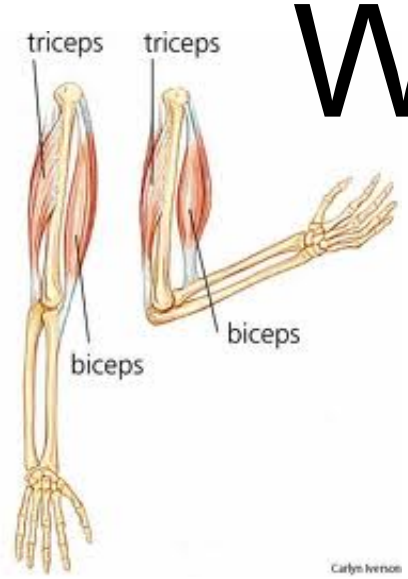
Jan 10, 2020

1) complete info on Joints
2) Muscular System
2) Review WS/pg 351 #4,5,8

Warm-Up



The triceps make up close to _ % of the upper arm.

Reveal-Rect

Dec 18-10:13 AM

Joints cont

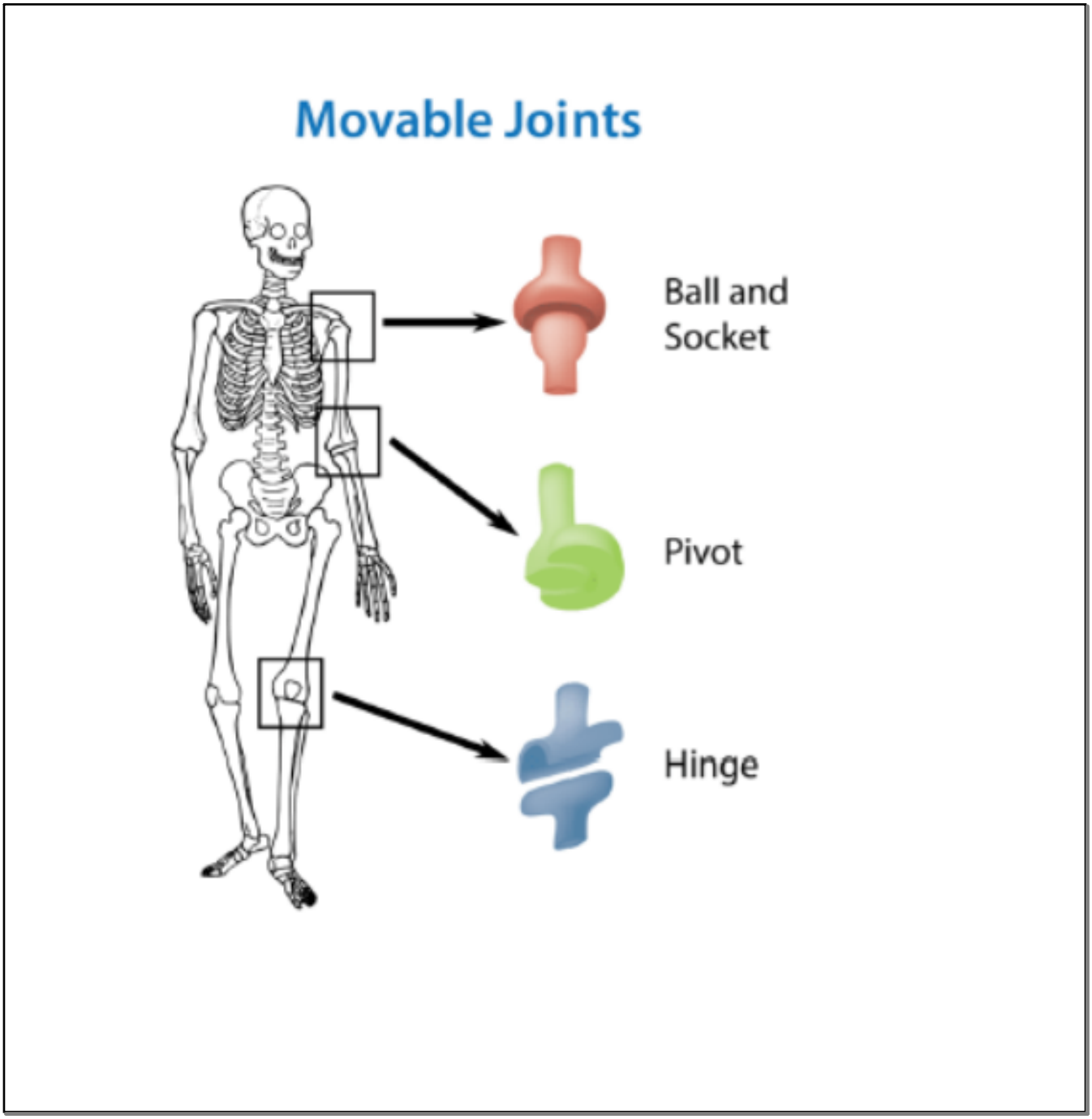
Hinge Joints allow for movement backwards and forwards in one direction i.e. elbow, knee

