


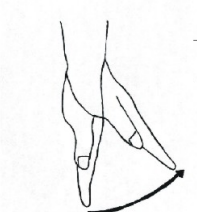
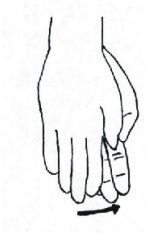

MSI ANATOMY LAB 11: POST-LAB EXERCISES
Anterior (Flexor) Forearm and Palm of Hand

1. List the muscles contained within the anterior compartments of the forearm. Identify the named nerve that innervates each muscle:

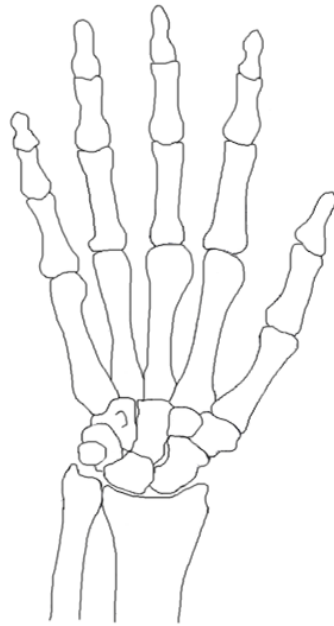
Anterior compartment of forearm:

Muscle	Innervation
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. In the diagrams below, name the movement illustrated (top blank line) and identify the muscles involved in each (number of blank lines indicates number of muscles – movement is from anatomical position; see Upper Extremity Muscle Chart).

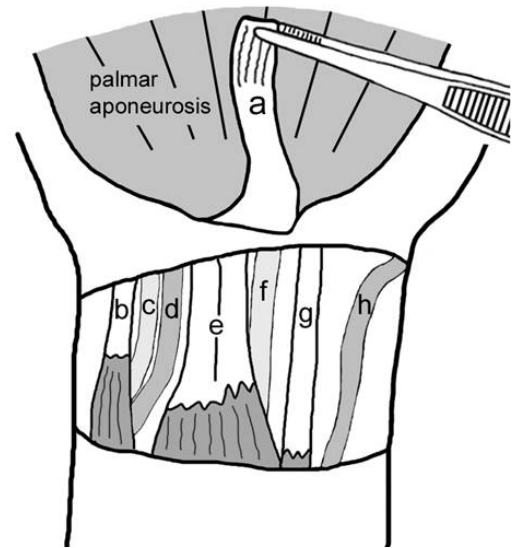
_____	_____
	_____
_____	_____
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	_____
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3. In the diagram below, draw in the location of the radiocarpal joint and the midcarpal joint.

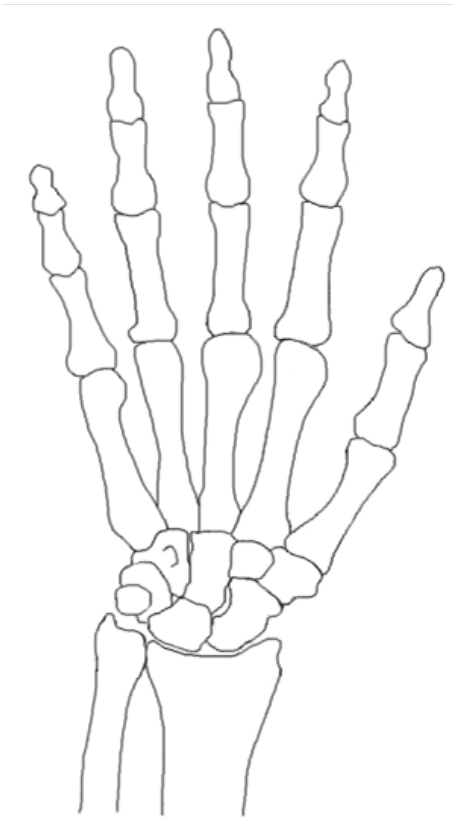


4. In the diagram, identify the labeled structures:

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____
- h. _____



5. In the diagram below, draw in the locations of insertion of the flexor digitorum superficialis, flexor digitorum profundus and the flexor hallucis longus. Based upon these insertions, list all of the joints acted upon by each muscle (Hint: identify all of the joints crossed by each muscle. Also, consider MCP joints II-V as a group; MP joints II-v as a group, etc.).



Joints acted upon by FDS

Joints acted upon by FDP

Joints acted upon by FPL

Answers

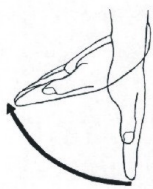
- List the muscles contained within the anterior compartments of the forearm. Identify the named nerve that innervates each muscle:

Anterior compartment of forearm:

Muscle	Innervation
<u>Pronator teres</u>	<u>Median</u>
<u>Flexor carpi radialis</u>	<u>Median</u>
<u>Palmaris longus</u>	<u>Median</u>
<u>Flexor carpi ulnaris</u>	<u>Ulnar</u>
<u>Flexor digitorum superficialis</u>	<u>Median</u>
<u>Flexor digitorum profundus</u>	<u>Medial half = Ulnar</u> <u>Lateral half = Ant. interosseous</u>
<u>Flexor pollicis longus</u>	<u>Anterior interosseous</u>
<u>Pronator quadratus</u>	<u>Anterior interosseous</u>

- In the diagrams below, name the movement illustrated (top blank line) and identify the muscles involved in each (number of blank lines indicates number of muscles – movement is from anatomical position; see Upper Extremity Muscle Chart).

