

Answer two (2) of the following 3 questions.

1) With ***Endurance training***:

- a. motor unit recruitment frequency ↑, ↓, or ↔ [pick one] and load generally ↑ modestly, greatly, or not at all [pick one]
- b. muscle CSA ↑, ↓, or ↔ [pick one]
- c. capillarity/capillary density ↑, ↓, or ↔ [pick one]
- d. mitochondrial proteins and/or mitochondrial density ↑, ↓, or ↔ [pick one]
- e. muscle fiber/Cell size ↑, ↓, or ↔ [pick one]
- f. muscle cell number ↑, ↓, or ↔ [pick one or explain]

2) With ***Resistance training***:

- a. motor unit recruitment frequency ↑, ↓, or ↔ [pick one] and load generally ↑ modestly, greatly, or not at all [pick one]
- b. muscle CSA ↑, ↓, or ↔ [pick one]
- c. capillarity/capillary density ↑, ↓, or ↔ [pick one]
- d. mitochondrial proteins and/or mitochondrial density ↑, ↓, or ↔ [pick one]
- e. muscle fiber/Cell size ↑, ↓, or ↔ [pick one]
- f. muscle cell number ↑, ↓, or ↔ [pick one or explain]

3) With a cessation of activity (***decreased training***):

- a. motor unit recruitment frequency ↑, ↓, or ↔ [pick one] and load generally ↑, ↓, or ↔ [pick one]
- b. muscle CSA ↑, ↓, or ↔ [pick one]
- c. mitochondrial proteins and/or mitochondrial density ↑, ↓, or ↔ [pick one]
- d. muscle fiber/Cell size ↑, ↓, or ↔ [pick one]
- e. muscle cell number ↑, ↓, or ↔ [pick one or explain]

Answer 1 of the following 3 questions:

4) Fill in the blanks:

A ↑ in cellular CSA is referred to as _____.

A ↑ in cell number is referred to as _____.

A ↓ in cellular number is referred to as _____.

5) What is neurological training?

6) Define myoplasticity and explain how (by what general mechanism(s)?) it occurs.