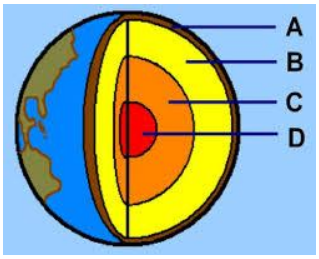
Science Review Checklist: 5th Grade

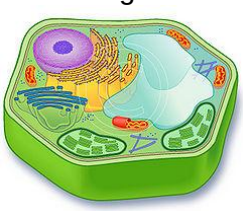
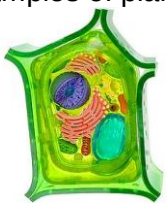
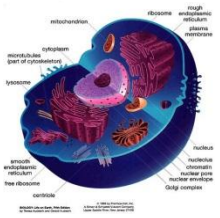
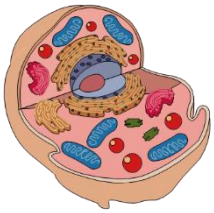
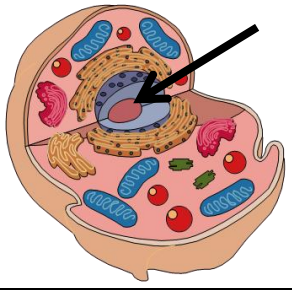
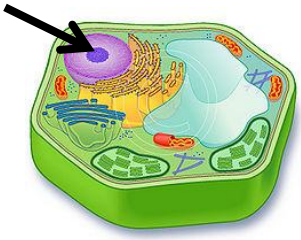
Put a check in the box each time you answer the question correctly.			1.Cover the right column with a piece of paper. 2. Answer the question and check your answer. 3. Put a check in the box if you answer correctly. 4. Go through the packet until you have answered each question correctly 3 times.	**Cover these answers!**
			1. A _____ is an educated guess about the outcome of an experiment.	hypothesis
			2. Something you observe with your own eyes is called a(n):	observation
			3. When you explain or make sense of your observations, you are making a(n):	inference
			4. The steps scientists use to help figure out why things happen the way they do is called the:	scientific method
			5. A variable in an experiment that is purposely changed by the experimenter is called a(n):	independent variable
			6. Those things that are purposely kept the same throughout an experiment are called:	constants
			7. The factor in an experiment that changes as a result of manipulating the independent variable is called the:	dependent variable
			8. Scientists think the Earth was formed _____ years ago.	4.6 billion
			9. The preserved remains or imprints of animals, plants, and other organisms from the distant past are called:	fossils
			10. Name the layers of the Earth according to the diagram below. 	A. crust B. mantle C. outer core D. inner core
			11. Which layer of the Earth is rocky and surrounds the Earth like a shell or skin?	crust
			12. Which layer of the Earth is the thickest?	mantle
			13. Which layer of the Earth is made of molten (melted) iron and nickel?	outer core
			14. Which layer of the Earth is normally a solid but heat from the other layers can change it to a very thick liquid?	mantle

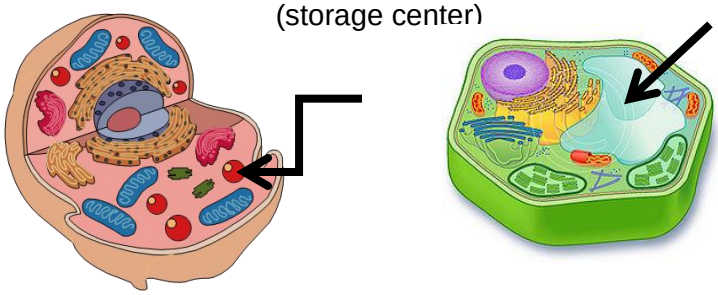
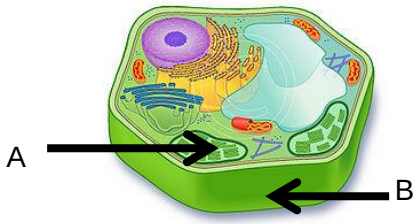
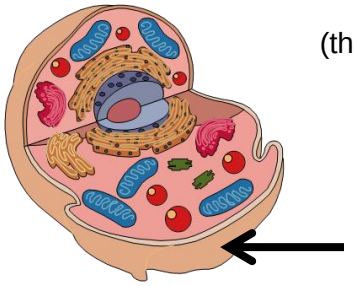
			15. Which layer of the Earth is made of solid iron and nickel?	inner core
			16. The mantle is made up of heavy:	rock
			17. Which layer of the Earth is the hottest?	inner core
			18. The inner core is solid due to the _____ of the other layers.	pressure
			19. The Earth's _____ energy within the core moves the mantle slowly.	heat (or thermal)
			20. Large continent-sized blocks of rock from the crust and upper mantle are called:	tectonic plates
			21. A break in the Earth's crust that results from the ground shifting is called a:	fault
			22. Where are most earthquakes and volcanoes located?	along fault lines (or plate boundaries)
			23. _____ boundaries occur when plates move toward each other.	convergent
			24. _____ occur along convergent, divergent, and transform boundaries.	earthquakes
			25. _____ boundaries occur when plates move apart.	divergent
			26. _____ boundaries occur when plates slide past each other.	transform
			27. New mountain ranges are formed along _____ boundaries.	convergent
			28. Mountains in the ocean are called _____, and form along divergent boundaries.	mid-ocean ridges
			29. Volcanoes form along _____ and _____ boundaries.	divergent and convergent
			30. Deep trenches form in the ocean along _____ boundaries.	convergent
			31. _____ from volcanoes is full of nutrients and can be used to grow new crops.	ash
			32. What fossils were found in the Appalachian Mountains, and what can you infer about how this area of Virginia has changed?	ferns; this area was once swampy
			33. What fossils were found in the Piedmont region, and what can you infer about how this area of Virginia has changed?	dinosaur footprints; dinosaurs dwelled in this region 150 million years ago

