

*Common Terms or Names
Applied to Selected
Farm Animals*

APPENDIX A

	Cats	Cattle	Dogs	Goats	Horses	Poultry	Sheep	Swine
Male of breeding age	Tom	Bull	Dog	Buck	Stallion	Cock*	Ram	Boar
Mature female	Queen	Cow	Bitch	Doe	Mare	Hen	Ewe	Sow
Young male	—	Bullock	Puppy dog	Buck kid	Colt	Chick [†]	Ram lamb	Shoat [‡]
Young female	—	Heifer	Puppy bitch	Doe kid	Filly	Chick [†]	Ewe lamb	Gilt
Newborn	Kitten	Calf	Pup	Kid	Foal	Chick [†]	Lamb	Pig
Unsexed male	Gib	Steer	Castrate	Wether	Gelding	Capon	Wether	Barrow
Unsexed female	Neuter	Spayed	Spayed	Spayed	Spayed	—	Spayed	Spayed
Groups	Bevy	Herd	Pack	Band	Herd	Flock	Flock	Drove
Genus	<i>Felis domestica</i>	<i>Bos</i>	<i>Canis</i>	<i>Capra</i>	<i>Equus</i>	<i>Gallus</i> [§]	<i>Ovis</i>	<i>Sus</i>
Act of breeding	Mating	Serving	Copulating	Serving	Covering	Mating	Tupping	Coupling
Act of parturition	Littering	Calving	Whelping	Kidding	Foaling	—	Lambing	Farrowing

*Called a *tom* in turkeys.

[†]Called a *poult* in turkeys, *gosling* in geese, and *duckling* in ducks.

[‡]Applied to a young pig of either sex under 1 year of age.

[§]Genus for chickens (*Aves* is the class of birds).

APPENDIX B

Convenient Conversion Data

1 milliliter (ml or cc) = 12 drops

1 teaspoon = 60 drops (5 cc)

1 tablespoon = 3 teaspoons (0.5 oz)

1 cup = 0.5 pint (8 oz)

1 pint = 32 tablespoons

1 quart = 2 pints (946.4 cc) and 1/8 peck

1 gallon = 4 quarts (3.785 liters, 8.345 pounds)

1 kilogram (kg) = 2.2046 pounds

1 liter = 1.0567 quarts (1 kg water)

1 foot = 0.3048 meter

1 meter = 3.2809 feet (39.37 inches)

1 kilometer = 0.6214 mile

1 acre = 0.4047 hectare (43,560 square feet)

1 hectare = 2.471 acres

1 barrel = 31.5 gallons (119 liters)

Grains, Pounds per Bushel

Oats = 32

Corn and rye = 56 (ear corn = 70)

Barley = 48

Beans and wheat = 60

1 bushel = 2150 cubic inches (32 quarts)

1 gallon = 231 cubic inches

Temperature Conversion

$$^{\circ}\text{C} = \frac{^{\circ}\text{F} - 32}{1.8}$$

$$^{\circ}\text{F} = (^{\circ}\text{C} \times 1.8) + 32$$

Measure of Mass

Grains	Drams	Ounces	Pounds	Metric equivalents, grams
1	0.0366	0.0023	0.00014	0.0647989
27.34	1	0.0625	0.0039	1.772
437.50	16	1	0.0625	28.350
7000	256	16	1	453.5924277

*Tables of Weights
and Measures*

APPENDIX C

Metric Weight

Microgram	Milligram	Centigram	Decigram	Gram	Dekagram	Hectogram	Kilogram	Metric ton
1								
10^3	1							
10^4	10	1						
10^5	100	10	1					
10^6	1000	100	10	1				
10^7	10^4	1000	100	10	1			
10^8	10^5	10^4	1000	100	10	1		
10^9	10^6	10^5	10^4	1000	100	10	1	
10^{12}	10^9	10^8	10^7	10^6	10^5	10^4	1000	1

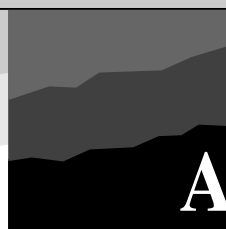
Metric Measure (Volume)

