Post Test

1. A patient demonstrates a flexible anterior pelvic tilt. What the is the **best** solution for this?
    a. Tilt the chair forward to meet their spine.
    b. Accommodate the chair around the pelvic tilt
    c. Reposition the patient to find a pelvic neutral position
    d. Add a lumbar support to "fill in the space" between the spine and the chair back.

Question 1 discussion: Because the patient mentioned has a ***flexible*** anterior pelvic tilt, meaning it's not fixed in place, the initial goal of seating should be to find a pelvic neutral position. A neutral pelvic position will help with aligning the spine, extremities and head to promote the greatest distal control. Utilizing a four-point pelvis positioning belt may be useful to help keep the pelvis in neutral. When a person demonstrates a ***fixed*** pelvic tilt, the chair would need to be accommodated around this posture.

2. A tilt-in-space seating system may have which of the following advantages when compared to a recline-only chair:
    a. Can help to reduce/inhibit extensor tone spasms
    b. Reduces risk of patient sliding out of chair
    c. Maintains patient's hip, knee and ankle angles while tilting back for pressure relief
    d. Reduces shear forces
    e. All of the above

Question 2 discussion: A tilt-in-space seating system allows pressure relief while maintaining the patient's hip, knee and ankle angles. Furthermore, a patient's trunk and pelvis can be repositioned in a tilted position, with the lower extremities relatively "fixed" against the footrests. A recline feature "rapidly" extends a user's trunk, which may cause extensor muscle spasms in individuals who commonly experience issues with extensor tone. Furthermore, recline can cause an individual's pelvis to slide forward, which increases their risk of sliding out of the chair upon upright positioning of the chair. As a note, there are chairs with both recline and tilt-in-space options which may be useful!

3. Which parameters of a pelvic positioning belt would be **most** helpful for a patient with a flexible posterior pelvic tilt?
    a. A four-point pelvic positioning belt with the primary belt at 30° and the secondary belt positioned at 60°
    b. A pelvic positioning belt with primary belt positioned at 60°
    c. A pelvic positioning belt with a primary belt at 45°
    d. A pelvic positioning belt with primary belt positioned at 90°

Question 3 discussion: For a flexible posterior pelvic tilt, an attempt should be made to find pelvic neutral. A pelvic positioning belt can be useful for this. Orienting it at 60° rather than the conventional 45° is optimal for preventing the ischial tuberosities from sliding anteriorly. Answer choice a) would be appropriate for someone with a flexible anterior pelvic tilt, as the 30° angle pulls on the ASIS to induce a posterior pelvic tilt, while the 60° belt acts as a stabilizer so they don't over-rotate.

4. Which direction of pull is recommended when using a pelvic positioning belt for a patient with a pelvic rotation?
    a. The belt should be tightened down on the side rotated anteriorly
    b. The belt should be tightened down on the side rotated posteriorly
    c. The belt should be tightened down bilaterally
    d. The belt should be cinched in the middle

Question 4 discussion: With a pelvic rotation, one ASIS sits more anteriorly. The pull of direction of the belt should be towards the ASIS rotated more anteriorly. This is the best way to prevent that ASIS from migrating forward again while seated.

5. Many head supports only provide support for the occiput. Where is an additional, helpful place for support in order to reduce hyperextension of a patient's neck?
    a. Mandible
    b. Superior portion of scapula
    c. Sub-occipital region
    d. Temples

Question 5 discussion: Adding support at the sub-occipital region helps correct cervical hyperextension. It helps to feel this yourself, by placing one hand behind the occiput, extending, and then trying again with an additional hand at the sub-occipital notch area.