

HOMEWORK FOR THE YEAR

WHEN YOU HAVE A QUIZ, EXAM, OR WE MOVE ONTO A NEW UNIT START THE NEXT ONE!!!!

IF YOU HAVE QUESTIONS --- ASK

THEY WILL ALSO BE IN THE DAY TO DAY NOTES ON THE SMART BOARD

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Homework = Read pages 3-9 and 10 - 15

Do review questions 1 & 2 pg 9 and 2 & 3 pg 15

Key Terms – science, observation, inference, hypothesis, controlled experiment, independent variable, dependent variable, control group, data, theory, bias

Homework = read pages 17 – 25

Do all review questions 1,2,3 pg 25 .

Key Terms = biology, DNA, stimulus, sexual reproduction, asexual reproduction, homeostasis, metabolism, biosphere, cells, growth, nutrition

Homework = read pages 34 - 53

Do all review questions 1,2,3 pg 38 & 1,2,3 pg 44 & 1,2 pg 49 & 2,3 pg 53 .

Key Terms = atom, nucleus, electron, element, isotope, compound, ionic bond, ion, covalent bond, molecule, hydrogen bond, cohesion, adhesion, mixture, solution, solute, solvent, suspension, pH scale, acid, base, buffer, monomer, polymer, carbohydrate, monosaccharide, lipid, nucleic acid, nucleotide, protein, amino acid, chemical reaction, reactant, product, activation energy, catalyst, enzyme, substrate

Homework = read pages 189 - 217

Do review questions 3 pg 194 & 4,5 pg 205 & 1,2 pg 213 & 1 pg 217

Key Terms = cell, cell theory, cell membrane, nucleus, eukaryote, prokaryote, light microscope, diffusion, endocytosis, exocytosis, cytoplasm, organelle, vacuole, lysosome, cytoskeleton, centriole, ribosome, endoplasmic reticulum, Golgi apparatus (Golgi body), chloroplast, mitochondria, ATP, cell wall, lipid bilayer, selectively permeable, semi-permeable, facilitated diffusion, osmosis, isotonic, hypertonic, hypotonic, osmotic pressure, turgor pressure, homeostasis, tissue, organ, organ system, receptor

KNOW – Hooke, Leuenhooke, Schleiden, Schwann, Virchow

- **Cell Theory**

Homework = Answer the following questions:

Why is cell communication important and how does it work?

Describe how each of the receptors work.

Describe diffusion and osmosis.

Describe the sodium potassium pump.

Homework = read pages 225 – 241

Do review questions 1,2 pg 228 & 1,2 pg 234 & 3 pg 241

Summarize the three stages of photosynthesis and where each one takes place.

What is the chemical formula of photosynthesis?

How do the stages of photosynthesis depend on the previous stage?

Key Terms – adenosine triphosphate, heterotroph, autotroph, photosynthesis, pigment, chlorophyll, thylakoid, stroma, NADP, light dependent reactions, light independent reactions (dark reactions), photosystem, electron transport chain, ATP synthase, Calvin cycle

Homework = read pages 249 - 265

Answer review questions 1,3,4 pg 260, 1,2 pg 265.

Key terms = calorie, cellular respiration, aerobic, anaerobic, glycolysis, NAD, Krebs cycle, matrix, fermentation, bacteria, lactic acid, alcohol fermentation

Homework = complete these help / review questions

- Where does the glucose come from that is in your body?
- Where does the oxygen come from that you use?
- What is the role of the oxygen atom?
- What are the differences between how a car burns gasoline and how your body burns glucose?

Homework= Read pages 274 – 285 & 323 – 329, & 426,427

Do review questions 1 pg 278, & 1 pg 284, 3 pg 329, &

and:

Explain the significance of sex chromosomes.