Microliter	Milliliter	Centiliter	Deciliter	Liter	Dekaliter	Hectoliter	Kiloliter	Myrialiter
1								
10^3	1							
10^4	10	1						
10^5	100	10	1					
10^6	10^3	100	10	1				
10^7	10^4	10^3	100	10	1			
10^8	10^5	10^4	10^3	100	10	1		
10^9	10^6	10^5	10^4	10^3	100	10	1	
10^{10}	10^7	10^6	10^5	10^4	10^3	100	10	1

Metric Measure (Length)

Micrometer*	Millimeter	Centimeter	Decimeter	Meter	Dekameter	Hectometer	Kilometer	Myriameter	Megameter	Equivalents
1	0.001	10^{-4}								0.000039 in
10^3	1	10^{-1}								0.03937 in
10^4	10	1								0.3937 in
10^5	100	10	1							3.937 in
10^6	1000	100	10	1						39.37 in
10^7	10^4	1000	100	10	1					10.9361 yd
10^8	10^5	10^4	1000	100	10	1				109.3612 yd
10^9	10^6	10^5	10^4	1000	100	10	1			1093.6121 yd
10^{10}	10^7	10^6	10^5	10^4	1000	100	10	1		6.2137 mil
10^{12}	10^9	10^8	10^7	10^6	10^5	10^4	1000	100	1	621.370 mil

*Formerly called the *micron* and abbreviated μ .



APPENDIX D

Agricultural Colleges and Experiment Stations in the United States and Its Territories

State	University name	Address
Alabama ^{*†}	Auburn University	Auburn University, AL 36849-5113
Alabama [†]	Alabama A&M College	Normal, AL 35762-1087
Alabama ^{*†}	Tuskegee University	Tuskegee, AL 36088-2314
Alaska ^{*†}	University of Alaska–Fairbanks	Fairbanks, AK 99775-7140
Alaska [*]	University of Alaska Agr. & Forestry Expt. Station	Palmer, AK 99645-6629
American Samoa	Land-Grant Div., American Samoa Comm. College	Pago Pago, AS 96799-2609
Arizona ^{*†}	University of Arizona	Tucson, AZ 85721-0038
Arkansas ^{*†}	University of Arkansas	Fayetteville, AR 72701-1202
Arkansas [†]	University of Arkansas at Pine Bluff	Pine Bluff, AR 71601-2799
California ^{*†}	University of California	Berkeley, CA 94704-1200
	University of California	Davis, CA 95616-8598
	University of California	Riverside, CA 92521-0001
California [*]	University of California	Los Angeles, CA 90024-0001
California [‡]	California State University	Fresno, CA 93740-9999
Colorado ^{*†}	Colorado State University	Fort Collins, CO 80523-3001
Connecticut ^{*†}	University of Connecticut	Box U-66, Storrs, CT 06269-4066
Connecticut [*]	Connecticut Agr. Expt. Station	New Haven, CT 06504-1106
Delaware ^{*†}	University of Delaware	Newark, DE 19717-1303
Delaware [†]	Delaware State University	Dover, DE 19901-2276
District of Columbia ^{*†}	University of the District of Columbia, Division of Natural Resources & Agr. Expt. Station	Washington, DC 20008-1122
Florida ^{*†}	University of Florida	Gainesville, FL 32611-0200
Florida [†]	Florida A&M University	Tallahassee, FL 32307-1402
Georgia ^{*†}	University of Georgia	Athens, GA 30602-7501
Georgia [*]	Georgia Coastal Plain Expt. Station	Tifton, GA 31794-0748
Georgia [*]	University of Georgia Griffin Expt. Station	Griffin, GA 30223-1731
Georgia [†]	Fort Valley State College	Fort Valley, GA 31030-0600
Guam ^{*†}	University of Guam	Mangilao, Guam 96923-0001
Hawaii ^{*†}	University of Hawaii	Honolulu, HI 96822-2231
Idaho ^{*†}	University of Idaho	Moscow, ID 83844-3151
Illinois ^{*†}	University of Illinois	Urbana, IL 61801-3620
Indiana ^{*†}	Purdue University	West Lafayette, IN 47907-1031
Iowa ^{*†}	Iowa State University	Ames, IA 50011-0001
Kansas ^{*†}	Kansas State University	Manhattan, KS 66506-4008
Kentucky ^{*†}	University of Kentucky	Lexington, KY 40546-0091
Kentucky [†]	Kentucky State University	Frankfort, KY 40601-2355
Louisiana ^{*†}	Louisiana State University	Baton Rouge, LA 70894-5055
Louisiana [†]	Southern University and A&M College	Baton Rouge, LA 70813-2073
Maine ^{*†}	University of Maine	Orono, ME 04469-5782

