



Dr. Fantastik

*Never regard study as a Duty,  
But as an enviable opportunity to learn.  
Albert Einstein.*

<u>Brain infarction is considered as?</u>	<u>Neurothrombosis</u>
<u>What muscle abducts the vocal cords?</u>	<u>Posterior cricoarytenoid m.</u>
<u>When taking away phosphate group from a nucleotide?</u>	<u>Nucleoside</u>
<u>What's the difference between thymidine and uracil?</u>	<u>Methyl</u>
<u>Innervation of the lungs?</u>	<u>Vagus n. CN10</u>
<u>Aflatoxin is what fungus ?</u>	<u>Aspergillus</u>
<u>Fusion of what determines size of mouth?</u>	<u>Macrostomia (Improper development fusion Mand &amp; Max processes)</u>
<u>Primary syphilis is common to?</u>	<u>Herpangina</u>
<u>Main bacteria that cause periodontal pockets? (Diffuse non-tender swelling?)</u>	<u>Bacteroides gingivalis (Parafirmona gingivalis)</u>
<u>7 weeks pregnant what does not occur?</u>	<u>Enamel calcification</u>
<u>What goes with ligamentum arteriosum?</u>	<u>Left recurrent Laryngeal n.</u>
<u>What runs with external jugular vein?</u>	<u>Great Auricular N Branch of Cervical Plexus C2-C3</u>
<u>What nerve goes between palatoglossus and palatopharyngeus?</u>	<u>Glossopharyngeal</u>
<u>All are on posterior border of axilla except?</u>	<u>Humerus</u>
<u>Resting potential is -70mV and extracellular K<sup>+</sup> increases and comes out of nowhere?</u>	<u>No change (Or Depolarizing if K<sup>+</sup> is leaking)</u>
<u>Why doesn't amphotericin B work against bacteria?</u>	<u>Works on ergosterol (Amphotericin is Antifungal)</u>
<u>What's the first sign of cell degeneration?</u>	<u>Cytoplasmic change (Cell nucleus)</u>
<u>Difference permanent Max central from primary Max centrals?</u>	<u>No mamelons on Primary</u>
<u>Which root shape is most likely to have one canal?</u>	<u>Round</u>
<u>Crepitus in jaw is due to what?</u>	<u>Age</u>
<u>Mandibular tori is made up of?</u>	<u>Cortical bone with fibro-vascular center</u>
<u>Man with bony exostosis has anaplastic glandular epi. was from?</u>	<u>Prostate carcinoma which metastasized</u>
<u>Naproxen acts on what?</u>	<u>Cox2 (NSAID)</u>
<u>Case:</u>	
<u>Pain in shoulder that extended down to arm and hands?</u>	
<u>What nerve is damaged?</u>	<u>T1, T2</u>
<u>Taking off ring from middle finger, which nerve?</u>	<u>C7(middle finger) C8(ring finger)</u>
<u>What nerve is involved when she has pain when turning her head?</u>	<u>Accessory n. CN11</u>
<u>END CASE</u>	
<u>ApoB100 is an?</u>	<u>LDL Receptor</u>

<u>What is biotin used for?</u>	<u>Pyruvate carboxylase</u>
<u>What is cofactor involved in Transamination?</u>	<u>PLP (Vit B6 - Peridoxin)</u>
<u>What's the primary molecule of reduction biosynthesis?</u>	<u>NADPH</u>
<u>Lacrimal gland nucleus innervation? Superior Salivatory Nucleus</u>	
<u>Vitamin K is used to make what?</u>	<u>Prothrombin</u>
<u>Woman with clinching jaw and bruxism, what muscle is affected?</u>	<u>Medial Pterygoid &amp; Masseter m</u>
<u>Fluoride stops bacteria via?</u>	<u>Inhibits enolase in glycolysis</u>
<u>What is hypoplasia most like?)</u>	<u>Small organ development</u>
<u>Rickettsia is a?</u>	<u>Typhus</u>
<u>Aminoglycoside does what? (Bacteriacidal ABX)</u>	<u>Inhibits mRNA synthesis</u>
<u>Bordertella pertussis vaccine is?</u>	<u>Killed vaccine</u>
<u>Dry mouth? (Xerostomia)</u>	<u>Sjogren's or Hypoparathyroidism</u>
<u>Innervation of Thenar muscle?</u>	<u>Median N</u>
<u>Where disc of TMJ is to the condyle?</u>	<u>Attached laterally</u>
<u>When yawning, which ligament tightens up so condyle stays in fossa?)</u>	<u>Lateral ligament</u>
<u>Why is saliva hypotonic?</u>	<u>Duct cells absorption greater Na&amp;Cl than secretion K &amp; HCO3</u>
<u>Klinefelter syndrome?</u>	<u>47 XXY</u>
<u>Turners Syndrome?</u>	<u>45:XO</u>
<u>Pain from which tract?</u>	<u>Spinothalamic – Sensory pathway</u>
<u>Main conduit in the brain is?</u>	<u>Thalamus</u>
<u>What controls vomiting reflex in CNS?</u>	<u>Medulla</u>
<u>What is alcoholism linked to?</u>	<u>Acute gastritis</u>
<u>What are the primary stones in gout?</u>	<u>Urate (uric acid) crystals</u>
<u>What forms the palate?</u>	<u>Fusion of intermaxillary, - palatal shelves</u>
<u>Gummatous necrosis causes all of the following except?</u>	<u>Alcoholism</u>
<u>Where Adipose tissue/Fat found in the hard palate?</u>	<u>Anterolateral portion</u>
<u>Ethylene oxide for sterilization is good for?</u>	<u>Heat labile tools</u>
<u>Why is dry heat better then autoclaving?</u>	<u>No dulling of instruments</u>
<u>What's not found in the epithelium?</u>	<u>Meisner's corpuscle</u>
<u>Difference between lamina propria and dermis?</u>	<u>Dermis: Dense irregular CT</u>
<u>Child couldn't breathe because?</u>	<u>Type II pneumocyte (Surfactant)</u>
<u>Most common cause of lump on a woman's breast?</u>	<u>Fibrocystic changes/lesion</u>
<u>What causes influenza to change year to year?</u>	<u>Antigenic capsule</u>
<u>What's small molecule that can't elicit immune response on it's own?</u>	<u>Hapten</u>
<u>What supplies SA node?</u>	<u>Right coronary artery</u>
<u>GH stimulates chondrogenesis indirectly by using what?</u>	<u>Somatomedins (Protein, cell growth)</u>