What causes genetic variation in offspring? (3 major events or processes)

Key Terms: cell division, asexual reproduction, sexual reproduction, chromosome, chromatin, cell cycle, interphase, mitosis, cytokinesis, prophase, centromere, chromatid, centriole, metaphase, anaphase, telophase, homologous, diploid, haploid, meiosis, crossing-over, zygote, allele, gene, cloning

Human cloning paper

Homework = Read pages 286 – 290, & 338 – 353, & 372 - 376

Do review questions 2 pg 290, 3 pg 343, 1,2 pg 348, 2 pg 376

Key terms = cancer, tumor, benign, malignant, lymphoma, carcinoma, leukemia, mutagen, carcinogen, germ cell mutation, somatic cell mutation, gamete, oncogene, transformation, bacteriophage, base pairing, plasmid, mutation, point mutation, frameshift mutation, polyploidy

Homework = read pages 350 - 353

Do review questions 1,2 pg 353

Key terms = nucleotide, double helix, mutagen, nitrogen base, DNA, replication, DNA polymerase, telomere

Homework = read pages 361 – 371, 377 - 383

Do review questions 1 & 2 pg 365, 1,3 pg 371, 3 pg 383

Key terms = RNA, messenger RNA, ribosomal RNA, transfer RNA, transcription, RNA polymerase, promoter, intron, exon, polypeptide, genetic code, codon, translation, anticodon, gene expression, operon, operator, RNA interference, differentiation, homeotic gene, homeobox gene, Hox gene

Homework = read pages 391 – 410 & 418 - 439

Do review questions 2 pg 397, 1,2 pg 401, 1,2 pg 409, 1,2 pg 427, 1,2,3 pg 434, 1,2 pg 439.

Key terms = genome, karyotype, sex chromosomes, autosome, sex-linked gene, pedigree, nondisjunction, restriction enzymes, gel electrophoresis, bioinformatics, genomics, selective breeding, hybridization, inbreeding, biotechnology, polymerase chain reaction, recombinant DNA, plasmid, genetic marker, transgenic, clone, gene therapy, DNA fingerprinting, forensics

Homework = read pages 553 -558, 450 – 473 & 538 - 552

Do review questions 3 pg 558, 2 pg 458, 1,2 pg 464, 3 pg 473, 1,pg 545, .

Key terms = endosymbiotic theory, evolution, fossil, artificial selection, adaptation, fitness, natural selection, biogeography, homologous structure, analogous structure, vestigial structure, extinct, half-life, geologic time scale, gradualism, punctuated equilibrium, adaptive radiation, convergent evolution, coevolution

Homework = Evidence of Evolution Worksheet

Homework = read pages 482 – 497 & 510 - 514

Do review questions 1,2 pg 486, 1,3 pg 492,

Key terms = gene pool, allele frequency, single gene trait, polygenetic trait, directional selection, stabilizing selection, disruptive selection, genetic drift, bottleneck effect, founder effect, genetic equilibrium, Hardy-Weinberg principle, sexual selection, species, speciation, reproductive isolation, behavioral isolation, geographic isolation, temporal isolation, binomial nomenclature, genus, systematics, taxon, family, order class, phylum, kingdom

Homework = Read pages – 634 – 638, 646 – 654, 680 – 684, 696 - 707

Do review questions 1,2 pg 638, 1 pg 649, 1,2 pg 684, 1,2 pg 707 and:

Be able to label a diagram of a flower and explain the function of each.

Describe some of the requirements for some seeds to germinate.

What is required for all seeds to germinate?

Key terms: sporophyte, gametophyte, seed, gymnosperm, angiosperm, pollen grain, pollination, seed coat, ovule, pollen tube, ovary, fruit, cotyledon, monocot, dicot, woody plant, herbaceous plant, stoma, guard cell, cuticle, xylem, phloem, palisade layer, spongy layer, sepal, petal, stamen, pistil, stigma, anther, filament, style, double fertilization, grafting, germination, dormancy

Homework = Read pages 988 - 1001 & 292 - 297

Review Questions 2 pg 1001, 2,3 pg 297

Key terms = puberty, testis, scrotum, seminiferous tubule, epididymis, vas deferens, semen, ovary, menstrual cycle, ovulation, corpus luteum, menstruation, sexually transmitted disease, zygote, blastocyst, implantation, gastrulation, neurulation, placenta, fetus, embryo, differentiation, stem cell, abortion, miscarriage

