

In the lab you will be expected to perform the following sensory tests on one of your colleagues

1. Assess light touch sensation using a cotton wool.

- Show the subject how the sensation feels on the sternum first.
- Ensure the subject has his eyes closed.
- Assess sensation across each dermatome. Start distally in the hands; work proximally comparing left to right at equivalent regions as you progress.
- Make a dabbing rather than a stroking or tickling stimulus.

2. Assess vibration sensation using a tuning fork

- Place a vibrating 128-Hz tuning fork over the subject's sternum to show the subject how the sensation feels.
- Place the vibrating fork on the subject's distal interphalangeal joint of the index finger; if sensation is impaired, proceed proximally to the metacarpophalangeal joints, wrist, elbow, shoulder and finally clavicle.
- If in doubt as to the accuracy of the response, ask the subject to close their eyes and report when you stop the fork vibrating with your fingers.

3. Assess Proprioception; joint position sense

- With the subject's eyes open, demonstrate the procedure. Lightly hold the distal part of the thumb from the sides. Tell the subject you are going to move their thumb up or down, demonstrating as you do so.
- Ask the subject to close their eyes and to identify the direction of movements in random order.
- Start with movements at the distal interphalangeal joint of the index finger; if the movements are not accurately felt, move to the first metacarpophalangeal joint, wrist, elbow and finally shoulder.

4. Two-point discrimination can be tested with a special pair of calipers, or a bent paper clip, alternating randomly between touching the subject with one or both points.

5. Test Cortical Sensation

- To test **graphesthesia**, ask the subject to close their eyes and identify letters or numbers that are being traced onto their palm or the tip of their finger.
- To test **stereognosis**, ask the subject to close their eyes and identify various objects by touch using one hand at a time.