Science Review Checklist: 5 th 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!
	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 B C D	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 B	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 $\rm H_2O$ 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	A. trough B. crest
146. What type of wave is a light wave?	transverse
147. Identify the part of the wave shown below.	
	wavelength
	1

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 Wavelength Rarefaction-	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