<u>Crack that goes from the enamel to the DEJ?</u>	<u>Enamel lamellae</u>
<u>Metabolism of AA. what are the 2 primary acceptors of amine groups?</u>	<u>OAA(Oxalo Acetic Acid) &amp; Alpha-ketoglutera</u>
<u>What happens as the tooth ages?</u>	<u>Decrease in cellularity</u>
<u>How do animal cells primarily use cholesterol?</u>	<u>Place into cell membrane</u>
<u>What's a way to measure human basal energy?</u>	<u>Temperature</u>
<u>All the primary ions in saliva except?</u>	<u>Calcium</u>
<u>What does the sigmoid sinus drain into?</u>	<u>Internal jugular vein</u>
<u>Initial venous drainage of the jejunum?</u>	<u>Superior mesenteric</u>
<u>What's secretes gastrin?</u>	<u>G Cells of stomach and duodenum</u>
<u>What organ is found by the right kidney?</u>	<u>Ascending colon</u>
<u>What's the 3<sup>rd</sup> sequence of amino acids in collage?</u>	<u>Glycine-proline-lysine</u>
<u>Glycan binds what in the bacterial cell wall?</u>	<u>D-alanine</u>
<u>During implantation, what stage of zygote?</u>	<u>Blastocyst</u>
<u>While a cell is rapidly dividing after fertilization, what happens?</u>	<u>Skips G0 and G1 phase (only S &amp; M)</u>
<u>Woman had white plaque that wiped off and red underneath?</u>	<u>Candidiasis</u>
<u>Woman not wearing dentures. What is the most common change in inter arch relationship? Class 1&amp;2</u>	
<u>Women also had dry mouth, why?</u>	<u>Medication</u>
<u>Where is NADPH made/formulated?</u>	<u>Pentose phosphate cycle (HMP)</u>
<u>Function of B1 &amp; B2 receptors?</u>	<u>B1=Heart-constriction, B2=Lung-dilation</u>
<u>Which pathogen causes granulomatous lesion in lung resembling TB?</u>	<u>Histoplasmosis</u>
<u>Where does deep facial vein drain into?</u>	<u>Pterygoid plexus of veins (Drains with Ant. Retro-mandibular vein into IJV)</u>
<u>Branches of Max artery go through all of the following foramen except?)</u>	<u>Lacerum</u>
<u>Where do you get glycerol from for TAGs? (Triacilglycerol)</u>	<u>Glycolysis</u>
<u>What hormone stores glucose in adipose?</u>	<u>Insulin</u>
<u>Which is not used in making cDNA(Complimentary DNA) library?</u>	<u>Telomerase</u>
<u>What do sulfa drugs act on/inhibit?</u>	<u>PABA (Para amino benzoic Acid)</u>
<u>Before retroviruses integrate DNA to genome, what must happen?</u>	<u>Complementary DNA first</u>
<u>Chronic ulcer with chronic slow blood loss, what likely complication?</u>	<u>Iron deficiency anemia</u>
<u>Basic dye stains heavily with osteoblastic activity, why?</u>	<u>A lot mitochon (Ribosome or protein)</u>
<u>What is not derived from neural crest?</u>	<u>Bones/cartilage of facial skeleton</u> <u>Mnemonic MOTEL PASS</u>
<u>Amelogenesis imperfecta results from mutation?</u>	<u>Missence (Single nucleotide change results in a codon)</u>
<u>Which of these doesn't cause lung cancer?</u>	<u>Anthrocosis (Coal workers)</u>
<u>Which is not a symptom of Down Syndrome?</u>	<u>Gynecomasty (Enlarged breast in male)</u> <u>(Down syndrome – small nose, small mouth, wide neck)</u>
<u>If you inside the ethmoid airspaces and break the ethmoid –</u>	

sinus laterally what space do you enter?	Orbit
What does thoracodorsal nerve innervate?	Latissimus dorsi C6, C7, C8.
Enamel with organic material in it that started on surface?	Enamel lamellae
What's not true about the TMJ ligament?	It doesn't connect disc medio-laterally
If you have metastasis jejunum to lymph, where does it meet?	Brachiocephalic vein via thoracic duct
All of the following in the kidney medulla except?	Glomerulus
What are the ketogenic amino acids?	Leucine & lysine
In you increase 5%CO <sub>2</sub> ?	Central chemoreceptors stimulated
Tongue moves to the right?	Right CN XII (Hypoglossal) damage
Branchiomic nerves come from where?	CN 5, 7, 9, 10, 11 (SVE)
Person sweats a lot, what is increased?	ADH
What doesn't cause vasoconstriction of pulmonary pre-capillaries?	Adenosine (Vasodilator, Increase BV & BP)
Between Primary Max central & Perm Max central which has the most pronounced fossa?	Perm Max Central
Which side is smaller mesio-distally mandibular labial or lingual?	Lingual
History of bruxing, which of the following would least be effected?	Inter-condyle distance
Which fiber carries pain for burning mouth?	A-fiber
Burning mouth with sudden onset of chills, fever, malaise, slight leukopenia, and etx.	
	What's the cause? Influenza A
Hypertension treated by inhibiting which receptor?	Alpha 1
Patient with stroke most likely came from? <small>Something like person had 1 stroke, where is likely 2 to come from?</small>	Mural thrombi of heart
Where is atherosclerosis most common?	Abdominal aorta
Nerve to levator veli palatini?	CN X (N Vagus)
All of the following is a reason for Hypertansion, except?	Partial occlusion of renal artery
Spasticity is defined as?	Hyper-responsive stretch reflex
What lines articular surface of TNJ 10yr old child?	Dense fibrous connective tissue
Metastatic calcification due to?	Hyperparathyroidism
Trachea bifurcation?	Sternal angle
Hepatic sinusoid drain what?	Portal blood to central vein
Sensation of face and teeth, which nucleus?	Main sensory of V(Trigeminal n.)
What is the most notable early change in cell degeneration?	Cell nucleus- Cytoplasmic change
Which contact of maxillary canine is larger?	Distal
What plays important role in regulation of antibody response?	T Helper
What is present in collagen, that isn't in elastin?	Hydroxylysine
Secretin is secreted from where?	S-Cells of duodenum
Achalasia is most related to?	Lower Esophagus
Athletes foot due to?	Tricophyton
Competitive inhibitor?	Increase Km & Vmax stays same
Function of T tubule?	Conduct electrical impulse to deep m.

Which does not cause vasoconstriction of kidney?	Histamine
Diabetes Insipidus is a deficiency in?	ADH (Urine could be nearly 20 liters per day)
Precursor of glucagon in cortisol?	Progesterone
Afferent signal from carotid sinus being stretched?	Glossopharyngeal
Patient with rash on side of face, droopy eye lid, constriction of pupil, what nerve dysfunction?	Horner's Syndrome
All infra-hyoids are innervated by?	Ansa Cervicalis (C1-C3) (Except Thyrohyoid which is by cervical spinal n via CN Glossopharyngeal )
Difference between Staph and Strep?	Catalase
Which does not cause cancer?	Anthracois
HHV8 (Human Herpes Virus 8)?	Karposi Carcoma
Vein connecting pterygoid plexus?	Deep Facial V.
Dicriminatory 2 point travels via?	Fasciculus cutaneous
What secretes TNF Alpha and ILH1?	Activated macrophages
Chronic blood loss from duodenum leads to?	Microcytic & hypochromic (Iron deficiency)
Parakeratinized mucosa viewed histologically shows?	Pyknotic nuclei
What keeps corpus luteum in tact?	HCG (Human Chorionic Gonadotropin)
Vaccination against polysaccharide would be effective against all, except?	Encapsulated (Mnemonic: Some Killers Have Pretty Nice Capsule's)
Main outcome of increased cAMP?	Activation of PKA (protein kinase A)
Riccketsia infects?	Endothelial cells (Lines interior surface of Blood vessel)
Fungi grow in what type of agar?	Sabouraud
What best described essential fat?	Branched
Phosphotydlle choline?	Lecithin
Vit C for?	Hydroxylation of lysine & proline
Amino acid for crosslinking?	Lysine
What amino acid can be made from pyruvate and what step?	Alanine - step 1 (Alanine, Leucine, Isoleucine)
Uric acid pathway requires?	Ornithine (Enzyme in urea cycle acts to push reaction forward to make urea)
Fruity breath?	Ketone bodies
Taste sensation umami is related to which amino acid?	Glutamate
Which one is around a nerve axon?	Endoneurium
Which one is around myofibril?	Endomysium
Which brachial nerve is for circumduction?	Axillary
Fluoride mechanism of action against bacteria?	Prevents glycolysis (Enolase)
Which one is the end organ of the sympathetic system?	Adrenal medulla

#### CASE:

Dead girl, erupted lower canine but not upper canine, rattle snake bites her lateral of the right forearm

hematoma on the lateral rim, maybe supraorbital injury, not sure of the right orbit.