Maryland* [†]	University of Maryland	College Park, MD 20742-5565
Maryland [†]	University of Maryland Eastern Shore	Princess Anne, MD 21853-1299
Massachusetts* [†]	University of Massachusetts	Amherst, MA 01003-0001
Michigan* [†]	Michigan State University	East Lansing, MI 48824-1314
Micronesia* [†]	College of Micronesia	Pohnpei, FM 96941-1179
Minnesota* [†]	University of Minnesota	St. Paul, MN 55108-1004
Mississippi* [†]	Mississippi State University	Mississippi State, MS 39762-9740
Mississippi [†]	Alcorn State University	Lorman, MS 39096-7500
Missouri* [†]	University of Missouri–Columbia	Columbia, MO 65211-0001
Missouri [†]	Lincoln University	Jefferson City, MO 65102-0029
Montana* [†]	Montana State University	Bozeman, MT 59717-2860
Nebraska* [†]	University of Nebraska–Lincoln	Lincoln, NE 68583-0908
Nevada* [†]	University of Nevada	Reno, NV 89557-0104
New Hampshire* [†]	University of New Hampshire	Durham, NH 03824-3587
New Jersey* [†]	Rutgers–The State University of New Jersey	New Brunswick, NJ 08903-0231
New Mexico* ^{†,‡}	New Mexico State University	Las Cruces, NM 88003-8003
New York* [†]	Cornell University	Ithaca, NY 14853-5905
New York*	New York Agr. Expt. Station	Geneva, NY 14456-0462
North Carolina* [†]	North Carolina State University	Raleigh, NC 27695-0001
North Carolina [†]	North Carolina A&T State University	Greensboro, NC 27420-1928
North Dakota* [†]	North Dakota State University	Fargo, ND 58105-5437
Ohio [†]	The Ohio State University	Columbus, OH 43210-1357
Ohio*	Ohio Agr. Research & Development Center	Wooster, OH 44691-4096
Oklahoma* [†]	Oklahoma State University	Stillwater, OK 74078-6019
Oklahoma [†]	Langston University	Langston, OK 73050-0730
Oregon* [†]	Oregon State University	Corvallis, OR 97331-2212
Pennsylvania* [†]	The Pennsylvania State University	University Park, PA 16802-2600
Puerto Rico* ^{†,‡}	University of Puerto Rico	Mayaguez, PR 00681-9030
Rhode Island* [†]	University of Rhode Island	Kingston, RI 02881-0806
South Carolina* [†]	Clemson University	Clemson, SC 29634-0001
South Carolina [†]	South Carolina State University	Orangeburg, SC 29117-0001
South Dakota* [†]	South Dakota State University	Brookings, SD 57007-0191
Tennessee* [†]	University of Tennessee	Knoxville, TN 37996-4500
Tennessee [†]	Tennessee State University	Nashville, TN 37209-1561
Texas* [†]	Texas A&M University	College Station, TX 77843-2142
Texas [†]	Prairie View A&M University	Prairie View, TX 77446-4079
Utah* [†]	Utah State University	Logan, UT 84322-4800
Vermont* [†]	University of Vermont	Burlington, VT 05405-0106
Virgin Islands*	University of the Virgin Islands	St. Croix, VI 00802-9990
Virginia* [†]	Virginia Polytechnic Institute and State University	Blacksburg, VA 24061-0402
Virginia [†]	Virginia State University	Petersburg, VA 23806-0001
Washington* [†]	Washington State University	Pullman, WA 99164-6240
West Virginia* [†]	West Virginia University	Morgantown, WV 26506-6201
Wisconsin* [†]	University of Wisconsin	Madison, WI 53706-1522
Wyoming* [†]	University of Wyoming	Laramie, WY 82071-3354

Other colleges granting degrees in food and agricultural sciences

Arizona	Arizona State University	Tempe, AZ 85282-2203
California	California Polytechnic State University	San Luis Obispo, CA 93407-0001
Illinois	Southern Illinois University	Carbondale, IL 62901-4399
Texas	Texas Technological University	Lubbock, TX 79409-2123
Wisconsin	University of Wisconsin–River Falls	River Falls, WI 54022-5001

*Agriculture experiment station.

[†]Land-grant college of agriculture.