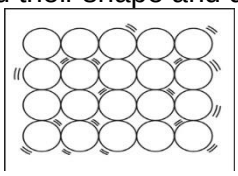
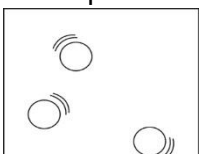
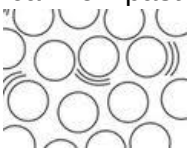
			34. What fossils were found in the Coastal Plain/Tidewater region, and what can you infer about how this area has changed?	bones and teeth from ancient ocean animals; this area was once covered by an ocean
			35. The physical features on Earth's surface are called:	landforms
			36. The process of breaking rock into smaller pieces is called:	weathering
			37. Rock gets broken down into sand, clay, and tiny pieces of rock called:	sediment
			38. Water, rain, ice, and plant roots all cause:	weathering
			39. The process of moving sediment from one place to another is called:	erosion
			40. List the four agents of erosion.	water, wind, glaciers, gravity
			41. The downhill movement of soil and rock due to gravity is called:	mass movement
			42. The movement of wet soil due to gravity is called a:	mudslide
			43. The movement of dry soil due to gravity is called a:	landslide
			44. _____ occurs when soil slowly moves downhill.	creep
			45. The process of dropping sediment in a new location is called:	deposition
			46. Flood water pounding against a canyon wall and wearing it down is an example of:	weathering
			47. A mudslide flowing down a steep hill is an example of:	erosion
			48. Glaciers dropping rock and sand to form terminal moraines is an example of:	deposition
			49. Acid rain dissolving the surface of rocks or marble statues is an example of:	weathering
			50. Deltas forming at the mouths of rivers is an example of:	deposition
			51. Wind blowing sand from one location to another is an example of:	erosion
			52. Wind blasting sand at rock and carving out arches is an example of:	weathering
			53. Roots hold soil in place. How can soil erosion be prevented?	by planting trees and other vegetation

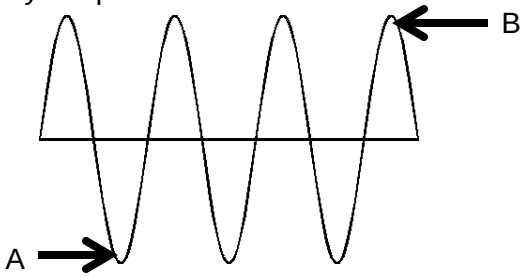
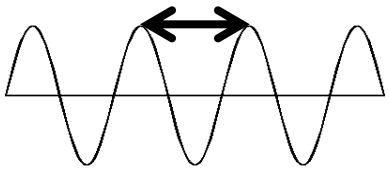
			54. Oceans cover about _____ % of the Earth's surface.	70
			55. The salinity of the ocean varies. Salinity means:	saltiness
			56. What part of the ocean floor is found along the edge of the continents and is very shallow?	continental shelf
			57. What part of the ocean floor is found just beyond the continental shelf and has deep canyons cut into it?	continental slope
			58. What part of the ocean floor joins the continental slope to the rest of the ocean floor?	continental rise
			59. The continental shelf, slope, and rise are all covered with thick layers of:	sediment
			60. _____ are mountains on the ocean floor.	seamounts
			61. The underwater mountain range that runs through the Pacific, Atlantic, and Indian Oceans is the:	Mid-Atlantic Ridge
			62. The flattest part of the ocean floor is the:	abyssal plain
			63. The deepest spots in the ocean are called:	trenches
			64. Evaporation or more run-off _____ the salinity of the ocean.(increases OR decreases)	increases
			65. _____ is the weight of water pressing down on an object	water pressure
			66. Waves are the up and down movement of ocean water and are caused by:	wind
			67. Giant waves caused by underwater earthquakes and volcanoes are called:	tsunamis
			68. A _____ is a stream of water that flows through the ocean like a river.	current
			69. The Earth's _____ causes ocean currents to bend to the left or right.	rotation
			70. Wind patterns and differences in water densities cause:	currents
			71. The _____ is a famous warm current that carries water from the equator to Europe.	Gulf Stream
			72. The greatest variety of ocean life is in the shallowest part of the ocean, above the:	continental shelf
			73. The _____ is the repeated rise and fall in the level of the ocean.	tide