What is the age of the girl?	9-10 years old (Max canine erupts 11-12)
Which bone of orbit probably broke?	Zygomatic
On the x-ray, there is a line of radiolucency on left orbit lateral margin?	Normal suture
Where would countercoup injury be ?	Right sphenoid (Opposite area of impact)
Which nerve is more prone to damage in the forearm?	Radial (Elbow)
END CASE.	
In a scar tissue we have bone formation?	Osseous metaplasia (Transformation from one cell to another)
Which sentences is correct about apoptosis?	Stage of cell cycle can't divide
Decrease number and size of tissue?	Hypoplasia and hypotrophy
Which term describe lack of differentiation?	Anaplasia
Which term is best for carcinoma that doesn't perforate basement?	Dysplasia
In which can we see more squamous metaplasia?	Bronchial
Prothrombin acts with which one to form thrombin?	Ca <sup>2+</sup>
Which fungal infection leads superficial skin disease?	Trychophytom, Mucormycosis also
Hyphae & chlamidiospore of which fungus could be found on mucosa?	Candida
Which one could be seen as an intracellular organism?	Histoplasmosis
Which tract is primarily for pain?	Lateral spinothalamic
What is the phase of the ovary when the uterus is in secretory phase?	Luteal
Which one is not a glycoprotein hormone?	GH (is a peptide hormone)
Which one is not true about pregnancy hormone?	Decrease Progesterone (it's Increases)
Which movement mix foods in the GI tract?	Segmented
Which organ has active phosphoenol pyruvate carboxykinase?	Liver
What is the best term for burning of pyruvate?	Oxidative carboxylation
Why diabetic patients needs less insulin when doing exercise?	Increase sensitivity muscle to insulin
Which one is not contributed in the posterior wall of axilla?	Humerus
Adenosin deaminase deficiency causes which disease?	SCID (Severe Combined ImmunoDeficiency)
6 month of age patient, with pyogenic infection, doctor can't palpate spleen, lymph nodes, doesn't have thymus, low WBC, what is problem?	SCID
Patient mid age female with pelvic lymphadenopathy, oral mucosa ulcer verly low WBC, pain, fever, what is the problem?	Acute Myeloid Leukemia (Abnormal WBC)
EBV is related with?	Burkett's Lymphoma
Which virus doesn't have latent phase?	Rhinovirus
The patient is famine has edema, what is cause of edema?	Decrease protein in plasma (Kwashiorkor)
In hypertensive heart, which one is seen?)	Left ventricular hypertrophy
Which one needs arthropods vector?	Rickettsia (Typhus)
Which post tooth shows more missing?	Mand 2 <sup>nd</sup> Premolar (Depends on options)

Which is related to GI malignancy?	Villous adenoma (Polyp that grows in colon & GI)
Which one has the biggest triangular ridge on facial cusp?	Mand 1 <sup>st</sup> premolar
In which tooth lingual dimension is more than buccal dimension?	Max 1 <sup>st</sup> molar
Which cusp is the tallest cusp of the primary mandibular first molar?	ML (DB for Mand 2 <sup>nd</sup> Molar)
Which primary tooth has crown similar to Premolar and roots similar to Molar?	Max 1 <sup>st</sup> Primary Molar
Which one has the most sharpest mesio-incisal angle in the right quad?	Tooth #25
The most symmetrical tooth?	Mand central incisor # 24 & 25
Where is the highest osmolarity of the kidney?	Loop of Henle in medulla
What is the cross section shape of Max central incisor at CEJ?	Triangular
How much is the space between tooth in the resting position?	2-4mm
Clicking without symptoms, under stress, where is the problem?	Lateral pterygoids
Which one has the higher probability?	M root of 1 <sup>st</sup> Man Molar 2 canals
Which one differentiates hepatocyte from other cells?	Glucokinase
Which cell you couldn't see in periostium?	Chondroblast (In perichondrium)
Which tooth is more possible to be peg shaped?	Max laterals
Mesial contact of lower canine?	Incisal third (Distal is mid third)
From frontal view what is the inclination of the lower molar teeth?	Lingual
What is the major Bacteria which is found in dental abscess with shape of branching?	Actinomyces
Mumps and measles belong to which group of viruses?	Paramyxoviruses
Hepatitis C virus?	RNA Virus
Sulfonamides compete with what molecule in their mechanism of action?	ParaAminoBanzoicAcid (PABA)
( ↑ non ABX Antimicrobial )	
Technically the receptor of the T cells are similar to which one?	Fab
The predominant cell in acute inflammatory responses?	PMN (Polymorphonuclear neutrophil)
The predominant cell in abscess?	PMN (neutrophils) (Also Granulocytes)
Which kind of force holds proteins in the lipid bilayer?	Hydrophobic interaction
Which criteria determines the progressive shift non-working condyle?	Medial wall of Glenoid fossa
Which one is autosomal dominant?	Gardner Syndrome (Multiple Polyps in the colon & Tumors outside the colon )
Inferior Parathyroid origin is from?	3 <sup>rd</sup> Pouch
Which branchial arch is the body of hyoid bone made of?	3 <sup>rd</sup> Arch, could be 2 <sup>nd</sup>
Patient has problem with external auditory meatus, what is the origin of this?	1 <sup>st</sup> Pharyngeal cleft
CASE:	
A 6 week pregnant woman is taking tetracycline for rosacea.	
Which one doesn't occur until 6 weeks of fetus?	Palatal shelf fusion
Which one is seen in the fetus but not in the mother?	Ductus venosus
What is the problem of using tetracycline for fetus?	Changing the color of the teeth

<u>After what time, is the best time for elective dental tx</u>	<u>as it should be after organogenesis of the fetus?</u>	<u>2<sup>nd</sup> trimester (same say after 10 weeks)</u>
<u>Which muscle opens mouth?</u>		<u>Geniohyoid (assist lateral pterygoid)</u>
<u>What protrudes hyoid bone?</u>		<u>Geniohyoid'</u>
<u>In dissection of vallecula which one don't you see?</u>		<u>Inferior Laryngeal N.</u>
<u>( Vallecula is a depression, just behind the root of the tongue between the folds in the throat. It serves as a spit trap.)</u>		
<u>Esophagus starting point?</u>		<u>At cricoid cartilage level</u>
		<u>Starts – C6, Enters Diaphragm - T10, Ends – T11</u>
<u>What lab test shows?</u>		<u>Increase-T3,T4 Decrease-TSH</u>
<u>The origin of pons and medulla?</u>		<u>Rhombdocephalon</u>
<u>Where is Raschkow plexus in the pulp?</u>		<u>Cell Free Zone of pulp</u>
<u>Vit C is needed for?</u>		<u>Hydroxylation Proline &amp; Lysine</u>
<u>CASE:</u>		
<u>Female, left back stab at L1-L2 left adjacent to the vertebra 12cm depth,</u>		
<u>has mallory wise bodies on her esophagus,and multiple mass on her uterus.</u>		
<u>What is the cause of the mallory wise body?</u>		<u>Alcoholism</u>
<u>What is the multiple mass on her uterus?</u>		<u>Leiomyoma</u>
<u>Which organ is most likely damaged?</u>		<u>Kidney</u>
<u>END CASE</u>		
<u>The mechanism of action of the tetanus toxin?</u>		<u>Prevent inhibitor neurotransmitter</u>
<u>The toxin of gas gangrene organism has what kind of enzyme active?</u>		<u>Lipase (lecithinase)</u>
<u>Lipid A with polysaccharide core is in which organism?</u>		<u>Gram(-) Bacteria</u>
<u>Clostridium tetani are all of the following?</u>		<u>Gram(+)Anaerobic Spores Rods</u>
<u>The action of the pilli in organism pathogenicity?</u>		<u>Adhesion and attachment to cell</u>
<u>When cardiac muscles start to contract?</u>		<u>Influx of Ca from outside</u>
<u>Regulation of the contraction in smooth muscle?</u>		<u>Myosin light chain kinase</u>
<u>Which molecule is skeletal muscle bind to Ca?)</u>		<u>Troponin C (calmodulin'smooth'm.)</u>
<u>What is intracellular element of glucagon?</u>		<u>cAMP</u>
<u>Mechanism of Graves disease?</u>		<u>Ig against TSH receptor</u>
<u>What narrows the Max buccal vestibule space when you open your mouth all the way?</u>		<u>Coronoid'process'</u>
		<u>(Hyperthyroidism,Autoimmune)</u>
<u>If RBC put in a hypotonic solution, what happens?</u>		<u>Hemolysis</u>
<u>Which one is best for GFR?</u>		<u>Inulin</u>
<u>Which one is not normal flora of nasopharynx?</u>		<u>Bordetella pertusis</u>
		<u>(Gram (+) encapsulated whooping cough)</u>
<u>Which one is not autoimmune disease?</u>		<u>Erythroblastosis fetalis</u>

