

## Unit 6: Plant Form and Function

### Chapter 35

apical dominance  
apical meristem  
axillary bud  
bark  
blade  
cork cambium  
cortex  
cuticle  
dermal tissue system  
determinate growth  
endodermis  
epidermis  
guard cells  
indeterminate growth

lateral meristem  
lateral root  
leaf  
leaf primordia  
meristem  
meristem identity gene  
mesophyll  
morphogenesis  
node  
pattern formation  
petiole  
phloem  
pith  
primary growth

root  
root cap  
root hair  
secondary growth  
sieve-tube elements  
stele  
stem  
stomata  
taproot  
terminal bud  
tissue  
vascular cambium  
vein  
xylem

### Chapter 36

abscisic acid (ABA)  
apoplast  
aquaporin  
Casparian strip  
circadian rhythm  
cohesion-tension hypothesis  
flaccid

mycorrhizae  
phloem sap  
plasmolysis  
pressure potential  
solute potential  
sugar sink  
sugar source

transpiration  
turgid  
turgor pressure  
water potential  
wilting  
xylem sap

### Chapter 37

cation exchange  
crop rotation  
ectomycorrhizae  
endomycorrhizae  
epiphyte  
essential element  
fertilization  
humus

hydroponic culture  
macronutrient  
micronutrient  
mycorrhizae  
nitrogen cycle  
nitrogen fixation  
nitrogen-fixing bacteria  
no-till agriculture

nodule  
phytoremediation  
rhizosphere  
soil horizons  
sustainable agriculture  
topsoil

### Chapter 38

accessory fruit  
aggregate fruit  
anther  
asexual reproduction  
biofuels  
carpel  
coevolution  
dormancy  
double fertilization  
endosperm

fruit  
megaspore  
microspore  
multiple fruit  
ovary  
ovule  
petal  
pistil  
pollen grain  
pollen tube

pollination  
seed coat  
self-incompatibility  
sepal  
simple fruit  
stamen  
stigma  
style  
transgenic  
vegetative reproduction

### Chapter 39

abiotic  
action potential  
action spectrum  
apoptosis  
auxin  
avirulent  
biotic  
cytokinins  
day-neutral plant

ethylene  
gene-for-gene recognition  
gibberellins  
gravitropism  
heat-shock protein  
hormone  
hypersensitive response (HR)  
long-day plant  
photomorphogenesis

photoperiodism  
phototropism  
salicylic acid  
senescence  
short-day plant  
systemic acquired resistance (SAR)  
tropism  
virulent

## Unit 7: Animal Form and Function

### Chapter 40

adipose tissue  
anatomy  
basal metabolic rate (BMR)  
cardiac muscle  
cartilage  
columnar  
connective tissue  
countercurrent exchange  
cuboidal  
ectothermic  
endothermic  
epithelial tissue  
glial cells  
hibernation

homeostasis  
hypothalamus  
integumentary system  
interstitial fluid  
ligament  
macrophage  
metabolic rate  
negative feedback  
neuron  
organ  
organ system  
osteoblast  
physiology  
positive feedback

response  
set point  
simple epithelium  
skeletal muscle (striated muscle)  
smooth muscle  
squamous  
standard metabolic rate (SMR)  
stimulus  
stratified epithelium  
striated muscle  
tendon  
thermoregulation  
tissue  
torpor

### Chapter 41

absorption  
alimentary canal  
amylase  
appendix  
bile  
bulk feeder  
carnivore  
colon  
digestion  
enzymatic hydrolysis  
essential amino acid  
essential fatty acids  
essential nutrient

filter feeder  
fluid feeder  
gastric juice  
hepatic portal vein  
herbivore  
large intestine  
liver  
malnourished  
microvillus  
mineral  
mucus  
nutrition  
omnivore

overnourishment  
pancreas  
pepsin  
peristalsis  
protease  
salivary glands  
small intestine  
sphincter  
stomach  
substrate feeder  
suspension feeder  
undernourishment  
vitamin

### Chapter 42

alveolus  
artery  
atherosclerosis  
atrioventricular valve  
atrium  
blood pressure  
bronchiole  
capillary  
cardiac cycle  
cardiac output  
cardiovascular system  
closed circulatory system  
countercurrent exchange  
diaphragm  
diastole  
double circulation

electrocardiogram (ECG or EKG)  
erythrocyte  
gas exchange  
gill  
heart  
heart attack  
heart murmur  
heart rate  
hemoglobin  
hemolymph  
hemophilia  
high-density lipoprotein (HDL)  
hypertension  
leukocyte  
low-density lipoprotein (LDL)  
lung

lymph  
lymph node  
lymphatic system  
open circulatory system  
pacemaker  
plasma  
platelet  
pulse  
stem cell  
stroke  
systole  
trachea  
vasoconstriction  
vasodilation  
vein  
ventricle

### Chapter 43

adaptive immunity  
active immunity  
acquired immunodeficiency syndrome (AIDS)  
allergens  
antibody  
antigen  
antigen receptor  
autoimmune disease  
B lymphocyte (B cell)  
cytotoxic T cell

helper T cell  
histamine  
human immunodeficiency virus (HIV)  
humoral immune response  
immune system  
immunization  
inflammatory response  
innate immunity  
interferon  
lymphocyte  
lysozyme

macrophage  
memory cell  
natural killer (NK) cell  
neutrophil  
passive immunity  
phagocytosis  
primary immune response  
secondary immune response  
T lymphocyte (T cell)  
vaccination