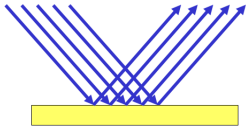
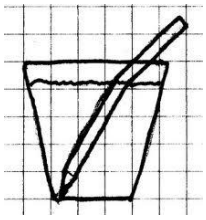
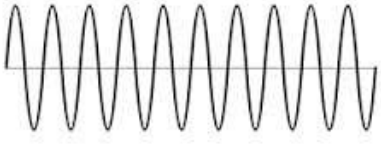
			74. _____ are tiny plant-like organisms that produce much of the Earth's oxygen.	phytoplankton
			75. Phytoplankton, like other plants, need sunlight for photosynthesis, and therefore live:	on the ocean's surface
			76. The three types of rocks are:	sedimentary, igneous, and metamorphic
			77. When molten rock or magma cools below the Earth's surface or cools after erupting from a volcano as lava, this type of rock is formed.	igneous
			78. Over a period of time, layers of sediment are pressed together to form these types of rocks.	sedimentary
			79. Sedimentary rocks often contain these remains of organisms which tell us a lot about life and Earth in the past.	fossils
			80. Rocks formed from other types of rocks by intense heat and pressure deep within the Earth are called:	metamorphic rocks
			81. The Earth's surface is constantly changing due to which 2 things within the Earth?	heat and pressure
			82. The Earth's surface is constantly changing due to which 2 things at the surface of the Earth?	weathering and erosion
			83. Rocks constantly change from one type to another due to a process called:	the rock cycle
			84._____ are caused by the pull of gravity of the sun and moon, but the moon has the greatest effect on it.	tides
			85.All living things are made of:	cells
			86. You can see many parts of a cell if you use a:	microscope
			87. What part of the cell is the "brain" and determines the cell's activities?	nucleus
			88. What part of the cell holds the cell together and protects it from its surroundings?	cell membrane
			89. What part of the cell stores food, water, and waste?	vacuole
			90. What part of the cell is a jelly-like substance that contains chemicals?	cytoplasm
			91. What two cell parts are present in plants but not in animals?	cell walls/chloroplasts

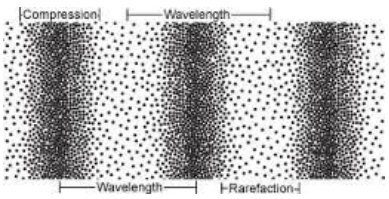
			92. The _____ is the rigid layer of a plant cell that supports and protects the cell.	cell wall
			93. The _____ makes food for the plant cell.	chloroplasts
			94. Plants make their own food through a process called:	photosynthesis
			95. Animals eat plants and other animals to produce:	energy
			96. _____ plants have special tissues to transport food and water.	vascular
			97. Are most plants vascular or nonvascular?	vascular
			98. Trees and flowering plants are examples of _____ plants	vascular
			99. _____ plants do NOT have tissues to transport food and water.	non-vascular
			100. Name 2 common examples of non-vascular plants.	moss, liverwort
			101. Animals with backbones, like snakes, lizards, and fish, are called:	vertebrates
			102. Animals without backbones, like clams, squid, worms, and insects, are called:	invertebrates
			103. Are these rectangular cells examples of plant or animal cells?  	plant
			104. Are these spherical cells examples of plant or animal cells?  	animal
			105. What are the arrows pointing to in these cells? (brain center)  	nucleus