Centroacinar cell is seen in which organ?	Pancreas
Which one is not a function of the spleen?	Platelet lysis (RBC occurs in fetus)
Which toxin produce scarlet fever?	Erythroxin (exotoxin)
Which one is posterior to Descending aorta?	Right kidney
Which is innervated by Vagus nerve?	Transverse colon
Mechanism of action of rifampin?	RNA synthesis inhibitor (Rifampin inhibits DNA-Dep RNA-Polymerase which directly stops mRNA Transcription)
Which one is the mechanism of action of fluorouracil?	Suicide inhibitor of thymidylate syn-s
Which is not correct about PCR (Polymerase Chain reaction) methods?	Plasmid mediated method/uptake
Histones are synthesized in which phase of cell cycle?	S phase
Which one plays important role in detecting the starting codons on RNA transcription?	Sigma part
DNA finger print is by?	Restriction fragment length polymor
Process of protein synthesis from RNA?	Translation
Lymph of ant mandibular teeth drain to where?	Submental
Serous demilumes in which gland? (Secrete mucous)	Sublingual ( Sublingual gland- purely mucous. Parotid gland- Purely serous. Sublingual gland- mixed secretion.)
Which nerve innervate soft palate?	Lesser palatal n.
Which muscle action is producing sound by approximating two vocal cords?	Later cricothyroid, Trans. arytenoid
The last two branches of the external carotid artery are?	Sup. Temporal and Maxillary arteries
Patient second day after extraction of Max 3 <sup>rd</sup> molars came with hematoma, what is the cause of the hematoma?	Needle Violated pterygoid plexus
Which pathogen most likely involved in abscess of angle of mandible?	Actinomices Israelii (lumpy jaw)
What is the cause of half facial paralysis after IAN(Inferior Alveolar nerve)?	Injection into parotid gland (CN 7, Ipsilateral facial paralysis)
After metabolic or respiratory acidosis, which abnormality or electrolytes is more likely possible?	Hyperkalemia(High Potassium in blood)
In cell, N-glycosylation occurs in where?	Rough Endoplasmic Reticulum
When primary lysosome called secondary?	Primary lysosome combine phagosom
The most common anemia?	Iron deficiency anemia
Which molecule transfer iron in the blood?	Transferrin(Hemoderin-Hemosiderin-Storage comple
Which one is correct about cholesterol synthesis pathway?	Pathway has squalin intermediate
Punched in the face. Angle of mandible had ecchymosis and swelling?	Caused by hematoma(ecchymosis)
Glucose is sequestered by which enzyme?	Hexokinase
What component of teeth does not come from neural crest cells?	Enamel (enamel organ)
Mesial furcation on Max 1 <sup>st</sup> Molar is located where?	Half-way between MB and palatal roo

<u>What intrinsic muscle of larynx is responsible for speech?</u>	<u>Vocalis or Thyroarytenoid m.</u>
<u>If you have tracheotomy, which nerve most likely affected?</u>	<u>Recurrent laryngeal (RLN—is a branch CN 10)</u>
<u>Destruction of anterior pituitary resembles what disease?</u>	<u>Addison's &amp; Hypogonadism</u>
<u>Which ion concentration is in a spore?</u>	<u>Calcium</u>
<u>What type of connective tissue is found in sutures of children?</u>	<u>Hyaline cartilage</u>
<u>8 year old had Max Central Incisor fracture, how long do you wait RCT?</u>	<u>2 years when roots close</u>
<u>Which artery most likely to cause epidural hematoma?</u>	<u>Middle meningeal artery</u>
<u>What is the largest of the paranasal sinuses?</u>	<u>Maxillary sinus</u>
<u>Anterior cerebral artery supplies what lobe?</u>	<u>Frontal &amp; Parietal lobes</u>
<u>Main immunoglobulin found in saliva?</u>	<u>sIgA (secretory IgA)</u>
<u>Why do you not give live attenuated polio vaccine?</u>	<u>Mutate and cause new strain</u>
<u>Where is the phagocyte located in the TMJ?</u>	<u>Synovial Membrane</u>
<u>Which fungus causes cerebral/brain infarct?</u>	<u>Aspergillus (Aflatoxin)</u>
<u>Innervation of the lungs?</u>	<u>Vagus N.</u>
<u>10 week pregnant woman, which doesn't happen?</u>	<u>TMJ formation</u>
<u>What forms the superior orbital fissure?</u>	<u>Great and Less Wing of Sphenoid</u>
<u>What part of the brain controls hunger?</u>	<u>Hypothalamus</u>
<u>What creates laryngeal prominence?</u>	<u>Thyroid cartilage</u>
<u>The part of the hard palate that is directly post. to Max Central incisors is formed from?</u>	<u>Intermaxillary Suture</u>
<u>Person has acute hemorrhage, what occurs?</u>	<u>HR increase, BP decrease</u>
<u>What innervates erector spinae muscles?</u>	<u>Dorsal branches of spinal nerve</u>
<u>Epithelial similarities between proximal convoluted tubule and salivary gland cell?</u>	<u>Striated duct</u>
<u>What part of thyroid is calcitonin from?</u>	<u>Parafollicular cells (C cells)</u>
<u>Which one of these helps in retraction of blood clots?</u>	<u>Factor VIII</u>
<u>The peak of mount Everest at atmospheric pressure is 250Hg,</u> <u>what is partial pressure of oxygen?</u>	<u>50</u>
<u>Cholesterol synthesis, which one is needed?</u>	<u>Squalene</u>
<u>Which will be recognized by restriction enzyme?</u>	<u>ATTA</u>
<u>Which bacteria is capsular?</u>	<u>Strep. Pneumonia – is Bacteria</u> <u>Histoplasma Capsulatum – is Fungi</u>

CASE:

Woman walks into dental office complaining of TMJ. Taking NSAIDs for TMJ, and taking prednisone. She has polymyalgia Rheumatica and osteoarthritis.

<u>Where would she have pain?</u>	<u>Pectoral girdle</u>
<u>What type of disease is Polymyalgia Rheumatica?</u>	<u>Autoimmune</u>
<u>All of the following are related to Polymyalgia Rheumatica except?</u>	<u>1) Muscle pain,</u> <u>2)Stiffness-especially in shoulder,</u>

You perform a dental procedure on person who's taking NSAIDs and is anemic,

she starts to hemorrhage, why? Because platelets aren't sticking NSAIDs

END CASE

Over-Treating with antibiotics, Clostridium Difficile would show? Pseudomembranous Colitis

What is not needed for synthesis of collagen? Folic Acid

Best treatment for Candida? Amphotericin B

Herpes virus is the only virus that gets it's cell wall from? Host Membrane

Hepatitis C is transmitted? Blood Borne

How many chains of heavy chain do you need to change to make it into a variable? 2

Where is the most common site in the lung to have Squamous Cell Carcinoma? Center of lung

Sickle Cell Anemia Hbs what happens? Agglutination & Deoxygenation

What's the most distinguishable factor of gingival mucosa? Rete peg

CASE:

Woman with osteoarthritis

All of these are correct about osteoarthritis except? Fever

Patient gets lesion through spinal nerve T4, and he lays on your chair,

what are you most worried about? Bladder releasing

Corboxyhemoglobin is? Carbon Monoxide

Patient has disorder with insufficiency of ADH? Copious Dilute Urine

Falx cerebri is? Dura mater

Which one of these are visceral branches of abdominal aorta? Celiac & Superior Mesenteric A.

