1. **HYPOTHESIS**
2. **CONTROL**
3. **VARIABLE**
4. **THEORY**
5. **Factor in an experiment that is changed**
6. **Possible explanation or answer to a problem**
7. **Well tested explanation**
8. **Factor in an experiment that is kept the same**

1. **SYNTHESIS**
2. **TRANSPORT**
3. **EXCRETION**
4. **RESPIRATION**
5. **Chemical reaction that releases energy from food**
6. **Movement of materials into and around a cell**
7. **Produce complex substances from simpler ones**
8. **Removal of carbon dioxide or ammonia from a cell**
9. **GROWTH/DEVELOPMENT**
10. **REPRODUCTION**
11. **REGULATION/HOMEOSTASIS**
12. **METABOLISM**
13. **All chemical reactions**
14. **maintain a stable internal environment**
15. **Making new organisms to continue species**
16. **Increase in size and number of cells**
17. **pH scale**
18. **acid**
19. **base**
20. **buffer**
21. **pH range 8-14**
22. **pH range 0-6**
23. **indicates the concentration of H+ ions in solution**
24. **can prevent sharp sudden changes in pH**
25. **monomer**
26. **polymer**
27. **carbohydrate**
28. **lipid**
29. **elements C and H; store long-term energy**
30. **small unit that can join together**
31. **C, H, O; main source of short-term energy**
32. **large compound formed from many monomers**
33. **nucleic ACID**
34. **nucleotide**
35. **protein**
36. **amino acid**
37. **building block of nucleic acid**
38. **building block of protein**
39. **store and transmit genetic information**
40. **control rate of reaction/ regulate cell processes**
41. **Organic**
42. **inorganic**
43. **reactant**
44. **product**
45. **does not contain carbon and hydrogen**
46. **compound that enters into a chemical reaction**
47. **contains carbon and hydrogen**
48. **compound produced by a chemical reaction**
49. **Enzyme**
50. **substrate**
51. **activation energy**
52. **catalyst**
53. **reactant of an enzyme-catalyzed reaction**
54. **proteins that act as biological catalysts**
55. **energy needed to start a reaction**
56. **speeds up chemical reaction**
57. **active site**
58. **denature**
59. **product**
60. **reactant**
61. **enzyme breaks down due to high temperature**
62. **on left side of chemical reaction**
63. **place on enzyme where substrates bind**
64. **on right side of chemical reaction**
65. **cell**
66. **organelle**
67. **eukaryote**
68. **prokaryote**
69. **Cell that contains a nucleus**
70. **Basic unit of structure and function**
71. **Cell that lacks a nucleus**
72. **membrane bound structures in eukaryotic cell**
73. **nucleus**
74. **chromosome**
75. **chromatin**
76. **ribosome**
77. **made of RNA, assembles amino acids into protein**
78. **made of DNA, visible during cell division**
79. **controls cell activity including cell division**
80. **threadlike DNA visible when cell is NOT dividing**
81. **centriole**
82. **vacuole**
83. **chloroplast**
84. **mitochondria**
85. **stores food water & waste, larger in plants**
86. **site of respiration. releases energy from glucose**
87. **site of photosynthesis. Manufactures food**
88. **organizes chromosomes in animal cell division**
89. **cell wall**
90. **cell membrane**
91. **phospholipid bilayer**
92. **selectively permeable**
93. **supports and protects cells, made of cellulose**
94. **maintains homeostasis**
95. **allows some substances to pass but not others**
96. **describes cell membrane, two layers of lipid**
97. **osmosis**
98. **diffusion**
99. **Active transport**
100. **concentration gradient**
101. **difference in concentration**
102. **movement from H to L concentration, no energy**
103. **diffusion of water**
104. **movement from L to H concentration ATP used**
105. **Cell**
106. **Cell specialization**
107. **unicellular**
108. **multicellular**
109. **single cell, one cell organism**
110. **more than one cell**
111. **different cells perform different tasks**
112. **basic unit of structure and function**
113. **ATP**
114. **Autotroph**
115. **heterotroph**
116. **photosynthesis**
117. **synthesizes own food**
118. **consumes other organisms**
119. **manufactures organic compounds**
120. **energy molecule cells can easily use**
121. **chloroplast**
122. **chlorophyll**
123. **photosynthesis uses**
124. **pigment**
125. **color compound that absorbs light**
126. **green pigment absorbs sunlight**
127. **contains chlorophyll, site of photosynthesis**
128. **carbon dioxide & water & sunlight**
129. **fermentation**
130. **cellular respiration**
131. **mitochondria**
132. **photosynthesis gives off**
133. **glucose & oxygen**