			106. What are the arrows pointing to in these cells? (storage center) 	vacuole
			107. What are the arrows pointing to in this cell? (makes food)  	A. chloroplast B. cell wall
			108. What is the arrow pointing to in this cell? (thin protection) 	cell membrane
			109. Anything that has mass and takes up space is called:	matter
			110. _____ is the measure of the amount of matter in an object.	mass
			111. _____ is a measure of the gravitational pull on an object.	weight
			112. _____ are matter that's made of only one type of atom like gold, hydrogen, and oxygen.	elements
			113. The smallest part of a compound is a:	molecule
			114. A substance made of at least two different elements bonded together, like H_2O or NaCl, is called a:	compound
			115. There are over 100 pure substances called:	elements
			116. A combination of two or more substances that are not bonded and can be separated by physical methods, like salt and pepper, is a:	mixture
			117. A mixture in which one substance dissolves in another, like lemonade, is a:	solution

			118. Which phase of matter contains molecules that are packed together so they hold their shape and do not flow? 	solid
			119. Which phase of matter contains molecules that move freely past each other with a lot of space between them? 	gas
			120. Which phase of matter contains molecules that are loosely packed together and can flow past each other? 	liquid
			121. _____ is a phase of matter that has no definite shape or volume.	gas
			122. ____ is a phase of matter that has a definite volume but no definite shape.	liquid
			123. ____ is a phase of matter that has definite shape and volume.	solid
			124. Atoms are made of 3 subatomic particles. What are they?	protons, neutrons, and electrons
			125. An atom's protons and neutrons are packed tightly in its center, called the:	nucleus
			126. _____ are the part of an atom that have a positive charge.	protons
			127. _____ arethe part of an atom that have no charge.	neutrons
			128. What part of the atom contains almost all of its mass?	nucleus
			129. _____ are parts of an atom with a negative charge. They have very little mass.	electrons
			130. What lists all elements and groups them by similarities?	The Periodic Table of Elements
			131. _____ makes matter change phases.	temperature or heat energy

			132. NaCl (sodium chloride) is a compound called:	salt
			133. If you heat a solid, it may:	melt into a liquid
			134. If you heat a liquid, it may:	evaporate into a gas
			135. If you cool a gas, it may _____ into a liquid.	condense
			136. If you cool a liquid, it may _____ into a solid.	freeze
			137. Clouds, dew, and water droplets on the outside of a glass on a hot day are all caused by:	condensation
			138. Light and sound are not matter. They are forms of:	energy
			139. List the 7 colors of the visible spectrum in order from the longest wavelength to the shortest.	red, orange, yellow, green, blue, indigo, violet
			140. An apple appears red because the apple absorbs all of the colors, but _____ red back to your eye	reflects
			141. _____ is a combination of several different wavelengths of light travelling together.	white light
			142. What “color” do you see when a material is absorbing all colors and not reflecting any?	black
			143. What “color” do you see when a material is reflecting all colors back to your eye, and not absorbing any?	white
			144. Light waves travels in straight paths called _____.	rays
			145. Identify the parts of the wave below. 	A. trough B. crest
			146. What type of wave is a light wave?	transverse
			147. Identify the part of the wave shown below. 	wavelength

			148. What travels faster through the atmosphere, light or sound?	light
			149. When light bounces off an object, it is: 	reflected
			150. When light bends, it is: 	refracted
			151. When light passes through an object, it is:	transmitted
			152. When light hits an object, it can be absorbed as _____ energy.	heat
			153. Light passes easily through a window because the glass is:	transparent
			154. Light can't travel through a wall. A wall is:	opaque
			155. Some light can pass through wax paper. Wax paper is:	translucent
			156. When white light passes through a _____, the different wavelengths bend at different angles, so we see a rainbow of colors.	prism
			157. Concave and convex lenses bend or _____ light.	refract
			158. How long does it take for light from the sun to travel 150 million km to Earth?	8 ½ minutes
			159. Light travels fastest through:	a vacuum or empty space
			160. The color light with the longest wavelength is:	red
			161. The color light with the shortest wavelength is:	violet
			162. Sound is a form of energy produced by:	vibrating matter
			163. Sound travels in:	waves
			164. The __ of a sound is the number of vibrations in a given time. 	frequency

			165. An object vibrating faster will have a higher frequency and a higher:	pitch
			166. Sound is a _____ wave. 	compression
			167. The distance between two compressions is the:	wavelength
			168. What kind of matter does sound travel through fastest?	solids
			169. Sound travels slower through gases than through liquids and solids because the molecules in gases are:	further apart
			170. Dogs, bats, and other animals can hear _____ sounds that humans cannot hear.	high frequency
			171. Whales can hear _____ sounds that humans cannot hear.	low frequency
			172. Musical instruments _____ to produce sound.	vibrate
			173. An instrument that uses sound echoes to measure the distance to the ocean floor or underwater objects is a:	sonar