[‡]Hispanic-serving land-grant institution.

Note: Agricultural colleges and experiment stations will send, on request, a list of available bulletins relating to their published research and activities.



APPENDIX E

Alphabetical List of Elements and Symbols

Element	Symbol	Atomic number	Atomic weight*	Element	Symbol	Atomic number	Atomic weight*
Actinium	Ac	89	227	Hydrogen	H	1	1.0079
Aluminum	Al	13	26.98	Indium	In	49	114.81
Americium	Am	95	243	Iodine	I	53	126.90
Antimony	Sb	51	121.75	Iridium	Ir	77	192.2
Argon	Ar	18	39.942	Iron	Fe	26	55.85
Arsenic	As	33	74.91	Krypton	Kr	36	83.80
Astatine	At	85	210	Lanthanum	La	57	138.91
Barium	Ba	56	137.35	Lawrencium	Lr	103	257
Berkelium	Bk	97	249	Lead	Pb	82	207.20
Beryllium	Be	4	9.013	Lithium	Li	3	6.940
Bismuth	Bi	83	208.99	Lutetium	Lu	71	174.98
Boron	B	5	10.82	Magnesium	Mg	12	24.32
Bromine	Br	35	79.913	Manganese	Mn	25	54.94
Cadmium	Cd	48	112.40	Mendelovium	Md	101	256
Calcium	Ca	20	40.08	Mercury	Hg	80	200.60
Californium	Cf	98	251	Molybdenum	Mo	42	95.95
Carbon	C	6	12.010	Neodymium	Nd	60	144.26
Cerium	Ce	58	140.12	Neon	Ne	10	20.182
Cesium	Cs	55	132.90	Neptunium	Np	93	237
Chlorine	Cl	17	35.455	Nickel	Ni	28	58.71
Chromium	Cr	24	52.01	Niobium (columbium)	Nb	41	92.91
Cobalt	Co	27	58.94	Nitrogen	N	7	14.007
Copper	Cu	29	63.54	Nobelium	No	102	254
Curium	Cm	96	247	Osmium	Os	76	190.2
Dysprosium	Dy	66	162.50	Oxygen	O	8	15.999
Einsteinium	Es	99	254	Palladium	Pd	46	106.4
Erbium	Er	68	167.26	Phosphorus	P	15	30.973
Europium	Eu	63	152.0	Platinum	Pt	78	195.08
Fermium	Fm	100	253	Plutonium	Pu	94	242
Fluorine	F	9	19.00	Polonium	Po	84	210
Francium	Fr	87	223	Potassium	K	19	39.098
Gadolinium	Gd	64	157.25	Praseodymium	Pr	59	140.91
Gallium	Ga	31	69.72	Promethium	Pm	61	147
Germanium	Ge	32	72.60	Protactinium	Pa	91	231
Gold	Au	79	197.0	Radium	Ra	88	226
Hafnium	Hf	72	178.49	Radon	Rn	86	222
Helium	He	2	4.003	Rhenium	Re	75	186.21
Holmium	Ho	67	164.93	Rhodium	Rh	45	102.90

Element	Symbol	Atomic number	Atomic weight*	Element	Symbol	Atomic number	Atomic weight*
Rubidium	Rb	37	85.48	Thallium	Tl	81	204.38
Ruthenium	Ru	44	101.1	Thorium	Th	90	232.04
Samarium	Sm	62	150.34	Thulium	Tm	69	168.93
Scandium	Sc	21	44.96	Tin	Sn	50	118.69
Selenium	Se	34	78.96	Titanium	Ti	22	47.90
Silicon	Si	14	28.09	Tungsten (wolfram)	W	74	183.85
Silver	Ag	47	107.875	Uranium	U	92	238.06
Sodium	Na	11	22.990	Vanadium	V	23	50.95
Strontium	Sr	38	87.63	Xenon	Xe	54	131.29
Sulfur	S	16	32.064	Ytterbium	Yb	70	173.03
Tantalum	Ta	73	180.94	Yttrium	Y	39	88.92
Technetium	Tc	43	99	Zinc	Zn	30	65.38
Tellurium	Te	52	127.60	Zirconium	Zr	40	91.22
Terbium	Tb	65	158.92				

*Atomic weight of the most abundant or best-known isotope or (in the case of radioactive isotopes) of the isotope with the longest half-life, relative to atomic weight of carbon 12 = 12.

