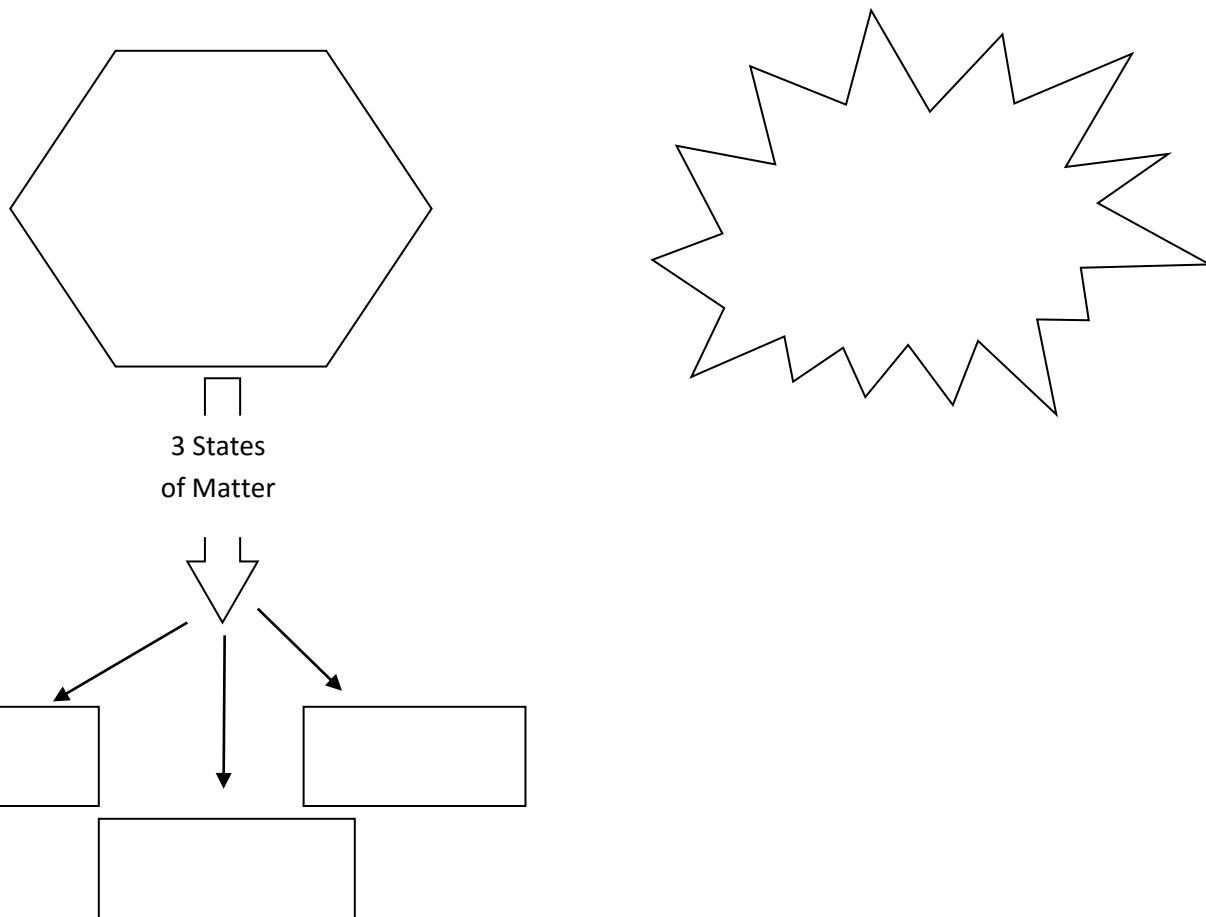


CHEMISTRY REVIEW

Scientists divide the universe into

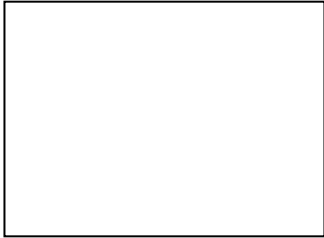


All matter is made of tiny particles called _____.

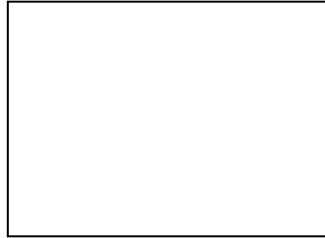
The states of matter are due to the type of atoms, the arrangement of atoms, how they _____ and how closely they are _____.

