Musculoskeletal – Thoracolumbar Spine – Physical Exam Checklist Learnpediatrics.com – Written by Dr. R. Acedillo

EXAMINATION	OSCE ITEMS	
STANDING	Inspection Anterior Shape of chest (pectus excavatum, carinatum) Body habitus (abdominal obesity, tone → lower back pain) Lateral Lumbar lordosis, thoracic kyphosis (scoliosis, spondylolythesis, trauma, osteomyelitis, etc) Posture (back pain, osteoporosis, flexion contracture) Posterior Symmetry of shoulders and scapulae Muscle bulk Scoliosis Level of iliac crests (leg lengths, contractures, structural scoliosis) Skin abnormalities (hairy patches – spina bifida, café au lait spots +/- irregular borders)	 Gait Basic walk (look at spine, width of gait, foot drop) Walk on toes (calf muscles) Walk on heels (extensors) Single leg knee bend (quadriceps) Active ROM Chest expansion (stiff in ankylosing spondylitis) Forward flexion (reversal of lumbar lordosis, distance of fingers to floor, rib humps, Schoberg's test – PSIS normal 5-/10+, 15-22 cm, root tension sign) Extension (normal 30°, facet joint arthritis) Lateral bending (normal 30-40°) Rotation (stabilize patients hips, normal 45°) Simulated rotation (amplification = faking back pain or actual hip abnormality = soft sign)
SITTING	Neurological – Lower Extremity Sensory Strength Reflexes (ankle can be done kneeling)	 Special Tests Tripod test (extend one knee, look if patient leans back on hands in response to pain = equivalent to straight leg raise)
SUPINE	 Palpation Palpate abdomen (aortic aneurysms, cholescystitis, perforated peptic ulcers, pancreatitis present as back pain) Rectal exam (metastatic prostate cancer, trauma) Perianal sensation (cauda equina syndrome) 	 Reflexes Abdominal (upper quadrants T/8-T10, lower quadrants T10-T12/L1) Bulbocavernosus reflex (acute spinal cord injury)
	 Special Tests - Root Tension Signs Straight leg raising (lift leg with knee extended) Crossed leg raising (lift contralateral leg - indicates larger sequestered disc fragmentation) Lesegue's test (hold leg at level where pain is relieved and then extend ankle to reproduce pain) 	 Bowstring sign (lift knee with leg flexed, extend knee, flex knee again to relieve pain, palpate hamstrings – mild discomfort/none, then palpate popliteal fossa – pain if nerve root impingement) While supine, ask patient to sit up (nerve root impingement)
PRONE	 Palpation Tenderness Paraspinal muscle spasm, gaps, and misalignment 	 Special Tests Femoral stretch test (flex knee 90°, lift thigh to extend hip – L3/L4 nerve root impingement)