Which one comes from the upper layer of neural tube? Ascending sensory pathway

Hering-Breuer reflex is in regards to what organ? Lung

Hering-Breuer reflex is in regard to? Stretch reflex

If the infundibulum is cut from the hypothalamus, which is affected? ADH

Which rickettsia infection is not from insect bite? Q fever (Coxiella Burneti – mild fly-like symptoms)

N-Muramic Acid is part of the? Bacterial Cell Wall

Which would not be found in the epithelial tissue of oral mucosa? Stratum Lucidum (Dead skin layer)

Lines of own resemble? Lines of Retzius

When trying to prevent formation of uric acid, what do you inhibit? Xanthine oxidase

Where is secretin made? Duodenum

Alzheimer's is a form of dementia and

people with depression are more likely to get Alzheimer's. True & True

Which two bacteria are found in 99% of feces? Bacteroides & Fusobacterium

Which inclusion gives a cell it's basophilic nature? Ribosomes

What happens with primary/initial exposure to HSV1? Pre Herpetic Gingivostomatitis

When does 2<sup>nd</sup> Man Molar complete apex formation? 15 years

Outer component of Hep B is?	Glycoprotein
<u>CASE:</u>	
Man with type II diabetes mellitus and drinks alcohol socially, come in for extraction of tooth #3.	
Why does he have bad breath?	Oral hygiene
All of the following are related to type II diabetes EXCEPT?	Autoimmune (Destroy Beta Cells Pancreas, Type I)
After extraction of tooth you notice histological pseudostratified ciliated epithelium at root tip, what is that from?	Maxillary Sinus
<u>END CASE</u>	
Which endocrine gland is not essential?	Adrenal Medulla
Which of the following is found in Zona Fasciculatis?	Cortisol
What do you find in sweat of a person with cystic fibrosis?	Chloride
During pregnancy which of the following happens in 10 weeks?	Increase-HCG, Progesterone. Decrease-LH, FSH
Why are dental tubules S Shaped?	Compacted/Crowding odontoblasts
What is the purpose of telomerase?	Elongation of telomere
Patient with RCT #3 and Radiolucency did not resolve. The histological section showed non-keratinized epithelium would show?	Options: ↓ Correct answer is Cyst Cyst, abscess, granuloma (Cyst & Abscess are both non-keratinized epithelium, but abscess would resolve after RCT,
During extraction you break the adjacent marginal ridge of amalgam?	Stop and inform the patient
<u>CASE:</u>	
Woman comes into your office complaining that every time she eats she gets a swelling that is painful and large. X-Ray shows radioopacity.	Inflammation of submandibular duct/gland
What's the dx?	Sialolithiasis
What kind of cells would you find when biopsy the duct?	Neutrophils
What type of connective tissue is in the middle portion of the retro-discal pad?	Loose CT
CNVII and CNVIII goes through?	Internal Acoustic Meatus
All will depress respiration except?	Cocaine
UTP-Glucose reacts with which of the following in glycogen synthesis?	Glucose 1 Phosphate
Fumerate connects urea cycle via?	TCA cycle
What's responsible for the dissociated of phosphate group during muscle contractions?	Cocking action
What occurs during tracheostomy?	Reduce airway resistance & dead space
Positive PPD is indicative of all of the following except?	Immune response to Mycobacterium TB
Where is ATP used most in kidney?	Proximal Tubules (most absorption)
In severe blood loss, all of the following occurs in kidney, EXCEPT?	Reduce secretions of Renin
What elicits an immune response when bound to carrier protein?	Hapten
With age, elasticity of aorta decreases, which of the following occurs?	Increase systolic & diastolic

Stretch reflex is?	Monosynaptic (Postural reflex)
Which reekitsial infection is not from insect bite?	Q fever (is from Coxiella Berneti)
Cryptococcus neophormans is?	Fungi (Encapsulated yeast)
Biceps Brachii innervation?	Musculocutaneous
Triceps Brachii inervation?	Radial N.
Where is the ulnar nerve least protected?	Elbow (medial epicondyle)
What's the difference of the small intestine and large intestine?	Villi
The double layer of peritoneum that suspends the jejunum and ileum from the posterior wall of abdomen?	Mesentary
0.05% mouth wash has what PPM( part per million ) Fluoride?	500
All the following between medial & lateral pterygoid heads EXCEPT?	Buccal nerve (goes between lateral)
Smooth muscle?	No intercalated disc (Yes calmodulin)
Heart innervation. The heart or pericardium?	Pericardium>phrenic n.>vagus n.
Nutrients that supply the TMJ are in?	Synovial fluid
Radiolucency on x-ray above so and so tooth, what was it?	Max sinus, Nasal cavity, etc.
How do you detect HIV in blood after infection, what the blood test is looking for?	Elisa-initial screening Ab, Western-conc. protein
What attaches to the cribiform plate?	Crista galli
Difference between primary Max cent and perm mx central?	No mamelons on primary (Primary is shorter incisocervicaly & wider mesiodistaly then perm)
Where is the 2 <sup>nd</sup> Mand molar thickest?	Mesial
Where is the ulnar nerve most vulnerable?	Elbow
What causes macrostomia?	Max and mand processes
What is most likely to cause cancer?	Peutz Jeghers syndrome
Type I collagen has?	Hydroxyproline
What amino acid other than glycine is found in collagen?	Proline, Lysine
Question about elastin	Glycine, Alanine, Valine, Desmosine St
What kind of collagen is found in PDL fibers?	Type I Hydroxyproline most, also type III
Neoplasia about being irreversible cellular change?	Karryohexis (Destructive fragmentation of nucleus of dying cell)
Rest position is 0-1 or 2-4mm?	2-4mm
Among all cell types, what is the most variable cell phase?	G1
<u>CASE:</u>	
75 years old woman, has type I DM, takes insulin and medications for high BP and hypercholesterolemia. She comes in with her breath smelling "fruity"	
What is the cause of her breath smelling fruity?	Hypercholesterolemia
What nerve runs with superior thyroid artery?	Internal Branch Superior Laryngeal N.
All of the following are foramen that are created by 2 bones except?	Infraorbital canal (3 bones)

Where do the 4 <sup>th</sup> , 5 <sup>th</sup> , and 6 <sup>th</sup> intercostal veins drain?	Accessory Hemiazygous V.
Which muscle has the least sensory innervation?)	Diaphragm
Infratemporal fossa contents?	Pterigoid M. Max A. and branches, Pterigoid venous plexus, Branches of Mand division of CN 5
Pterygopalatine Foramen contents (Pterygo Max fissure) ?	Branches of Max N. (Pterigopalatine part of pterigopalatine ganglion)
What connects the nasal cavity and pterygopalatine foramen?	Sphenopalatine foramen
Which of the following is NOT an infrahyoid muscle?	Geniohyoid
Through which cartilage can you perform a tracheotomy?	Cricothyroid membrane (Inf. edge of thyroid Cartilage 2-4 tracheal rings)
What kind of epithelium is found in the nasopharynx?	Pseudo ciliated columnar
Which of the following is a cancer of the adrenal medulla?	Pheochromocytoma
<u>CASE:</u>	
Man has fair skin and has a mole rapidly growing lateral to nose or on alar part of nose, growing fast.	
What is the lesion?	Keratoacanthoma
Most common cause of non-gonococcal urethritis?	Chlamydia
Where does the MF cusp of the Max 1 <sup>st</sup> molar occlude?	MB groove of mand 1 <sup>st</sup> molar
Combining curve of Wilson and curve of Spee?	Compensating curve
Curve of Wilson?	Medial lateral curvature
Curve of Spee?	Antero Posterior curvature
Purine metabolism and precursor of adenosine and guanine?	Inosine monophosphate
Treponema pallidum?	Syphilis
What enzyme do oral bacteria use to create dextrans?	Glucosyl transferase
Immunoglobulin transfer from mother to fetus?	Placentally for IgG (IgA breast)
Which of the following does NOT cause pneumonia?	Strep mutans
Where is intrinsic factor secreted?	Stomach
Where is pepsinogen secreted?	Stomach

CASE:

50 years old male who comes in for ortho tx. Has fixed partial denture on 12-14.