Draw atoms in a

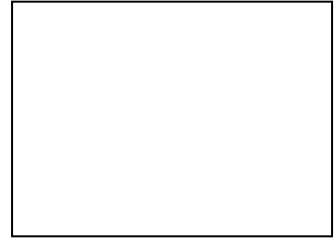
solid



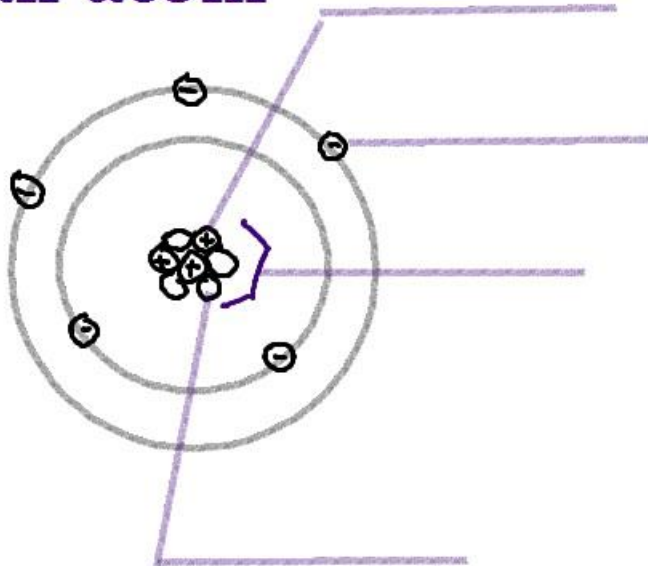
liquid



gas



Parts of an atom



Anything made of just one kind of atom is called an _____.

Scientists have identified _____
different elements.

The image shows a periodic table of elements. The top is labeled 'Group' with Roman numerals I through VIII. The left side is labeled 'Period' with numbers 1 through 8. Elements are color-coded: Alkali metals (red), Alkaline earth metals (orange), Lanthanides (pink), Actinides (purple), Transition metals (light blue), Poor metals (grey), Metalloids (green), Nonmetals (yellow), Halogens (light green), and Noble gases (light blue). A legend at the bottom explains the border styles: solid border for elements older than Earth, dashed border for elements older than Earth but not primordial, dotted border for synthetic elements, and no border for undiscovered elements. The legend also explains the color-coding for atomic number: red for gas, blue for liquid, and black for solid.

Period	Group I	Group II	Group III	Group IV	Group V	Group VI	Group VII	Group VIII
1	1 H							2 He
2	3 Li	4 Be		5 B	6 C	7 N	8 O	9 F
3	11 Na	12 Mg		13 Al	14 Si	15 P	16 S	17 Cl
4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe
5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru
6	55 Cs	56 Ba	*	72 Hf	73 Ta	74 W	75 Re	76 Os
7	87 Fr	88 Ra	**	104 Rf	105 Db	106 Sg	107 Bh	108 Hs
8	119 Uun							

* Lanthanides: 57 La, 58 Ce, 59 Pr, 60 Nd, 61 Pm, 62 Sm, 63 Eu, 64 Gd, 65 Tb, 66 Dy, 67 Ho, 68 Er, 69 Tm, 70 Yb, 71 Lu
** Actinides: 89 Ac, 90 Th, 91 Pa, 92 U, 93 Np, 94 Pu, 95 Am, 96 Cm, 97 Bk, 98 Cf, 99 Es, 100 Fm, 101 Md, 102 No, 103 Lr

Legend:
Alkali metals: red
Alkaline earth metals: orange
Lanthanides: pink
Actinides: purple
Transition metals: light blue
Poor metals: grey
Metalloids: green
Nonmetals: yellow
Halogens: light green
Noble gases: light blue
solid border: at least one isotope is older than the Earth (Primordial elements)
dashed border: at least one isotope naturally arise from decay of other chemical elements and no isotopes are older than the earth
dotted border: only artificially made isotopes (synthetic elements)
no border: undiscovered
Atomic number in red: gas
Atomic number in blue: liquid
Atomic number in black: solid

The most common element in the universe
is _____. It is also the _____

and most _____. _____ of the
universe by weight is composed of
hydrogen. Most _____ are made
mainly of hydrogen.

The Earth's atmosphere is made of

78% nitrogen

21% _____

0.9% argon

When atoms bond together they make new things called _____.

