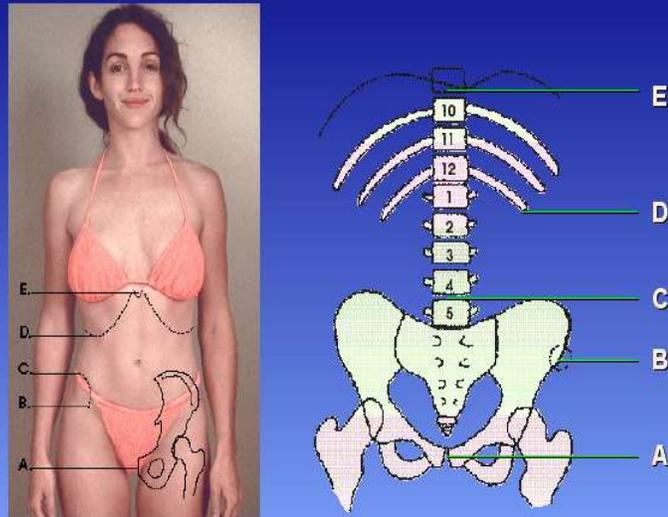
Total Vertebrae Summary

	Intervertebral foramina	Zygapophyseal joints
Cervical	45° oblique (upside, LPO or RPO)	Lateral
Thoracic	Lateral	70° oblique (upside, LPO or RPO)
Lumbar	Lateral	45° oblique (downside, LPO or RPO)

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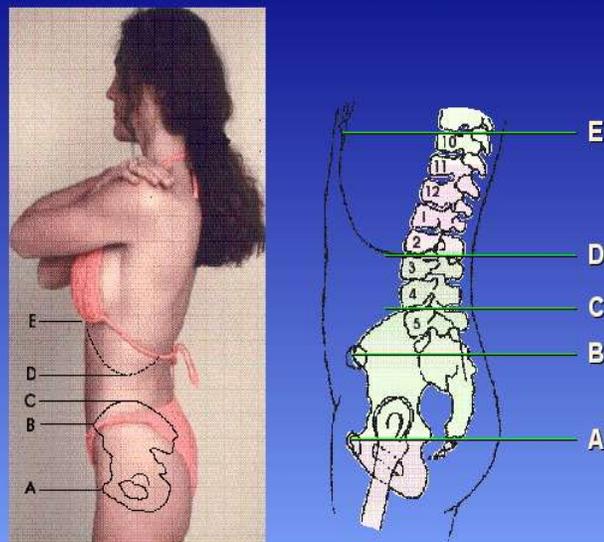
Lower Spine Landmarks (Frontal View)



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Lower Spine Landmarks (Lateral View)



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