134. **organelle that releases energy stored in glucose**
135. **aerobic process that releases 36 ATP molecules**
136. **anaerobic process that releases 4 ATP**
137. **aerobic respiration**
138. **anaerobic respiration**
139. **reactants of respiration**
140. **products of respiration**
141. **process that releases energy from glucose w/out O2**
142. **releases energy from glucose with O2**
143. **glucose & oxygen**
144. **carbon dioxide, water & ATP energy**
145. **transpiration**
146. **Waxy cuticle**
147. **Guard cells**
148. **Stoma/ stomata**
149. **Openings on leaf, allows gas exchange**
150. **Cells that control opening and closing of stoma**
151. **Lipid; leaves surface that reduces water loss**
152. **Loss of water through the stoma in a plant leaf**
153. **phloem**
154. **xylem**
155. **Cell division**
156. **mitosis**
157. **Vascular tissue in leaves & stems that carries water**
158. **Vascular tissue in plants that carries glucose/food**
159. **cell division cell divides into two identical cells**
160. **process by which a cell makes new cells**
161. **centromere**
162. **Spindle fiber**
163. **cytokinesis**
164. **chromatid**
165. **a replicated(copied) chromosome**
166. **area where the chromatids are attached**
167. **division of the cytoplasm**
168. **helps separate chromosomes during mitosis**
169. **Cell plate**
170. **Cleavage furrow**
171. **cancer**
172. **Spindle fiber**
173. **helps separate chromosomes during mitosis**
174. **cytokinesis in animals to divide the cytoplasm**
175. **cytokinesis in plants to divide the cytoplasm**
176. **uncontrolled cell division (growth)**
177. **haploid**
178. **diploid**
179. **meiosis**
180. **pollen**
181. **plant sperm, formed in meiosis, used in plant sex**
182. **contains homologous chromosomes**
183. **produces 4 genetically different gametes**
184. **contains only a single set of chromosomes**
185. **gamete**
186. **zygote**
187. **Variation (genetic)**
188. **Cross pollination**
189. **genetic differences within populations**
190. **fusion of sperm & egg, a fertilized egg**
191. **plant sex, transfer of pollen**
192. **sex cell; Ex: sperm and egg**
193. **reproduction**
194. **Asexual reproduction**
195. **Vegetative propagation**
196. **fertilization**
197. **form of asexual reproduction in plants**
198. **union of sperm and egg**
199. **the production of new organisms.**
200. **one parent, produces identical offspring**
201. **Binary fission**
202. **regeneration**
203. **clones**
204. **budding**
205. **identical copies of a parent cell or organism**
206. **a new cell forms as an outgrowth of the parent**
207. **one cell divides evenly into two new cells**
208. **regrowth a of a missing part**
209. **Spores (sporulation)**
210. **Law of dominance**
211. **Law of segregation**
212. **Sexual reproduction**
213. **used for asexual reproduction by ferns & fungi**
214. **two parents, increases variety**
215. **Some traits rule over others**
216. **Alleles (genes) separate during meiosis**
217. **traits**
218. **heredity**
219. **genetics**
220. **independent assortment**
221. **inheritance of one trait does not affect others**
222. **the study of heredity**
223. **study of the way in which traits are passed**
224. **characteristics; skin color, hair color, eye color**
225. **allele**
226. **gene**
227. **hybrid/heterozygous**
228. **pure/homozygous**
229. **unit of heredity that is located on a chromosome**
230. **two different genes for a trait; ex. Tt- tall plant**
231. **two same genes for a trait; ex. TT or tt**
232. **forms of a gene. ex. for eye color: brown, blue**
233. **phenotype**
234. **genotype**
235. **recessive**
236. **dominant**
237. **Trait always appears even if only 1 is present; T**
238. **Trait may be hidden if only 1 is present; t**
239. **genetic makeup; letters**
240. **physical appearance; what organism looks like**
241. **fertilization**
242. **segregation**
243. **incomplete dominance**
244. **Punnett square**
245. **a chart drawn to predict results of a genetic cross**
246. **gametes join to form a zygote**
247. **separation of alleles during gamete formation**
248. **Red 4’oclocks mated with white produce pink**
249. **carrier**
250. **crossing over**
251. **codominance**
252. **incomplete dominance**
253. **exchange of segments of DNA, leads to variation**
254. **has the gene *but does not* display the trait**
255. **both alleles show in heterozygous organism**
256. **two characteristics in heterozygote blend**
257. **nondisjunction**
258. **amniocentesis**
259. **sex-linked trait**