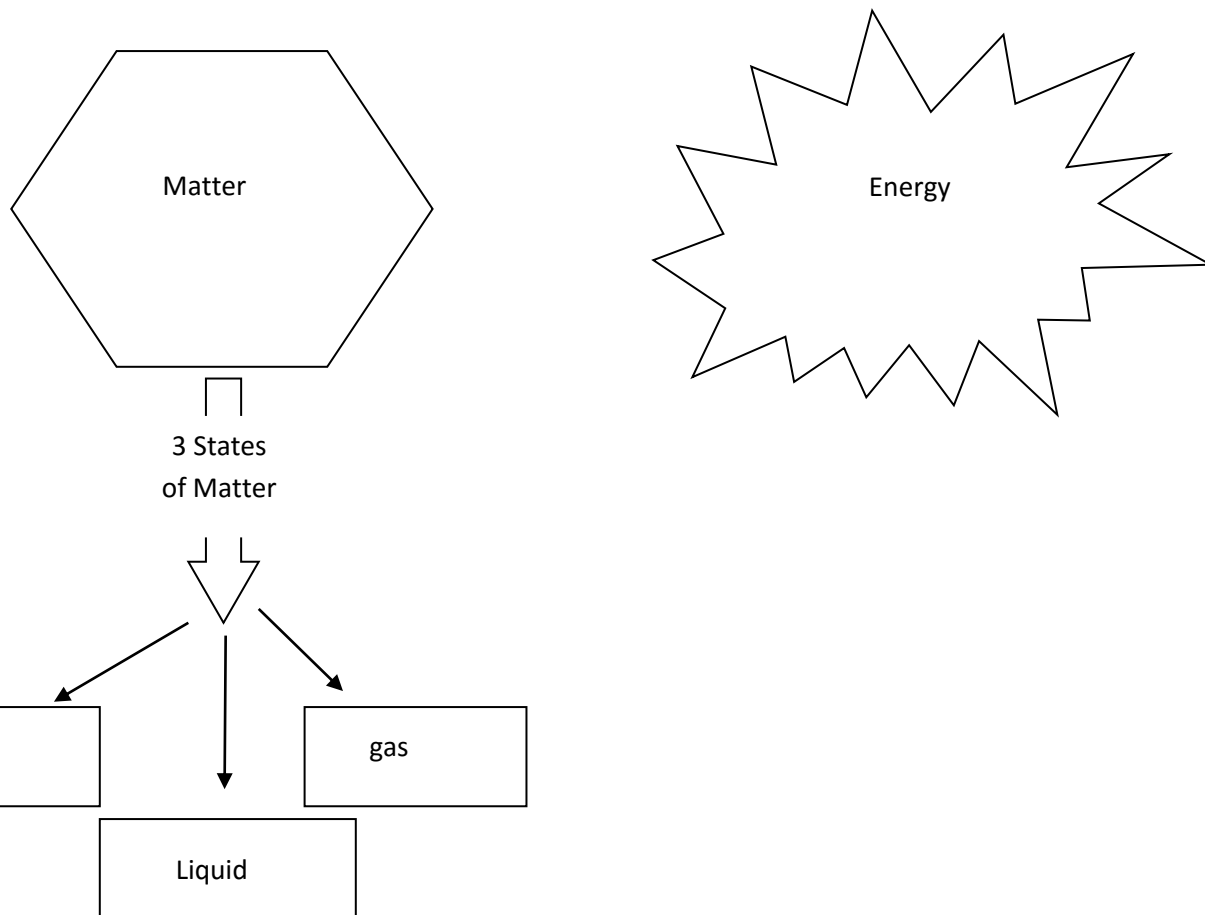
A good example of a molecule is _____
or water. Draw it:

70% of the _____ is made of it

70% of the _____ surface is
covered with it.

Chemistry Review **Answers**

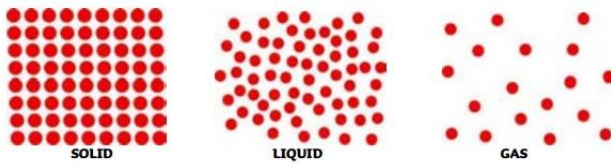
Scientists divide the universe into



All matter is made of tiny particles called **atoms**.