Need to remove the anterior abutment.

What of the following is NOT likely to be a complication of extraction?	One root
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What is a complication of coxsackie virus that can be in oropharynx?	Herpangina
Left maxillary Canine is experiencing sharp pain, what fibers?	A-delta
No sign of decay, what is the most likely cause of the pain?	Max Sinus infection
All of following are characteristics of autoimmune condition EXCEPT?	Erythroblastosis fetalis
What causes secretion of watery saliva?	Parotid Gland (serous)
Serous demilunes?	Sublingual gland
Branches of Celiac trunk?	L Gastric, Common Hepatic, Splenic A.
What two muscles create sling around mandible?	Medial pterygoid and Masseter
Which organ most likely to undergo red infarction?	Lungs
Which organism is not normal flora to the respiratory tract?	Bordetella pertussis (Whooping cough)
What does the anticodon react with?	Codon on the mRNA
What branch of carotid artery not in carotid triangle?	Superficial Temp and Max A.
Punch in throat injury to?	L1
Fracture in the side of the orbit what bone is affected?	Lamina papyracea of ethmoid bone
Blow on the head – conscious coup affected?	Contralateral
Radiolucent line – Zygomatic bone?	Normal suture
Most frequent form of varicosities?	Ventral tongue and legs
What nerve is palmar thumb?	Median n.
What nerve is circumflexion?	Axillary n.
Mediotrusive movement?	Support/guiding
What is the difference between the carotid body and carotid sinus?	Body – chemo, Sinus – baro.
Which pharyngeal arch makes body of hyoid?	2 <sup>nd</sup> Arch
Which pharyngeal pouch creates internal acoustic meatus?	1 <sup>st</sup> pouch
Where does the median nerve innervate?	Flexors
What is the function of the pons?	Motor control and sensory analysis
Pons is derived from?	Metencephalon
What is the crista terminalis and where is it located?	Boundary between sinus venarum and right primitive atrium. SAN to AVN (In Heart)
The ligamentum teres is a remnant of what embryonic structure?	Fetal left umbilical vein (In Liver)
What is the purpose of the ductus arteriosus?	Connects pulmonary artery to aortic arch
What does ductus arteriosus become?	Ligamentum arteriosum (In Heart)
Which primary tooth has the crown of a premolar and roots of molar?	1 <sup>st</sup> Max Molar
What nerves innervate the lung?	Ant post pulm plexus (N vagus)
What nerves are associated with the otic ganglion?	CN IX Glossopharyngeal
What hasn't fused by the 6 <sup>th</sup> week of embryo development?	Max and medial nasal processes
What is the most inferior structure innervated by vagus n.?	Transverse colon
What amino acids are associated with urea cycle?	Arginine, Aspartic acid
What keeps glycolysis going?	Oxaloacetate formation

<u>What carries iron in the plasma?</u>	<u>Transferrin'</u>
<u>Paramyxovirus?</u>	<u>Mumps and measles</u>
<u>Streptococcus breaks down sucrose into what products?</u>	<u>Glucose and Fructose</u>
<u>What enzyme primarily breaks down sucrose?</u>	<u>Sucrase</u>
<u>How is glucose and fructose associated with caries?</u>	<u>Dextran and levan</u>
<u>What amino acid is associated with umami?</u>	<u>L-glutamate</u>
<u>What tissues have PEPCK?</u>	<u>Liver, kidney, fat-tissue</u>
<u>How is epinephrine associated gluconeogenesis and glycogenolysis?</u>	<u>Encourages the pathways</u>
<u>What are the boundaries of the inferior compartment of the TMJ?</u>	<u>Articulating disc and condyle</u>
<u>In what part of the cell cycle does histones condense DNA?</u>	<u>Nucleus</u>
<u>What is the mechanism of Rifampin?</u>	<u>Binds RNA poly, (Inhibit bacterial RNA polymerase, this enzyme is responsible for prevent transcription)</u>
<u>What is the mechanism of sulfonamides?</u>	<u>Dihydropteroate synthetase. Inhibit folate</u>
<u>What is dimorphism in fungus?</u>	<u>Hyphae or yeast</u>
<u>What is the cause of Typhus?</u>	<u>Rickettsia typhi</u>
<u>How is Rickettsia transferred?</u>	<u>Ticks/fleas/lice</u>
<u>What is bladder cancer associated with?</u>	<u>Cigarette smoking</u>
<u>What are the virulence factors of Neisseria Meningitis?</u>	<u>Endotoxin LOS</u>
<u>What is Protein A?</u>	<u>Virulence in Staph Aureus, septic death</u>
<u>What disease causing agents have polysaccharide capsule?</u>	
	<u>Mnemonic Some Killers Have Pretty Nice Capsules</u>
<u>How do pili act as a virulence factor?</u>	<u>Attachment to humans</u>
<u>What do you use to sanitize heat sensitive sterilization?</u>	<u>Ethylene oxide</u>
<u>What are the symptoms of Graves disease?</u>	<u>Exophthalmos</u>
<u>What tumor is associated with myasthenia gravis?</u>	<u>Thyoma</u>
<u>Hand sanitizer?</u>	<u>Isopropyl Alcohol</u>
<u>What is another name of prolactin?</u>	<u>Luteotropic hormone (LTH)</u>
<u>Where is the thoracic duct located?</u>	<u>Between two gooses Azygoose &amp; esophagoose</u>
<u>When does the premolar begin to calcify?</u>	<u>1.5-2.5 year old</u>
<u>What is the cross section of the mandibular central incisor?</u>	<u>Ovoid</u>
<u>What are the lab results of a person that has prostate cancer?</u>	<u>Increase acid phosphatase</u>
<u>What is the substrate of thrombin?</u>	<u>Fibrinogen</u>
<u>What types of cartilage is in the fetus?</u>	<u>Hyaline</u>
<u>Von ebners and parotid gland?</u>	<u>Only serous</u>
<u>What is not absorbed in the jejunum?</u>	<u>Jejunum is there for digestion</u>
<u>What cells secrete bicarbonate?</u>	<u>Parietal Cells</u>
<u>What is the visceral lining that makes up the Bowman's Capsule?</u>	<u>Podocytes</u>
<u>Where in the body has the greatest osmolarity gradient?</u>	<u>Medulla of the kidney</u>

