

3.1 Anatomical language, planes and imaging

Name: _____ Class: _____ Date: _____ **Total: 23 marks**

KEY WORDS sagittal plane

Objective

Use directional terms and planes unambiguously, and apply the axial display convention.

1 Key knowledge and worked examples

■ The grammar

Superior/inferior, anterior/posterior, proximal/distal, lateral/medial. Planes: sagittal (right/left), coronal (front/back), transverse (cross-section). Axial display: patient's RIGHT on image LEFT.

■ Worked example: the drill

Elbow distal to shoulder, proximal to wrist ✓; sternum anterior to heart anterior to oesophagus ✓ – each pair replaces a sentence.

2 Practice

2.1 Name the plane that separates the eyes from the back of the head. [3]

2.2 The knee is ____ to the hip and ____ to the ankle. [3]

2.3 On an axial brain scan, the patient's left occipital lobe appears on which side of the image? [3]

3 Exam-style questions

3.1 A surgeon describes a lesion as "right upper lobe, anterior segment, 3 cm from the pleural surface".

State the plane in which the anterior/posterior distinction is made. Explain the display convention that lets two readers agree on "right" without seeing the patient. Explain why side is always stated first in procedures. [7]

3.2 A midline sagittal MRI is requested.

State what "midline sagittal" cuts and what remains visible in one half. Explain why sagittal views show the spinal canal end-to-end while coronal views do not. State one structure best seen on each of the three planes. [7]