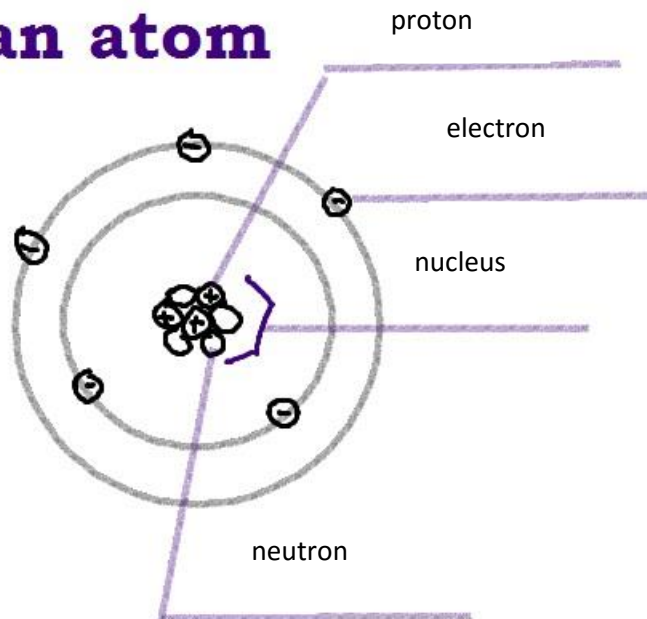
The states of matter are due to the type of atoms, the arrangement of atoms, how they **move** and how closely they are **packed**.

Draw atoms in a



Anything made of just one kind of atom is called an element.

Parts of an atom



Scientists have identified 118 different elements.

		Group																	
		I	II											III	IV	V	VI	VII	VIII
Period	1	1 H																2 He	
	2	3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
	3	11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
	4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
	5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
	6	55 Cs	56 Ba	*	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
	7	87 Fr	88 Ra	**	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Uut	114 Fl	115 Uup	116 Lv	117 Uus	118 Uuo
	8	119 Uun																	

* Lanthanides	57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu
** Actinides	89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr

Alkali metals	Alkaline earth metals	Lanthanides	Actinides	Transition metals
Poor metals	Metalloids	Nonmetals	Halogens	Noble gases

State at standard temperature and pressure	solid border: at least one isotope is older than the Earth (Primordial elements)
Atomic number in red: gas	dashed border: at least one isotope naturally arise from decay of other chemical elements and no isotopes are older than the earth
Atomic number in blue: liquid	dotted border: only artificially made isotopes (synthetic elements)
Atomic number in black: solid	no border: undiscovered

The most common element in the universe is hydrogen. It is also the smallest and most basic. 90% of the universe by weight is composed of hydrogen. Most stars are made mainly of hydrogen.

The Earth's atmosphere is made of

78% nitrogen

21% oxygen

0.9% argon

When atoms bond together they make new things called molecules.

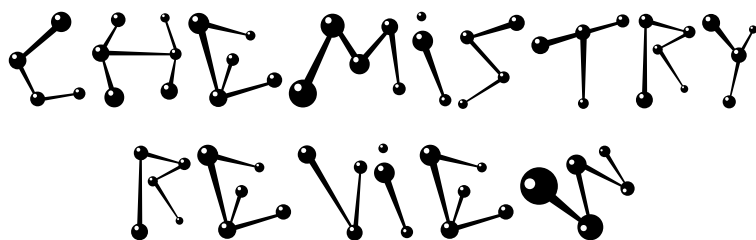
A good example of a molecule is

H₂O

or water. Draw it:

70% of the human body is made of it

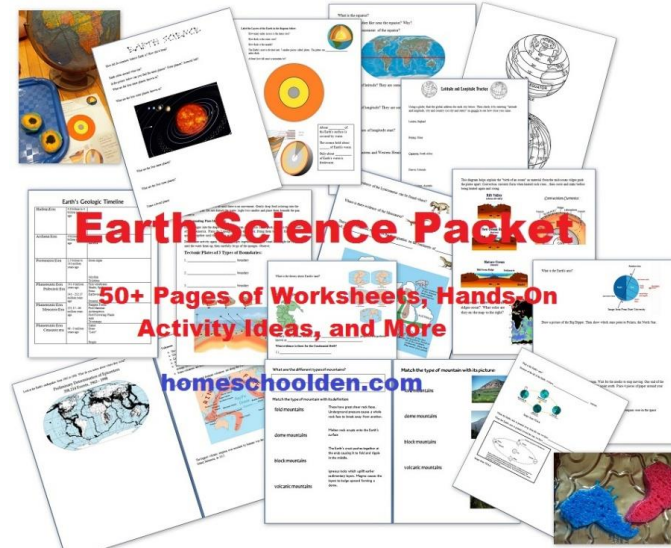
70% of the Earth's surface is covered with it.