<u>What is the difference between protooncogene vs oncogene?</u>	<u>Proto turn onco by virus/bact, mutation</u>
<u>What does the anterior cerebral artery supply?</u>	<u>Medial parietal, medial surface frontal L.</u>
<u>Innervation that cause rotation of the arm?</u>	<u>C5 - C6</u>
<u>X linked?</u>	<u>Agammaglobulinemia</u>
<u>Multiple Myeloma?</u>	<u>Cancer of the plasma cells in bone marrow</u>
<u>Avian related fungi?</u>	<u>Aspergillosis</u>
<u>The cusp of Maxillary canine contacts where?</u>	<u>Does not contact with anything</u>
<u>Triangular shape of canals at cervical cross section?</u>	<u>Max 2<sup>nd</sup> Molar</u>
<u>Ornithine is an amino acid from?</u>	<u>Urea Cycle</u>
<u>Transports fatty acids from the cytosol into mitochondria in lipolysis?</u>	<u>Carnitine</u>
<u>Fungus associated with birds?</u>	<u>Aspergillosis</u>
<u>Most common organism responsible for endocarditis?</u>	<u>1) Staph Aureus 2) Strep Viridans</u>
<u>Most common endometrial cancer?</u>	<u>Leiocarcinoma</u>
<u>Esophagus begins at what level?</u>	<u>Cricoid cartilage , sternal angle</u>
<u>Histological section of a tori?</u>	<u>Cortical bone with hematopoetic</u>
<u>Where is fat found in the palate?</u>	<u>Anterolateral part of palate</u>
<u>Genes that regulate lipoproteins?)</u>	<u>Lipoprotein lipase + APOC2</u>
<u>LDL receptor?</u>	<u>APOB 100 (Apolipoprotein B Synthesized in liver)</u>
<u>Organism that causes athlete's foot?</u>	<u>Trichophyton</u>
<u>Mechanism of fluoride anti-microbial effect?</u>	<u>enolase inhibitor</u>
<u>Neural crest cells make what?</u>	<u>PNS, meckel's, odontoblasts</u>
<u>Meckel's cartilage makes what?</u>	<u>Incus, malleous, sphenomand lig, lingula</u>
<u>First pharyngeal makes what?</u>	<u>Auditory tube and tympanic cavity</u>
<u>What makes the malleous and incus?</u>	<u>1<sup>st</sup> Arch (meckels)</u>
<u>Sabauras agar?</u>	<u>Fungal growth medium</u>
<u>Shoulder pain involves what nerves?</u>	<u>T1,T2</u>
<u>What innervates the middle finger?</u>	<u>C7 (C5-T1)</u>
<u>What innervates the ring finger?</u>	<u>C8 (C8-T1)</u>
<u>If a person can't flex their wrist, what nerves are involved?</u>	<u>C6-C7 flexor ulnar/median</u>
<u>What are the visceral branches of the abdominal aorta?</u>	<u>Celiac, Sup/Inf Mesenterics, gonadal, renal</u>
<u>What salivary cells resemble pancreatic ductal cells?</u>	<u>Parotid gland</u>
<u>What promotes secretion and effects of CCK, GIP, Gastrin, Secretin?</u>	<u>Gastric distention</u>
<u>Function of parathyroid?</u>	<u>Calcium regulation</u>
<u>Purpose of ethylene oxide?</u>	<u>Sterilize heat sensitive items</u>
<u>Advantage of using dry heat over autoclaving?</u>	<u>No dulling effect</u>
<u>What nerve is involved in blinking?</u>	<u>CN V &amp; VII</u>
<u>Root most likely to perforate Max sinus?</u>	<u>Palatal root of max 1<sup>st</sup> molar.</u>
<u>What is on the outer edge of the lateral wall of the ethmoid sinus?</u>	<u>Orbit of the eye</u>

What other infections resemble TB symptoms?	Histoplasma Capsulatum
What is the name of mass after fertilization but before implantation?	Blastocyst
Chromosome of Klinefelters?	47XXY
What ions are found in saliva?	Calcium
What type of tissue covers the condylar surface in 10 year old?	Fibrocartilage
Where is synovial fluid produced?	Type B synoviocytes
What causes microangioma in diabetes?	Small vessels
What area of the brain is the central relaying station?	Thalamus
What part of the brain makes you vomit?	CNX enteric system (medulla)
What develops into the hard palate?	Lateral shelves
What are the symptoms of trisomy 21?	Wide neck, flat nose, small mouth
What disease are involved in lysosomal deficiency?	Newman Pick-sph, Gaucher-gluco, Taysach
What is the reason leukemic patients bleed?	Decrease in platelets
How do you tell the difference between mucous and serous cell in histo?	Mucous: foamy, dark nuclei
Of all intracellular fluid what takes up the most volume?	Potassium>Phosphate. (Extracellular- NaCl)
Where does spermatogenesis occur?	Epididymis
What innervates the Max 2 <sup>nd</sup> PM?	Middle superior alveolar n.
What is the most distal portion of the brachial plexus?	3 cords
How is arbovirus transmitted?	Arthropods
How is typhus transmitted?	Arthropods (fleas, ticks, lice) Rickettsia
What nerve is the submandibular ganglion associated with?	Lingual N. CN V, Chordatympani CN VII
What innervates the spinal erector muscles?	Dorsal Ramus of spinal nerve
Where does the inferior thyroid artery come from?	Subclavian A. not ECA
What process makes NADPH?	Pentose pathway shunt
What is the main source of glycerol?	Fats
What is the chemical formula of the most common salt found in bone?	HAP Ca <sub>10</sub> (PO <sub>4</sub> ) <sub>6</sub> (OH) <sub>2</sub>
What enzyme produces oxaloacetate?	Pyruvate carboxylate & malate dehydrog
Where does the sigmoid sinus drain?	Internal jugular vein
What innervates the brachialis muscles?	Musculocutaneous
Where is perikaryon cell bodies of sympath nerves located?	Dorsal root ganglion
Arterial pO <sub>2</sub> is most similar to what?	100mmHg alveolar pO <sub>2</sub>
What does pH = pKa?	Isoelectric point
Systemic candidiasis?	Histo, crypto, coccidio
Which fungus are dimorphic?	H.Capsulatum, B.Dermotide, C.Immitis
Organisms that exhibit dimorphism and grow on Sabouraud's medium?	Fungi'
Fungal organism not found in soil?	Blastomycosis & Cryptococcus. Neoforman in soil
Final nitrogen donor for urea?	Arginine
Pain sensation goes over?	Lateral spinothalamic tract

What is the function of telomeres?	Binding site for primers for eukaryotes
Diabetes Mellitus Type II?	Not autoimmune
Is there a carrier state in Hep C?	Yes
Acetyl choline does what to erector pilli?	Binds muscurinic receptors, erects muscle
Man has paralysis under left on right half of his face under eye lid, where did stroke start?	Left parietal lobe
Fumarase is what type of enzyme?	Isozyme
What does fumarate do in the urea cycle?	Connects urea to TCA
Embryology what makes up the area posterior to the Max Incisor?	Lateral palatine shelves
Dentist extracts 2 <sup>nd</sup> Max Molar and finds ciliated transition epi from?	Max sinus
Hygienist accidently cuts patient 1cm from midline distal Max 2 <sup>nd</sup> Molar, what muscle is not damaged?	Uvula
Patient is bleeding profusely from what artery?	Greater palatine artery
Sphingomyelin?	Not responsible for RBC recognition
What is not in the CNS?	Schwann cells (They're in PNS)
What doesn't innervate parotid gland?	FEAR is what is in the gland (Sens. Innervation Auriculotemporal N. – Gland Great Auricular N. – Fascia Parasympathetic: Glossopharyngeal N. – Otic Ganglion – Parotid gland Sympathetic: Sup. Cerviacal ganglion)
What role does ATP play during the actin myosin interaction?	ATP binds to myosin forming > myosin-ADP bond complex
What line contracts the most in a sarcomere?	Z line
Which type of white blood cell is the least abundant?	Basophils
What is likely cause of pulmonary embolism?	Thrombophlebitis
What nerve passes through superior and middle constrictor?	Glossopharyngeal
What would you find in the sweat of a person with cystic fibrosis?	Chlorine
What are the two most abundant species of bacteria found in feces?	Bacteroides and Fusobacterium
What stage does methotrexate stop cell mitosis?	S Synthesis
What cells in the glomerulus have brush borders and are pyramids?	PCT (Proximal Convoluted Tube) cells
Alzheimer's and depression are related.	True
Amyloid deposit related to Alzheimer's?	True ( Beta amyloid )
What is the most common bacteria vaccine given in US?	DTaP (Children under age 7 )
Which bacteria gets it's virulence from sugar capsules?	Bacillus or clostridium
Bacterial cell wall is made of?	N-Acetyl Muramic Acid