260. **pedigree**
261. **diagnosis of chromosomal disorders in fetus**
262. **trait controlled by genes on the sex chromosomes**
263. **chart used to trace inheritance of a trait in a family**
264. **chromosomes fail to separate, abnormal # results**
265. **sex chromosome**
266. **autosomal chromosome**
267. **karyotype**
268. **multiple alleles**
269. **more than 2 alleles for a trait exist; ex A,B,O blood**
270. **chart; to identify unusual chromosome #**
271. **determines the sex and sex-linked traits**
272. **determines all other traits (not related to sex)**
273. **gene pool**
274. **theory**
275. **fossil**
276. **evolution**
277. **change in a population’s genetic makeup over time**
278. **well tested explanation**
279. **preserved remains or evidence of an organism**
280. **combined genes in a particular population**
281. **survival of the fittest**
282. **fitness**
283. **variation**
284. **adaptation**
285. **ability of an organism to survive and reproduce**
286. **inherited characteristic that increases survival**
287. **differences that are passed from parents to offspring**
288. **individuals better suited to environment will survive**
289. **Allele**
290. **common descent**
291. **artificial selection**
292. **natural selection**
293. **also called survival of the fittest**
294. **alternate forms of a gene.**
295. **all life evolved from a common ancestor.**
296. **humans decide which traits will be passed on**
297. **speciation**
298. **geographic isolation**
299. **homologous structure**
300. **antibiotic resistance**
301. **EX: Same bones in a bat wing and whale flipper**
302. **formation of a new species**
303. **geographic barriers produce new species**
304. **ability to resist being killed by an antibiotic**
305. **inherited trait**
306. **biogenesis**
307. **abiogenesis**
308. **pesticide resistance**
309. **adaptation of pest to a chemical, less susceptibility**
310. **traits that get passed down to the next generation**
311. **a theory that life comes from non-living things**
312. **a theory that life comes from life**
313. **Taxonomy**
314. **Phylogeny**
315. **Binomial Nomenclature**
316. **Domain**
317. **classification of organisms into groups**
318. **naming organisms using the genus & species**
319. **Largest taxonomic group**
320. **Evolutionary relationship between organisms**
321. **dichotomous (taxonomic) key**
322. **Species**
323. **Cladogram**
324. **Genus**
325. **A guide to identification using “2-choice” steps**
326. **Taxonomic group containing 1 or more species**
327. **Taxonomic group whose members can interbreed**
328. **Branching diagrams, show common ancestors**
329. **Plant Kingdom**
330. **Fungi Kingdom**
331. **Animal Kingdom**
332. **Protist Kingdom**
333. **Unicellular eukaryotic organisms**
334. **Cell walls, lack chlorophyll and feed on dead**
335. **photosynthetic, eukaryotic, multicellular organisms**
336. **multicellular, eukaryote, heterotroph, locomotion**
337. **ABIOTIC**
338. **BIOTIC**
339. **Eubacteria**
340. **Archebacteria**
341. **Bacteria that live everywhere**
342. **Bacteria that live in extreme environments**
343. **Living part of an ecosystem**
344. **Non-living part of an ecosystem**
345. **BIOSPHERE**
346. **ECOLOGY**
347. **POPULATION**
348. **SPECIES**
349. **Study of the interaction between living things**
350. **All living & nonliving things on earth**
351. **capable of producing fertile offspring**
352. **A group of the same species living in an area**
353. **COMMUNITY**
354. **HETEROTROPH/CONSUMER**
355. **AUTOTROPH/PRODUCER**
356. **ECOSYSTEM**
357. **Two or more different species living in an area**
358. **All the living and non-living things in an area**
359. **Synthesize/manufacture their own food**
360. **Must consume other organisms for energy**
361. **CHEMOSYNTHESIS**
362. **CARNIVORE**
363. **HERBIVORE**
364. **PHOTOSYNTHESIS**
365. **OMNIVORE**
366. **using light to manufacture organic compounds (food)**
367. **using chemicals to manufacture food**
368. **Gets food from eating other animals**
369. **Gets food from eating plants**
370. **Gets food from eating producers & consumers**
371. **TRANSPIRATION**
372. **DECOMPOSER**
373. **FOOD CHAIN**
374. **FOOD WEB**
375. **evaporation of water through plant stomata**
376. **recycling the nutrients back into the ecosystem**
377. **one way flow of energy through organisms**
378. **change in one relationship affects entire community**
379. **MUTUALISM**
380. **ECOLOGICAL PYRAMID**
381. **BIOMASS**
382. **TROPHIC LEVEL**