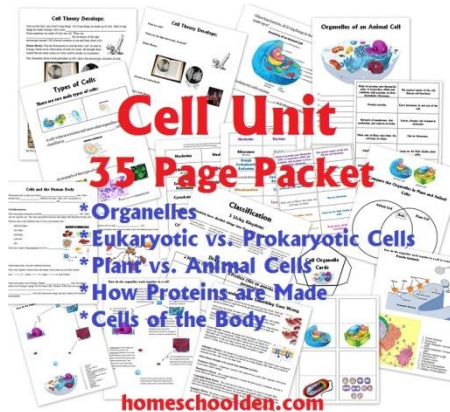
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Be sure to check out our packets
at homeschoolden.com

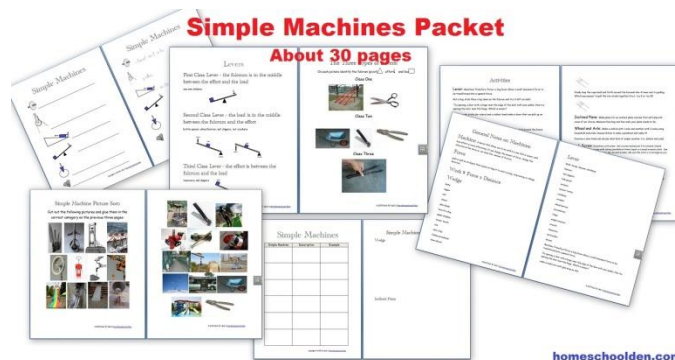
[Earth Science Packet](#): Plate Movement, Earthquakes
Volcanoes and more!



[A Study of Cells Packet](#)

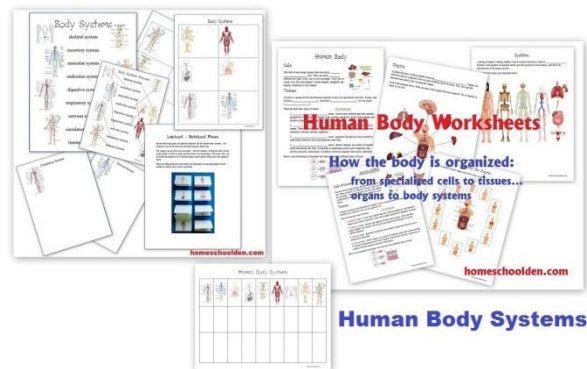


[Simple Machines Packet](#)

