Revision checklists

# History taking

**Symptoms**

* Pain
* Swelling
* Stiffness
* Limp
* Pattern of joint involvement

**Evolution**

* Acute or chronic?
* Associated events
* Response to treatment

**Involvement of other systems**

* Skin, eye, lung or kidney symptoms?
* Malaise, weight loss, fevers, night sweats?

**Impact on patient’s lifestyle**

* Patient’s needs/aspirations
* Behavioural changes
* Impact at school
* Limitation of activities

**Focused questions for the child with a learning disability**

* Regression in motor milestones?
* Change in behaviour?
* Subtle adaptations noted to perform activities?
* Change in gait or shape of fingers?

# pGALS screening questions

* Any pain, swelling or stiffness in muscles, joints or back?
* Dress completely without any difficulty?
* Walk up and down stairs without any difficulty?

# pGALS screening examination

**Gait**

* Observe walking including on tiptoes and heels
* Observe patient standing: Front, sides and back

**Arms**

* Hands in front, palms down, fingers outstretched
* Backs of hands, make fist
* Each finger in turn to touch thumb
* Palpate metacarpophalangeal joints
* Hands together, then back–to-back
* Reach up, ‘touch the sky’, ‘look at ceiling’
* Hands behind neck

**Legs**

* Patient lying supine
* Comment on muscle bulk, leg alignment, symmetry
* Inspect soles of feet
* Palpate for an effusion at knee
* Flex and extend the knee (active and passive)
* Palpate for crepitus of the knee
* Internal rotation of hip

**Spine**

* Inspect spine: comment on appearance
* Place ear to shoulder
* Bend and touch toes
* Open mouth and place 3 fingers vertically within

# pREMS General Principles

**Introduction**

* Introduce
* Explanation
* Verbal consent
* Places child at ease
* Observe for pain

**Look**

* Scars, swelling, rashes
* Muscle wasting
* Posture, alignment of joints
* Footwear, walking aids
* Ensure appropriately exposed

**Feel**

* Temperature
* Swelling
* Tenderness
* Crepitus
* Muscle tone

**Move**

* Full range of movement – active and passive
* ‘Copy me’ approach
* Restriction – mild, moderate or severe?

**Function**

* Comment on functional assessment of joint

# pREMS examination of the hand and wrist

* Introduce yourself/gain consent to examine
* Inspect hands (palms and backs) for muscle wasting skin and nail changes
* Check wrist for carpal tunnel release
* Feel for radial pulse, tendon thickening and bulk of thenar and hypothenar eminences
* Assess median, ulnar and radial nerve sensation
* Assess skin temperature
* Squeeze MCP joints
* Bimanually palpate swollen or painful joints, including wrists
* Look and feel along ulnar border
* Assess full finger extension and full finger tuck
* Assess wrist flexion and extension – active and passive
* Assess median and ulnar nerve power
* Assess function: grip and pinch, picking up small object
* Perform Tinel’s test (if suggestion of carpal tunnel syndrome)
* Special tests: nailfold capillaroscopy, hypermobility assessment

# pREMS examination of the elbow

* + Introduce yourself/gain consent to examine
  + Look for scars, swellings or rashes
  + Assess skin temperature
  + Palpate over head of radius, joint line, medial and lateral epicondyles
  + Assess full flexion and extension, pronation and supination – actively and passively
  + Assess function – e.g. hand to nose or mouth
  + Special tests: muscle power, peripheral nerves, peripheral pulses, hypermobility, entheses

# pREMS Examination of the shoulder

* Introduce yourself/gain consent to examine
* Inspect shoulders from in front, from the side and from behind
  + Assess skin temperature
  + Palpate bony landmarks and surrounding muscles
  + Assess movement and function: hands behind head, hands behind back
  + Assess (actively and passively) external rotation, flexion, extension and abduction
  + Observe scapular movement
  + Special tests: muscle power, peripheral nerves, peripheral pulses, hypermobility

# pREMS examination of the hip

* Introduce yourself/gain consent to examine

**With the patient lying on couch:**

* Look for flexion deformity and leg length disparity
* Check for scars
* Feel the greater trochanter for tenderness
* Assess full hip flexion, internal and external rotation
* Perform the Thomas test
* Measure leg length
* Special tests: Gowers’s test, entheses, muscle power, hypermobility

**With the patient standing:**

* Look for gluteal muscle bulk
* Measure thigh girth
* Perform the Trendelenburg test
* Assess the patient’s gait

# pREMS examination of the knee

* Introduce yourself/gain consent to examine

**With the patient lying on couch:**

* + Look from the end of the couch for varus/valgus deformity, muscle wasting, scars and swellings
  + Look from the side for fixed flexion deformity
  + Assess skin temperature
  + With the knee slightly flexed palpate the joint line and the borders of the patella
  + Feel the popliteal fossa
  + Perform a patellar tap and cross fluctuation (bulge sign)
  + Assess full flexion and extension (actively and passively)
  + Assess stability of knee ligaments medial and lateral collateral – and perform anterior draw test
  + Measure leg length, thigh girth
  + Special tests: Clarke’s test, patellar tracking, thigh-foot angle, hamstring and iliotibial tightness, knock-knee/bow-leg assessment, hypermobility

**With the patient standing:**

* Look again for varus/valgus deformity and popliteal swellings
* Assess the patient’s gait

# pREMS examination of the foot and ankle

* Introduce yourself/gain consent to examine

**With the patient lying on couch:**

* + Look at dorsal and plantar surfaces of the foot
  + Assess skin temperature
  + Palpate for peripheral pulses
  + Squeeze the MTP joints
  + Palpate the midfoot, ankle joint line and subtalar joint
  + Assess movement (actively and passively) at the subtalar joint (inversion and eversion), the big toe (dorsi- and plantar flexion), the ankle joint (dorsi- and plantar flexion) and mid-tarsal joints (passive rotation)
  + Look at the patient’s footwear
  + Measure leg length
  + Special tests: thigh-foot angle, hypermobility, entheses, muscle power, nailfold capillaroscopy

**With the patient standing:**

* Look at the forefoot, midfoot (foot arch) and the hindfoot
* Assess the gait cycle (heel strike, stance, toe-off)

# pREMS examination of the spine

* Introduce yourself/gain consent to examine

**With the patient standing:**

* Inspect from the side and from behind
* Palpate the spinal processes and paraspinal muscles
* Assess movement: lumbar flexion and extension and lateral flexion; cervical flexion, extension, rotation and lateral flexion
* Special tests: one-leg standing spine extension test

**With the patient sitting on couch:**

* Assess thoracic rotation

**With the patient lying on couch:**

* Perform straight leg raising and dorsiflexion of the big toe
* Assess limb reflexes

# Examination tips for children with a learning disability, especially Down’s syndrome

* Be opportunistic – observe child move around the room and in play
* DA most commonly affects the small joints of the hands and wrists. Start with these joints if the child is not likely to tolerate a full examination
* Compare sides, as it may be difficult to appreciate joint restriction in a child with joint hypermobility