383. **Position an organism occupies in a food chain**
384. **represents biomass and energy available**
385. **The amount of living material at a trophic level**
386. **Symbiosis between 2 species which both benefit**
387. **PARASITISM**
388. **PREDATION**
389. **SYMBIOSIS**
390. **COMPETITION**
391. **Symbiosis one benefits the other is harmed**
392. **means 'living together' between two species**
393. **one organism consumes all or part of another**
394. **two or more organisms that use same resource**
395. **immigration**
396. **emigration**
397. **carrying capacity**
398. **limiting factor**
399. **Moving INTO a new place**
400. **Moving OUT OF a place**
401. **Causes growth of a population to decrease**
402. **Largest # of individuals an environment can support**
403. **density-dependent**
404. **biomagnification**
405. **density-independent**
406. **DDT**
407. **Limiting factor that DEPENDS on population size**
408. **population size DOES NOT matter (ex. Weather)**
409. **Pesticide that kills mosquitos**
410. **toxin affects top consumer the most**
411. **Global warming**
412. **biodiversity**
413. **invasive species**
414. **Greenhouse effect**
415. **Increase in the average temperature of Earth**
416. **CO2 & methane in air prevents the escape of heat**
417. **All the variety of organisms in the world**
418. **Introduced to new habitats and reproduce rapidly**
419. **Limiting factor**
420. **ozone depletion**
421. **CFC’s**
422. **Acid rain**
423. **Thinning of protective ozone layer above Earth**
424. **Cause of ozone depletion**
425. **Mixture of factory chemicals with precipitation**
426. **causes growth of a population to decrease**
427. **immigration**
428. **Exponential Growth**
429. **Logistic growth**
430. **Emigration**
431. **Moving INTO a new place**
432. **Moving OUT OF a place**
433. **population growth with limited resources**
434. **constant population growth. Unlimited resources**
435. **DNA base pairing rules**
436. **RNA base pairing rules**
437. **double helix**
438. **nucleotide**
439. **monomer (building block) of DNA**
440. **adenine & thymine (T); guanine &cytosine**
441. **adenine & uracil (U);guanine & cytosine**
442. **shape of DNA; twisted ladder**
443. **RNA**
444. **replication**
445. **gene**
446. **DNA**
447. **stores and transmits genetic information**
448. **process in which a cell copies its DNA**
449. **sequence of DNA that codes for a protein**
450. **single stranded, has uracil**
451. **transfer RNA (tRNA)**
452. **protein synthesis**
453. **messenger RNA (mRNA)**
454. **amino acid**
455. **monomer (building block) of protein**
456. **assembles amino acids; DNA to RNA to Protein**
457. **carry instructions from nucleus to ribosome**
458. **Carries amino acids to ribosome**
459. **translation**
460. **mutation**
461. **codon**
462. **transcription**
463. **part of the DNA molecule is copied into m RNA**
464. **decoding of mRNA message into a polypeptide**
465. **3 base sequence that codes for one amino acid**
466. **change in DNA sequence**
467. **restriction enzymes**
468. **selective breeding**
469. **genetic variation**
470. **genetic engineering**
471. **manipulation of an organism's genome**
472. **breeding plants and animals for particular
traits.**
473. **genetic differences both within** [**populations**](http://en.wikipedia.org/wiki/Population)
474. **DNA-cutting enzymes found in bacteria**
475. **DNA fingerprinting**
476. **recombinant DNA**
477. **plasmid**
478. **gel electrophoresis**
479. **use electricity to separate DNA pieces by size**
480. **method for identifying individuals**
481. **created by combining 2 or more different species**
482. **Circular DNA that readily accepts foreign DNA**
483. **Human Genome Project**
484. **Cloning**
485. **Stem Cell**
486. **transgenic organism**
487. **organism with
genes from another species**
488. **makes genetically identical copies of organism**
489. **international project to map the** [**human genome**](http://en.wikipedia.org/wiki/Human_genome)
490. **can become any number of specialized cell**
491. **virus**
492. **bacteria**
493. **antibody**
494. **vaccine**
495. **consists of DNA and capsid, pathogen**
496. **prokaryote, can be a pathogen**
497. **protects against a virus**
498. **protein that alerts immune system of invader**
499. **immunity**
500. **pathogen**
501. **antigen**
502. **antibiotic**
503. **can’t become sick from pathogen**
504. **disease causing agent**
505. **treats infections by bacteria**
506. **stimulates an immune system attack**