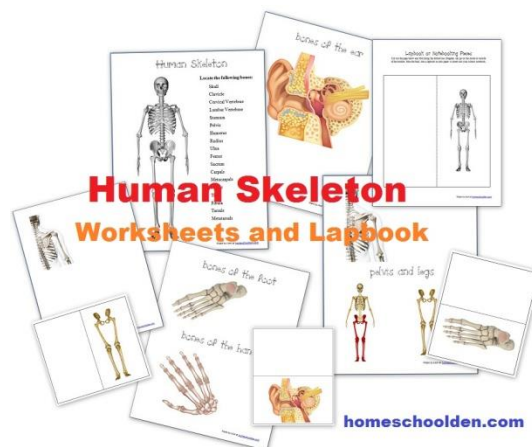


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Human Body Systems



Skeleton Lapbook and Notebook Pages

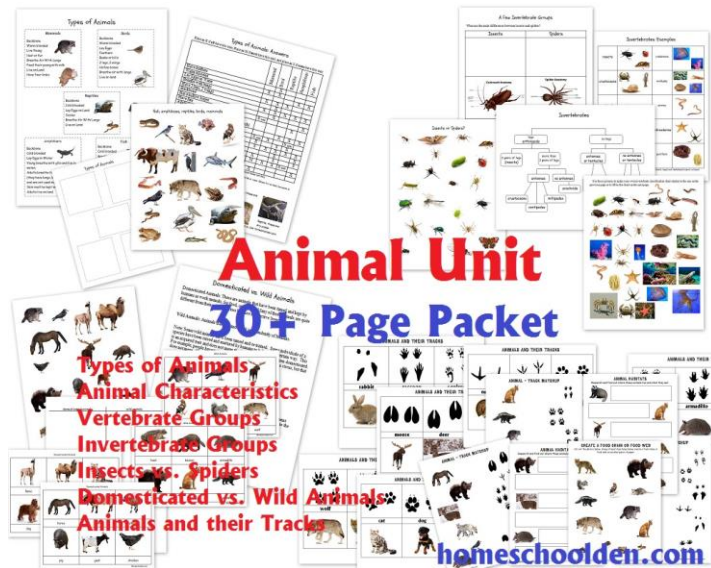


Digestive System Pack

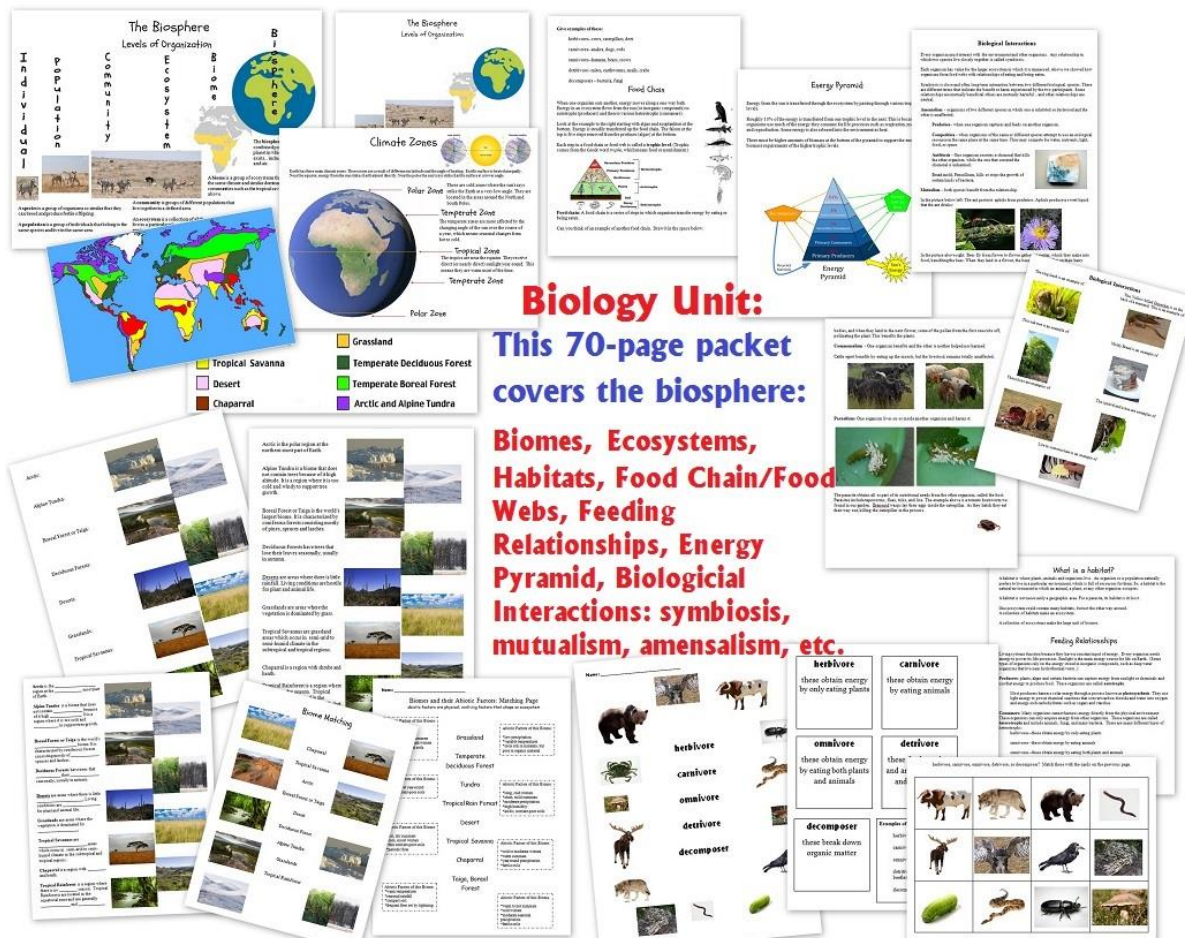


Be sure to check out our packets: at
homeschoolden.com

Animal Packet: (5 vertebrate groups, characteristics of animals, invertebrate animal groups, animal track activities, domesticated vs. wild animals)

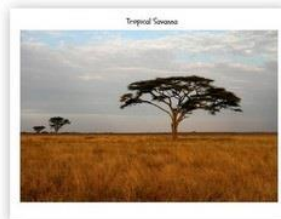


Biology Unit: Biomes, Ecosystems, Habitats, Feeding Relationships, Biological Interactions





Biome Worksheets and Picture Cards



8 x 11 Printable Photos of the 9 Biomes
(or print 4-per-page for smaller cards)

**Part of our 70-page
Biology Packet**

homeschoolden.com

Be sure to check out our packets: at
homeschoolden.com

Civics and Government Packet:



American Revolution Packet (A Study of the causes of and events leading to the American Revolution such as the French & Indian War, Sugar & Molasses Acts, Stamp Act, Boston Massacre, Townshend Acts, Boston Tea Party, Lexington & Concord and more)