Which is not correct about PCR methods?	Plasma mediated or plasma uptake NOT true
Xanidase oxidase?	Uric Acid
What is needed for collagen synthesis?	Vit C
Kidney substance filtered and secreted. The clearance rate is?	>Inulin
Regulation of FI in diet?	Bone/urine
Nerve exits stylomastoid foramen and get damage, what's affected?	Obucaloris Oris
Which of the following fungal infections is AVIAN related?	H. Capsulatum
Line of Retzius?	Resemble line of Owen in dentin
Which of PDL fibers is most numerous?	Oblique
Periodontal disease with osteoclastic bones what cytokine?	IgG
Travelers diarrhea?	E. Coli
Arginine is in?	Urea Cycle
What is a precursor of urea in urea cycle?	Arginine
Middle of the wrist innervation?	Median n.
Typhus?	Rickettsia
Discoïd lupus and can't open mouth?	Reynauld Syndrome
What will cover the hard palate after an ulceration heals?	Parakaratinized strat squam epithelium
Asthma patient is on albuterol/HBP meds what dental complication?	Orthostatic hypotension
Macula densa?	Dense CT
Macrostomia?	Failure of Max/Mand processes to fuse
Osteoclast is a?	Monocyte
Implant patient which cells will be most actively dividing?	Osteoprogenitor cells
Lesser petrosal N. travels through what foramen?	Foramen ovale (Parotid gland)
Postural reflex?	Stretch reflex
Pheochromocytoma?	Adrenal medulla (Tumor, result of too much Epi. & Norepi. release)
Which structure has both afferent and efferent vessels?	Lymph nodes
Where is lactase made?	Brush border or small intestine villi
The swallowing center 2 <sup>nd</sup> stage of deglutination is located?	Medulla
Myocardial infarction?	Coagulative necrosis
Highest cusp in a mandibular Y shape premolar is?	Lingual cusps (The Biggest B>ML>DL)
The most common fungal disease in human?	Trichophyton
What is the committed step in the cell cycle?	Cyclin-E/CDK2 complex of G1 to S phase
Artery occluded what causes the heart myocyte damage?	Infarct
Which sugar is not absorbed in small intestines?	Maltose
Which part of the arm is the most susceptible to ulnar nerve injury?	Elbow
Which muscle is innervated by radial nerve?	Triceps
Which mediastinum is the heart) located in?	Middle
The facial nerve exits which foramen?	1) Int. Acoustic meatus 2) Stylomastoid

What exits the thorax at T12?	Descending aorta
The medial border of the infratemporal fossa?	The pterygomaxillary fissure
The motor innervation to the muscles of mastication exit foramen?	Ovale
Preganglionic parasympathetic fibers exit which foramen?	Foramen ovale
Which of the following is NOT associated with cavernous sinus?	Optic nerve
Bullet enters above the eyebrow and exits posterior skull, what bones are not affected?	Temporal & Maxillary
What makes up the mandibular sling?	Medial Pterygoid and Masseter
What inserts on coronoid process?	Temporalis m.
Taste fibers are innervated by all of the following except?	CN V
What structure is posterior to the carotid sheath that runs along the longus capitis muscle?	Sympathetic chain ganglia
Direct branch of the celiac trunk?	Splenic A. (also Gastric and Hepatic A.)
What will you find in a Howship lacunae?	Osteoclasts
What are affected in Lines of Owen?	Odontoblasts
Secretion of ameloblasts is dependent on?	Laying down pre-dentin
Function of the pulp?	Primary Make dentin, Secd. Supply and Sensitiv
What is responsible for stretching the vocal cords?	Cricothyroid m.
Which endocrine organ is not necessary for life?	Adrenal medulla
Soft bolus of food sensed by?	Mucosal mechanoreceptors (Merkel's disk & Ruffini corp)
Bit hard on popcorn kernel what stops biting?	Periodontal mechanoreceptors
Muscles of mastication are in equilibrium in?	Resting position (postural)
Transmits from thalamus to cortex?	Internal capsule
Which amino acids have hydrocarbon side-chains?	Valine, Leucine, Isoleucine, Phenylalanine
Direct precursor of urea?	Arginine
Product of the enzyme of isocitrate dehydrogenase in TCA cycle?	A-ketoglutarate + CO <sub>2</sub>
Purpose of low carbohydrate diet?	Keep serum levels of insulin down
What does Fluoride replace when applied on teeth?	Hydroxyl group. HAP > FAP
Most common cause of hepatomegaly?	Fatty change or hepatitis
What do you want to inhibit in a person with gout?	Xanthine oxidase
Something about southern blotting?	DNA analysis
B12?	Intrinsic factor
Vitamin K?	Blood clotting
B6?	Transaminase reactions
Precursor of purine synthesis de novo?	IMP (inosine monophosphate)
Which organ doesn't make estrogen?	Adrenal medulla (Cortex makes it)
Milk ejection is a result of?	Oxytocin (Peptide hormone produced in Hypothalamus and released by Posterior Pituitary.)



<u>Epinurium is what?</u>	Outer most layer of CT around PNS nerve
<u>Medium sized arteries have?</u>	Thick tunica media
<u>Difference between colon and all other part of GI tract?</u>	Colon doesn't have any villi
<u>Know the osteoprogenitor cells?</u>	Osteoblast by BMP, TGF-B, PDGF
<u>The demilunes on top of mucous cells is?</u>	Serous
<u>What produces mucous in lungs?</u>	Clara cells
<u>Max canine erupt when?</u>	11-12 years
<u>Dens in dente higher frequency in which tooth?</u>	7 or 10. Lat. incisors
<u>Peritubular dentin (intratubular) is?</u>	Most highly mineralized
<u>Ulnar nerve injury is highest in what area?</u>	Elbow
<u>What type of bone do you see after 2-3 years at the site of injury?</u>	Compact bone ( Woven bone 1-3 weeks Lamellar bone 1-3-years Compact bone 1-3 years Remodeling bone 4-5 years )
<u>Auerbach's plexus?</u>	Both parasympathetic and sympathetic
<u>Meisseiner plexus?</u>	Only parasympathetic
<u>Testosterone is made in what type of cell?</u>	Leydig cells
<u>Muscles of mastication from which brachial arch?</u>	Arch 1
<u>Radial nerve innervated what muscle?</u>	Triceps
<u>Centric relation is what type of position?</u>	Most repeatable
<u>Rest position is determined by what?</u>	Musculature
<u>Curve of spee?</u>	Anterior posterior of occlusal plane
<u>Whats the sum of curve of Spee and Wilson?</u>	Compensating curve
<u>What's in between both 8 &amp; 9?</u>	Intermaxillary suture or Mesiodens
<u>The developing permanent come in in what relationship to primary?</u>	Lingual
<u>The oldest enamel or 1<sup>st</sup> sign of the development of the anterior teeth?</u>	Incisal edge
<u>In electron microscope vs the other ones you what?</u>	Can't view living tissue
<u>Frow fungus on what kind of agar?</u>	Sabouraud agar
<u>Rickets?</u>	Vit D deficient in kids \ Osteomalacia-Adults
<u>Knee Jerk reflex?</u>	Monosynaptic reflex arc
<u>Sensation from face will be sensed where?</u>	Somatosensory cortex
<u>Them most common cause of portal hypertension?</u>	Cirrhosis of liver
<u>What arteries supply thyroid gland?</u>	Branch ECA & Branch of thyrocervical
<u>How to convert mg of Fl into ppm. Ie 500mg is?</u>	05% ppm
<u>The arteries that supply the thyroid gland?</u>	From thyrocervical trunk and ECA

*“ Believe in miracles,  
Hope is never lost ”*