

Science in the Elementary and Middle School Years Checklist:

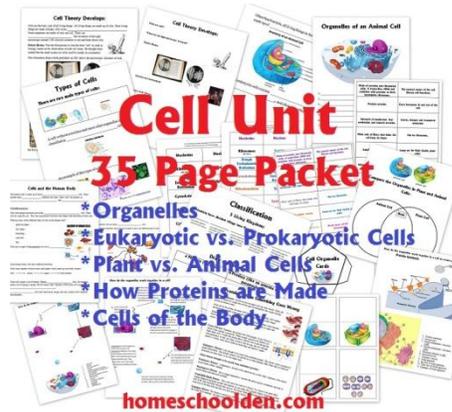
This is a list of some of the science units and topics we'll cover in elementary and middle school. We will return to these topics more than once, each time going into more depth. We spend as much time as needed (and while interest lasts). I know we'll cover the topic again in a few years.

The Human Body	
	Cells
	Tissues
	Nervous System
	Skeletal, Muscular and Integumentary Systems (skin, etc.)
	Circulatory and Respiratory Systems
	Digestive and Excretory Systems
	Endocrine and Reproductive Systems
	Immune System and Disease
Biology	
	Plants and Animal Cells
	Cell structure and Process
	Cell Function (chemical reactions inside cells)
	Cell Division
	DNA-RNA, Genetics
	Life Cycle and Reproduction
	Plants
	Growth
	Photosynthesis
	Genetics
	Animals
	Unit on animal adaptations, animal habitats, animal homes, animal characteristics, migration, camouflage, animals and their young, vertebrates/invertebrates, herbivores/carnivores/omnivores, conservation - extinct vs. endangered animals, [This is a carryover from the science we covered in the preschool years (ages 4-6)... and there is a separate checklist for that!]
	Classification, taxonomy
	Kingdom, phylum, class, order, family, genus, species
	Offspring names
	Group names
	Levels of organization
	Biosphere, ecosystem (biome), community, population, organism, groups of cells, cells, molecules
	Microorganisms - bacteria, viruses, protists, fungi
	Biomes (ecosystems)
	Ecology - interdependence of organisms and their environment, food chain
	Population Dynamics
	Animal anatomy and physiology
Chemistry	
	Atoms, Molecules
	Acids & Bases
	Atomic structure - periodic table

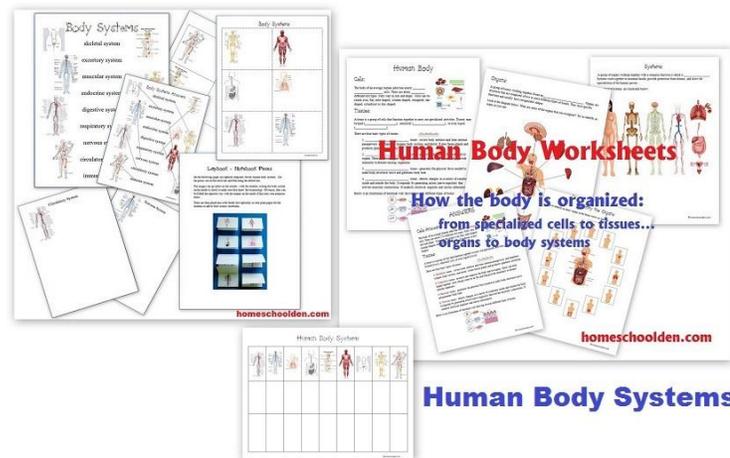
	Common elements, chemical bonds, chemical reactions
	Mixtures - Solutions
	Molecular Chains
	Organic Chemistry -- chemistry of carbon
Astronomy	
	Solar System Inner and outer planets, asteroid belt
	Moon
	Gravity
	Kinds of Stars
	Galaxies
Earth Science	
	Geology - history of the Earth
	inside Earth – geosphere
	Rocks & Minerals - sedimentary, metamorphic, igneous rocks
	Earth systems (geosphere, biosphere, hydrosphere, atmosphere)
	Magnets
	Earth's Magnetism
	Earth's movement – changes to Earth's surface
	plate movement
	what changes landforms
	what causes mountains, volcanoes, earthquakes
	how has Earth's surface changed
	Weather
	Water
	Freshwater
	Underground water
	Oceans, Tides
	Cycles
	Water Cycle
	Oxygen Cycle
	Nutrient Cycle
	Nitrogen Cycle
	Carbon Cycle
	Sulfur Cycle
	Phosphorus Cycle
	Rock Cycle
Physics	
	Simple Machines
	Speed, force, energy, motion, power, heat, heat transfer, conduction, convection, radiation
	Light and optics
	Electricity
	Sound - vibration, waves, speed, frequency, wavelength, amplitude

We've made lots of science worksheet packets that are available at our blog, homeschoolden.com:

[A Study of Cells Packet](#)



[Human Body Systems](#)



[Skeleton Lapbook and Notebook Pages](#)



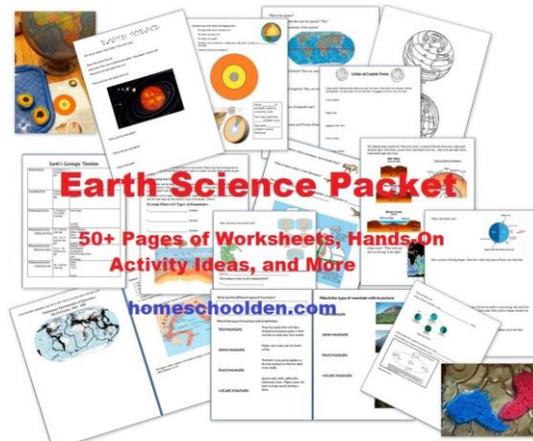
Digestive System Pack



Simple Machines Packet



Earth Science Packet: Plate Movement, Earthquakes Volcanoes and more!



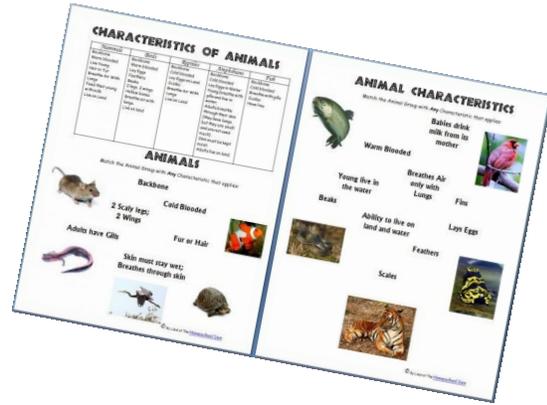
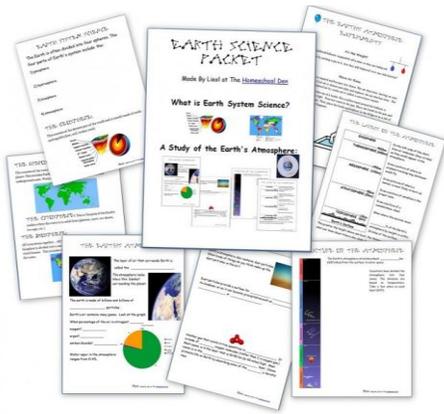
Rocks and Mineral Packet



Plus, we have a Weather Unit, A packet on the Layers of the Atmosphere and lots of animal classification worksheets and printables.



Weather Packet
by Liesl at the Homeschool Den



We have a muscular and circulatory packet that will come out at some point down the line! :)