#### Chapter 44

aldosterone  
ammonia  
antidiuretic hormone (ADH)  
atrial natriuretic peptide (ANP)  
Bowman's capsule  
collecting duct  
cortical nephrons  
distal tubule  
excretion  
filtrate

filtration  
glomerulus  
kidneys  
loop of Henle  
nephron  
osmolarity  
osmoregulation  
proximal tubule  
reabsorption  
renal cortex

renal medulla  
renal pelvis  
secretion  
transport epithelium  
urea  
ureter  
urethra  
uric acid  
urinary bladder  
vasa recta

#### Chapter 45

adrenal gland  
autocrine  
diabetes mellitus  
endocrine gland  
endocrine system  
endorphin  
epinephrine  
estrogen  
glucagon  
growth factor  
growth hormone (GH)

hormone  
hypothalamus  
insulin  
insulin-like growth factor (IGF)  
islets of Langerhans  
local regulators  
melanocyte-stimulating hormone (MSH)  
melatonin  
neurohormones  
neurotransmitters  
norepinephrine

oxytocin  
pancreas  
paracrine  
pheromones  
pituitary gland  
progesterone  
signal transduction  
testosterone  
thyroid gland  
thyroid-stimulating hormone (TSH)  
tropic hormone

#### Chapter 46

asexual reproduction  
budding  
cleavage  
cloaca  
conception  
contraception  
corpus luteum  
ectopic  
egg  
endometrium  
endometriosis  
estrous cycle  
external fertilization  
fertilization  
fetus  
gamete

gametogenesis  
gestation  
gonads  
hermaphroditism  
in vitro fertilization  
internal fertilization  
labor  
lactation  
mammary glands  
menopause  
menstruation  
natural family planning  
oocyte  
oogenesis  
organogenesis  
ovary

ovulation  
parthenogenesis  
placenta  
pregnancy  
primary oocyte  
secondary oocyte  
sexual reproduction  
sperm  
spermatogenesis  
trimester  
urethra  
uterus  
vasectomy  
zygote

#### Chapter 47

amniote  
animal pole  
apoptosis  
blastocoel  
blastocyst  
blastomere  
blastopore  
blastula  
cadherins  
cleavage  
determination

differentiation  
ectoderm  
endoderm  
fast block to polyspermy  
gastrula  
gastrulation  
germ layers  
inner cell mass  
mesoderm  
model organisms  
morphogenesis

neural crest  
neural tube  
notochord  
organogenesis  
pattern formation  
positional information  
slow block to polyspermy  
totipotent  
vegetal pole  
yolk

#### Chapter 48

action potential  
axon  
brain  
cell body  
central nervous system (CNS)  
dendrite  
depolarization  
dopamine  
endorphin  
equilibrium potential  
excitatory postsynaptic potential  
ganglion

glia  
hyperpolarization  
inhibitory postsynaptic potential (IPSP)  
interneuron  
ion channels  
ligand-gated ion channel  
membrane potential  
motor neuron  
myelin sheath  
nerve  
neuron  
neurotransmitter

nodes of Ranvier  
norepinephrine  
oligodendrocyte  
peripheral nervous system (PNS)  
resting potential  
Schwann cell  
sensory neuron  
serotonin  
synapse  
threshold  
voltage-gated ion channel

#### Chapter 49

Alzheimer's disease  
amygdala  
autonomic nervous system  
biological clock  
bipolar disorder  
blood-brain barrier  
brainstem  
cerebellum  
cerebral cortex  
cerebrospinal fluid

cerebrum  
corpus callosum  
forebrain  
gray matter  
hindbrain  
hypothalamus  
long-term memory  
medulla oblongata  
midbrain  
nerve net

neural plasticity  
parasympathetic division  
Parkinson's disease  
pons  
reflex  
schizophrenia  
short-term memory  
sympathetic division  
thalamus  
white matter

#### Chapter 50

amplification  
cardiac muscle  
chemoreceptor  
compound eye  
cone  
endoskeleton  
exoskeleton  
fast-twitch fibers  
I band  
intercalated disk  
iris  
lens  
mechanoreceptor  
middle ear

motor unit  
myoglobin  
olfaction  
outer ear  
pain receptor  
perception  
peristalsis  
photoreceptor  
pupil  
receptor potential  
retina  
rhodopsin  
rod  
sarcomere

sensory adaptation  
sensory reception  
sensory transduction  
single-lens eye  
skeletal muscle (striated muscle)  
slow-twitch fibers  
smooth muscle  
striated muscle  
taste buds  
tetanus  
thermoreceptor  
tympanic membrane  
Z lines

#### Chapter 51

agonistic behavior  
altruism  
associative learning  
behavior  
behavioral ecology  
classical conditioning  
coefficient of relatedness  
cognition  
cognitive map  
communication  
cross-fostering study  
culture  
fixed action pattern (FAP)  
foraging  
game theory

habituation  
Hamilton's rule  
imprinting  
inclusive fitness  
innate behavior  
kin selection  
kinesis  
learning  
mate choice copying  
migration  
monogamous  
operant conditioning  
optimal foraging theory  
pheromone  
polyandry

polygamous  
polygyny  
promiscuous  
proximate question  
reciprocal altruism  
sensitive period  
sign stimulus  
signal  
social learning  
sociobiology  
spatial learning  
taxi  
twin study  
ultimate question