# ANKLE AND FOOT COMPLEX – PRACTICAL LEARNING ACTIVITIES

**1. Arch Support Simulation Game**

**Objective: Simulate arch mechanics and weight distribution.**

**Instructions: Teams model longitudinal/transverse arches during stance using body positions. Include flattening in pronation. Debrief.**

**Time: 35 minutes (15 setup, 20 game/debrief).**

**Assessment: Participation (40%), linkage (60%).**

**2. Foot Motion Role-Play**

**Objective: Demonstrate triplanar ankle-foot motions.**

**Instructions: Groups role-play dorsiflexion, inversion, pronation/supination. Include muscle activation. 5-minute skit.**

**Time: 40 minutes (20 prep, 20 performances).**

**Assessment: Creativity (40%), accuracy (60%).**

**3. Ankle Joint Mapping Exercise**

**Objective: Visualize ankle-foot anatomy.**

**Instructions: Groups mind map joints, arches, extrinsic/intrinsic muscles. Present three motion examples.**

**Time: 45 minutes (20 mapping, 25 presentations).**

**Assessment: Clarity (30%), accuracy (70%).**

**4. Pronation vs Supination Debate**

**Objective: Debate functional roles of foot motions.**

**Instructions: Teams argue pronation for shock absorption vs supination for rigidity. 5 min present, 3 min rebuttal.**

**Time: 35 minutes (10 prep, 25 debate).**

**Assessment: Strength (50%), concepts (50%).**

**5. Foot Arch Case Analysis**

**Objective: Analyze arch-related pathologies.**

**Instructions: Individual case (e.g., pes cavus). Pairs propose interventions. Share insight.**

**Time: 30 minutes (15 individual, 15 pair).**

**Assessment: Summary (50%), participation (50%).**

**6. Muscle Function Peer Teaching**

**Objective: Teach extrinsic/intrinsic muscle roles.**

**Instructions: Assigned topic. 3-minute teach-back with diagram.**

**Time: 50 minutes (10 prep, 40 teaching).**

**Assessment: Clarity (40%), engagement (30%), accuracy (30%).**

**7. Ankle Motion Pathway Workshop**

**Objective: Trace motions across joints.**

**Instructions: Draw/label plantarflexion, eversion, muscle roles. Discuss pathology. Share whiteboard.**

**Time: 40 minutes (20 drawing, 20 sharing).**

**Assessment: Accuracy (60%), insight (40%).**

**8. Flat Foot Problem-Solving**

**Objective: Manage foot deformities biomechanically.**

**Instructions: Groups analyze overpronation case. Propose two interventions. 5-minute pitch.**

**Time: 45 minutes (25 analysis, 20 presentations).**

**Assessment: Depth (50%), collaboration (50%).**

**9. Foot Support Concept Application**

**Objective: Apply anatomy to orthotic/strengthening strategies.**

**Instructions: Individual notes; groups flowchart arch support progression. Share.**

**Time: 40 minutes (15 individual, 25 group).**

**Assessment: Completeness (50%), application (50%).**

**10. Integrated Quiz and Reflection**

**Objective: Synthesize ankle-foot topics.**

**Instructions: Quiz + 200-word reflection.**

**Time: 45 minutes (20 quiz, 25 reflection).**

**Assessment: Score (60%), depth (40%).**