Homework = read pages 922 - 927

Do review questions 2 pg 927

Key terms = bone marrow, cartilage, ossification, joint, ligament,

Homework = read pages 928 - 933

Do review questions 1,2,3 pg 933

Key Terms = muscle fiber, myofibril, myosin, actin, sarcomere, neuromuscular junction, tendon

Homework = read 954 – 961, 935 - 939

Do review questions 1,2 pg 961, 1 pg 939

Key terms = plasma, red blood cells, hemoglobin, white blood cells, platelet, lymph, epidermis, keratin, melanin, dermis, sebaceous gland, hair follicle

Homework = read pages 882 - 887

Review questions 1,2,3 pg 887

Key terms = kidney, nephron, filtration, reabsorption, excretion, ureter, urinary bladder, urethra, Bowman's capsule

Homework = read pages 896 - 904

Do review questions 3 pg 900, 2 pg 904

Key terms = neuron, nerve, dendrite, axon, myelin sheath, synapse, neurotransmitter, central nervous system, peripheral nervous system, cerebrum, cerebellum, hypothalamus, sensory neuron, reflex, autonomic nervous system, brain stem, dopamine

Homework = read pages 948 - 953

Do review questions 3 pg 953

Key Terms = myocardium, atrium, ventricle, valve, pulmonary circulation, systemic circulation, pacemaker, artery, capillary, vein, blood pressure, cardiovascular disease, hypertension

Homework = read pages 868 - 881

Do review questions 1,2 pg 873, 2, 3 pg 881.

Key terms = calorie, carbohydrate, fat, protein, vitamin, mineral, mechanical digestion, chemical digestion, amylase, esophagus, peristalsis, stomach, pepsin, small intestine, villus, micro villus, large intestine

Homework = read 963 - 969

Review question 2 pg 969

Key terms = pharynx, trachea, larynx, bronchus, alveolus, diaphragm, inhalation, exhalation, asthma, emphysema, lung cancer

Homework = read pages 978 – 987 & 1010 - 1027

Do review questions 1,2 pg 981, 2 pg 987, 1,2 pg 1013, 2,3 pg 1019, 1,3 pg 1022, 1 pg 1027.

Key terms = hormone, target cell, exocrine gland, endocrine gland, pituitary gland, releasing hormone, corticosteroid, epinephrine, norepinephrine, thyroxine, calcitonin, parathyroid hormone, infectious disease, germ theory of disease, Koch's postulates, zoonosis, vector, inflammatory response, histamine, interferon, fever, immune response, antigen, antibody, humoral immunity, cell-mediated immunity, vaccination, active immunity, passive immunity, allergy, asthma

Homework = 64 - 145

Do all review questions 1,2,3 pg 68, 1 pg 72, 1,2 pg 78, 4 pg 86, 1,2,3,4 pg 104, 1,2 pg 109, 1,3pg 121, 1,2,3,4 pg 135, 1,2 pg 141

Key terms = biosphere, species, population, community, ecology, ecosystem, biome, biotic factor, abiotic factor, autotroph, primary producer, photosynthesis, chemosynthesis, heterotroph, consumer, carnivore, herbivore, scavenger, omnivore, decomposer, detritivore, food chain, phytoplankton, food web, zooplankton, trophic level, ecological pyramid, biomass, nutrient, limiting nutrient, weather, climate, microclimate, greenhouse effect, tolerance, habitat, niche, resource, predation, herbivory, keystone species, symbiosis, mutualism, parasitism, commensalism, ecological succession, primary succession, pioneer species, secondary succession, wetland, population density, carrying capacity, limiting factor, demography

Homework = read pages 154 - 179

Do review questions 1,2 pg 157, 1,2 pg 165, 1a,1b,2 pg 172, 1,2 pg 179.

Key terms = monoculture, renewable resource, nonrenewable resource, sustainable development, desertification, deforestation, pollutant, biological magnification (bioaccumulation), smog, acid rain, biodiversity, ecosystem diversity, species diversity, genetic diversity, habitat fragmentation, ecological hot spot, ecological footprint, ozone layer, aquaculture, global warming