Wrist flexion



Flexor carpi radialis
Flexor carpi ulnaris

Wrist extension



Ext. carpi radialis longus
Ext. carpi radialis brevis
Ext. carpi ulnaris

Radial deviation



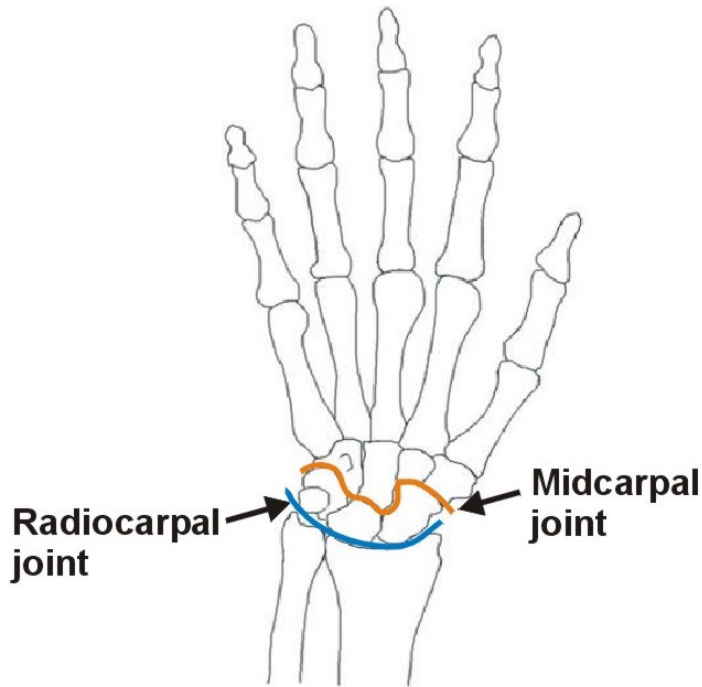
Flexor carpi radialis
Ext. carpi radialis longus

Ulnar deviation



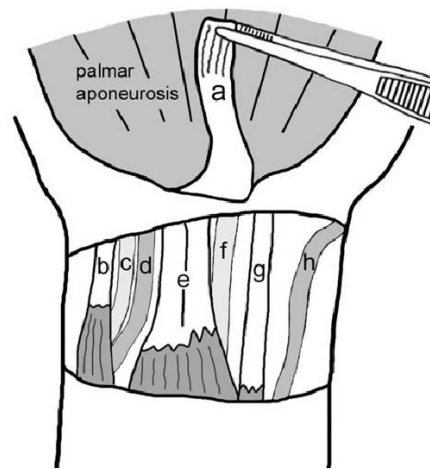
Flexor carpi ulnaris
Ext. carpi ulnaris

3. In the diagram below, draw in the location of the radiocarpal joint and the midcarpal joint.

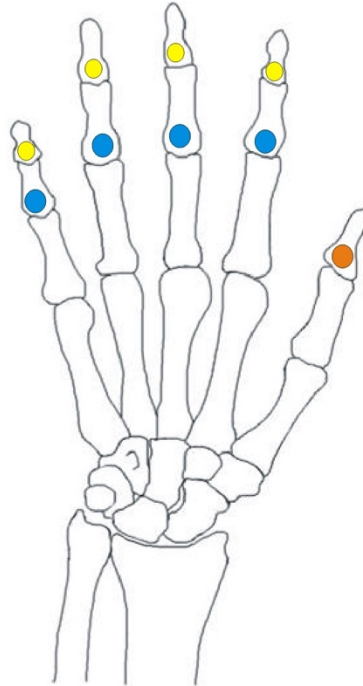


4. In the diagram, identify the labeled structures:

- a. Palmaris longus
- b. Flexor carpi ulnaris
- c. Ulnar nerve
- d. Ulnar artery
- e. Flexor digitorum superficialis
- f. Median nerve
- g. Flexor carpi radialis
- h. Radial artery



5. In the diagram below, draw in the locations of insertion of the flexor digitorum superficialis, flexor digitorum profundus and the flexor hallucis longus. Based upon these insertions, list all of the joints acted upon by each muscle (Hint: identify all of the joints crossed by each muscle. Also, consider MCP joints II-V as a group; MP joints II-v as a group, etc.).



Acted upon by FDS

Radiocarpal

Midcarpal

Carpometacarpal joints II-V

MP joints II-V

PIP joints II-V

Acted upon by FDP

Radiocarpal

Midcarpal

Carpometacarpal joints II-V

MP joints II-V

PIP joints II-V

DIP joints II-V

Acted upon by FPL

Radiocarpal

Midcarpal

Carpometacarpal joint I

MP joint I

IP joint of thumb

Note: Digits are numbered here for convenience only - you should always refer to them by their names.