Causes and Events Leading to the AMERICAN REVOLUTION

Highlighting:

- The French and Indian War
- Albany Plan
- Sugar and Molasses Acts
- Pontiac's Rebellion
- Proclamation of 1763
- Stamp Act
- Sons of Liberty
- Noble Men of Boston
- Townshend Acts
- Tea Act
- Boston Tea Party
- Intolerable Acts
- First Continental Congress
- Battles of Lexington and Concord

30-Page Packet

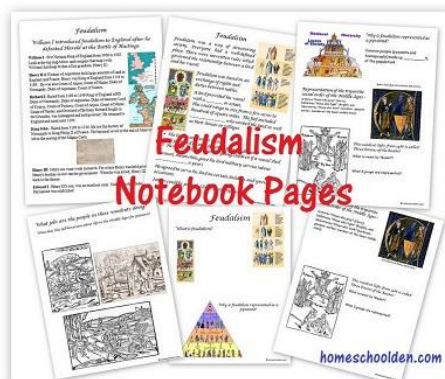
Made by Liesl at homeschoolden.com

World Facts Packet:

- *Largest countries
- *Population facts
- *Major world religions
- *Facts about the World: longest river, largest desert, wettest and driest places on Earth, tallest mountain, deepest spot in the ocean, etc.
- *Facts about the US: largest/smallest state, capital, highest mountain, longest river, rivers & lakes sheet, largest cities, neighbors
- *Blank fact sheet pages for: Canada, United Kingdom, Australia, South Africa
- *Famous world landmarks



Feudalism, Medieval Art



Middle Ages Unit Feudalism Activities

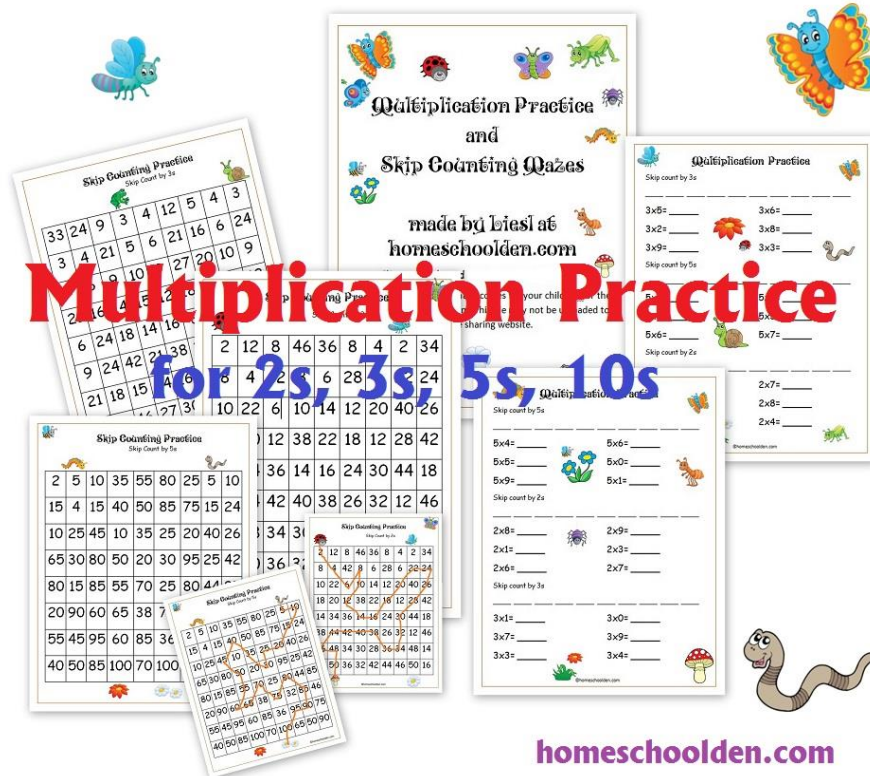


Draw cards and see what your fate is.
Will you survive the Middle Ages?!!!