Ball and Socket joints permit movement in all directions i.e. shoulder, pelvis

Pivotal Joints allow both side to side movement and up and down movements i.e. skull and vertebra

Gliding joints allow the bones to slide along each other i.e. wrist

Jan 9-2:56 PM



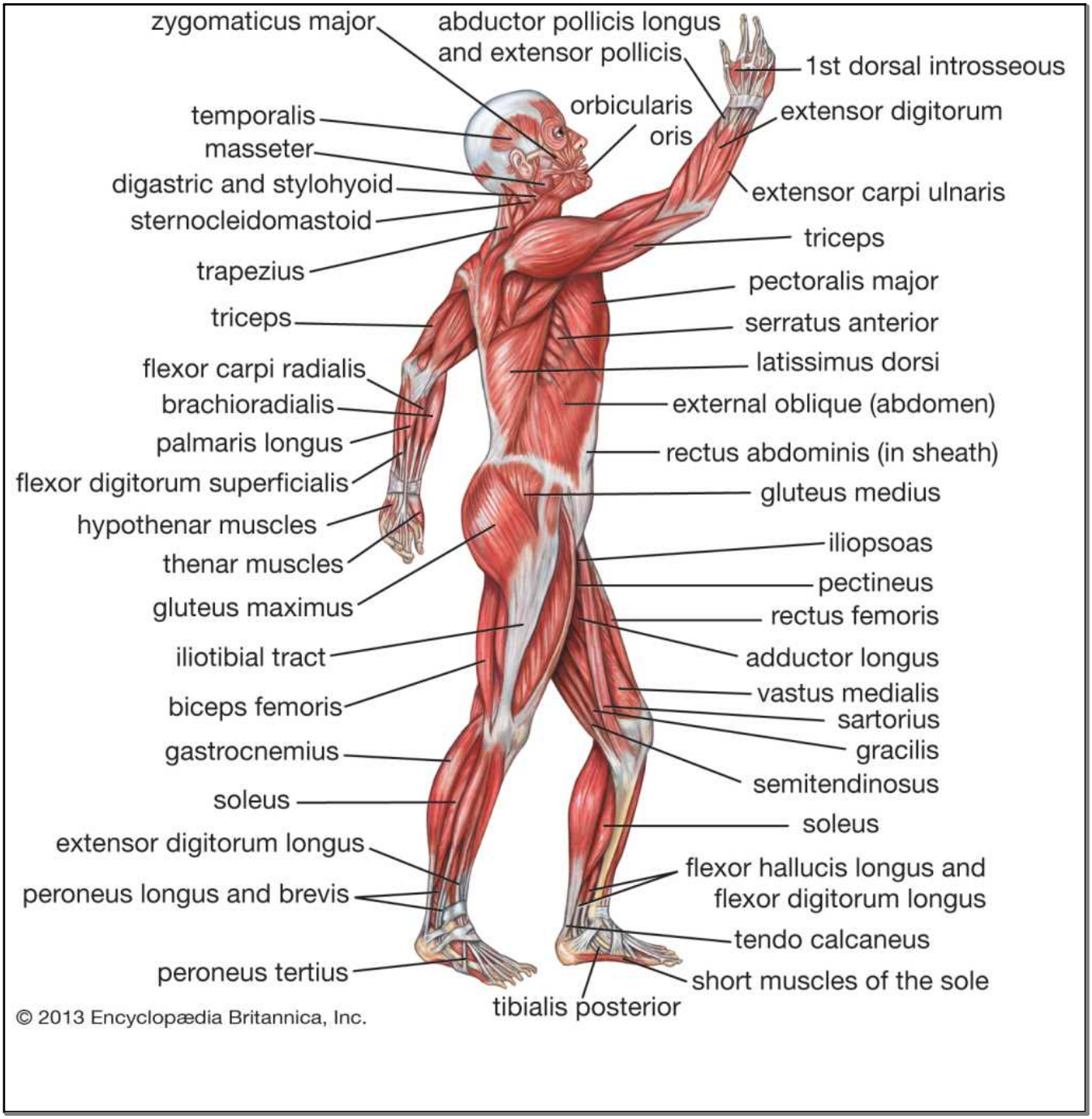
Jan 9-3:01 PM

The Muscular System

- Your body contains more than 600 muscles.

Can you name some of the muscles in your body?

Dec 7-8:16 AM


zygomaticus major
abductor pollicis longus
and extensor pollicis
1st dorsal introsseous
orbicularis
oris
temporalis
extensor digitorum
masseter
digastric and stylohyoid
extensor carpi ulnaris
sternocleidomastoid
triceps
trapezius
pectoralis major
triceps
serratus anterior
flexor carpi radialis
latissimus dorsi
brachioradialis
external oblique (abdomen)
palmaris longus
rectus abdominis (in sheath)
flexor digitorum superficialis
gluteus medius
hypothenar muscles
iliopsoas
thenar muscles
pectineus
gluteus maximus
rectus femoris
iliotibial tract
adductor longus
vastus medialis
biceps femoris
sartorius
gracilis
gastrocnemius
semitendinosus
soleus
soleus
extensor digitorum longus
flexor hallucis longus and
flexor digitorum longus
peroneus longus and brevis
tendo calcaneus
peroneus tertius
short muscles of the sole
tibialis posterior
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Types of Muscles:

- The human body has 3 kinds of muscle tissue.
- Skeletal muscle: are attached to bones and make movement possible; at joints, skeletal muscles are attached to bones by tendons; can be controlled voluntarily.
- Smooth muscle: found in the walls of blood essels, the stomach and other organs; cannot be controlled voluntarily.