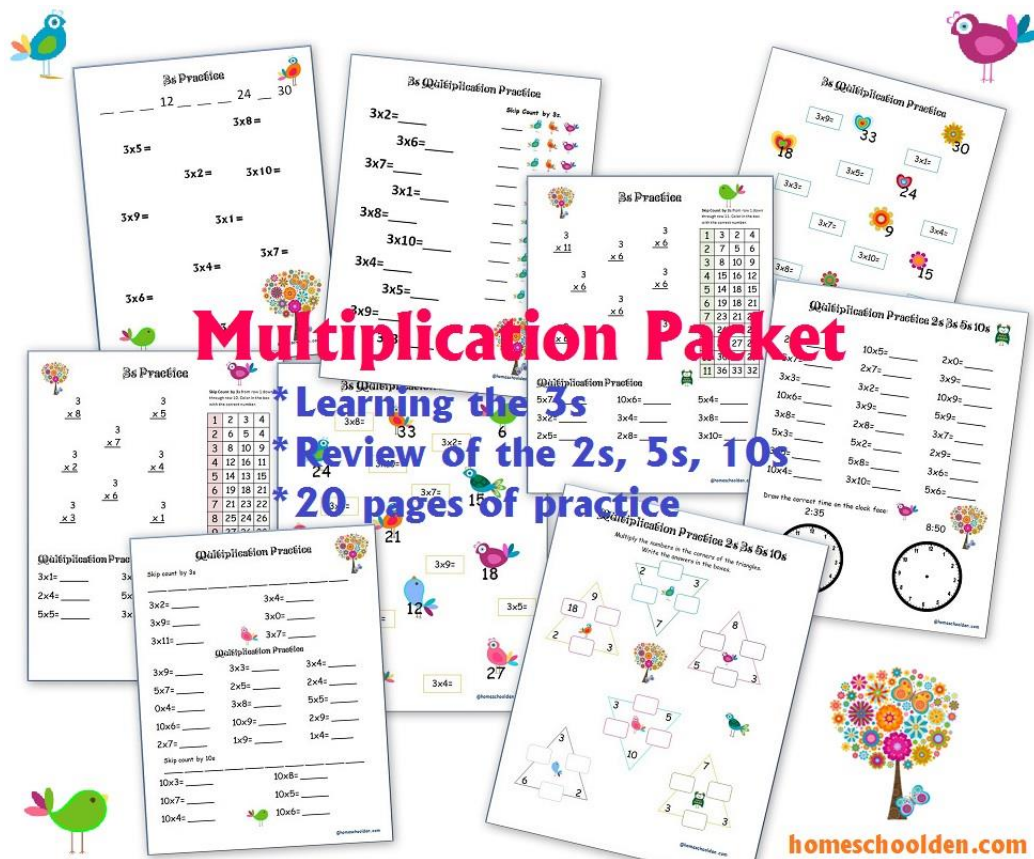


The "king" sat at the top of the hill in his castle. If you drew certain cards you had to run up the hill to serve the king. To the right, peasants are "working" hard in the fields.

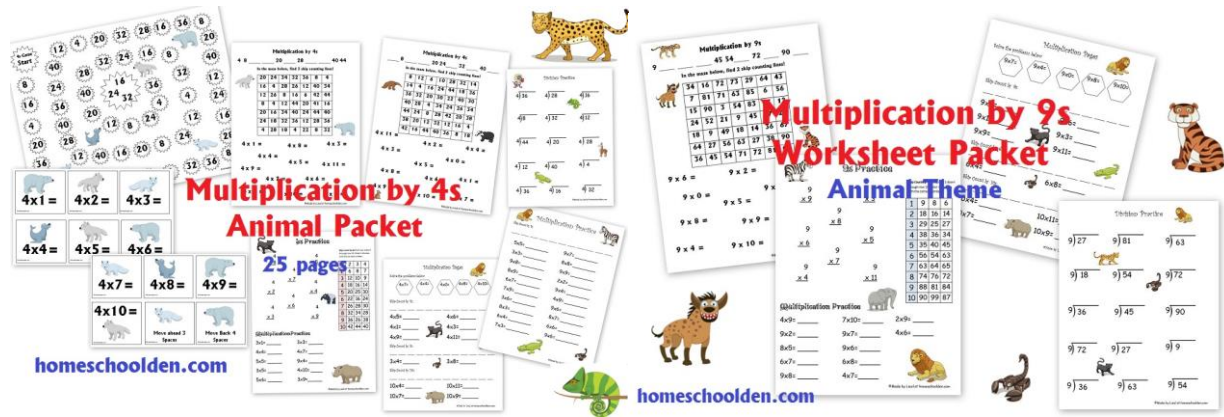
Bugs, Butterfly and Flowers Theme: 2s, 3s, 5s, and 10s.



Multiplication Packet: Learn the 3s, Practice the 2s, 5s, 10s



Multiplication by 4s and 9s Packets



Multiplication by 8s Packet: 25 pages of worksheets, Lizard Races for the 4s, 6s, 7s, 8s and 9s