- Cardiac muscle: pump blood through the heart and rest of the body, also involuntary.

	SMOOTH	CARDIAC	SKELETAL
Location	Wall of hollow organs, vessels, respiratory passageways	Wall of heart	Attached to bones
Cell characteristics	Tapered at each end, branching networks, nonstriated 	Branching networks; special membranes (intercalated disks) between cells; single nucleus; lightly striated 	Long and cylindrical; multinucleated; heavily striated 
Control Action	Involuntary Produces peristalsis; contracts and relaxes slowly; may sustain contraction	Involuntary Pumps blood out of heart; self-excitatory but influenced by nervous system and hormones	Voluntary Produces movement at joints; stimulated by nervous system; contracts and relaxes rapidly

Dec 7-8:32 AM

Muscle Actions:

- Muscle cells change their lengths by contracting, or shortening, to do work.

- Muscles pull on bones and causes that body part to move.

- Skeletal muscles always work in pairs; e.g. one to bend arm, and one to straighten it (biceps and triceps)

- A muscle that bends at a joint is a **flexor**, a muscle that straightens a joint is an **extensor.**

Dec 7-8:21 AM

Muscle Problems:

- Muscles can get painful cramps.
- Muscle cramps occur when muscles spasm by contracting suddenly and strongly.
- Sore muscles are caused by overuse or small tears.
- A muscle strain is caused by a larger tear that requires rest and time to heal.
- Muscular dystrophy is a disease of the skeletal muscles in which the muscles gradually are destroyed.
- The muscle loses its ability to contract.

Dec 7-8:24 AM