2010-11 Grade 2 Science Instructional Calendar

Topic/Concept	**Suggested Time**	**AKS**		
Characteristics of Science	On-Going	**AKS 1-6**		
Life Science	**First 9 weeks**	**AKS 13**		
Life Cycles, Plant Growth and Development	9 weeks	13) investigate the life cycles of different organisms to understand the diversity of life 13a) illustrate and describe the life cycle of common animals (cats, birds, frogs, butterflies) 13b) relate seasonal changes to observations of how a tree changes throughout a school year 13c) investigate the life cycle of a plant by growing one from a seed and recording changes over a period of time 13d) investigate how variables such as temperature, light, water and nutrients affect the growth of plants 13e) identify fungi (mushroom) as a living organism		
Physical Science	**Second 9 weeks**	**AKS 10**		
Matter	9 weeks	10) investigate the properties of matter and changes that occur in objects 10a) identify three states of matter (solid, liquid, gas) and sort materials according to their state 10b) compare and contrast the different properties of matter 10c) recognize and compare physical properties of objects (weight, size, buoyancy) 10d) recognize variables that change matter (mixing, heating, freezing, cutting, wetting, dissolving, bending, exposing to light) 10e) recognize chemical changes in matter (burning paper, toasting bread) 10f) Extension: describe changes involved in making/cooking a familiar snack (Jell-O, pudding, popcorn, ice cream, snow cones)		

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Earth Science	**Third 9 weeks**	**AKS 7, 8**		
Astronomy	9 weeks	7) describe the universe as including the moon, sun, other stars and planets 7a) describe the physical attributes of stars (size, brightness and patterns) 7b) identify gravity as the force that pulls objects towards the center of the earth and as a force that exists between the earth and the moon and the earth and other planets 8) investigate the position of the sun and moon to show patterns throughout the year 8a) compare how the sky is different at various times of the year 8b) investigate the position of the sun in relation to a fixed object on Earth at various times of the day 8c) determine how shadows change through the day by making a shadow stick or using a sun dial 8d) relate the length of the day and night to the change in seasons (days are longer than nights in the summer) 8e) use observations and charts to record the shape of the moon for a period of time		
Physical Science	**Fourth 9 weeks**	**AKS 11, 12, 9**		
Energy - Light and Heat Force and Motion	4 weeks	11) identify sources of energy and how energy is used 11a) identify sources of light energy, heat energy and energy of motion 11b) describe how light, heat and motion energy are used 12) demonstrate changes in speed and direction using pushes and pulls 12a) demonstrate how pushing and pulling an object affects the motion of the object 12b) demonstrate the effects of speed changes on an object 12c) predict what happens to an object when no external force acts on it 12d) predict what happens to the speed and direction of an object when force is applied		
Environmental Changes	3 weeks	9) observe and record changes in our surroundings and infer the causes of those changes 9a) recognize effects that occur in a specific area caused by weather, plants, animals and/or people		
Extensions/Previewing	2 weeks	Schools can choose to use this time to either extend content covered previously or begin to preview (or pre-teach) the subsequent course. Materials for previewing are available on the GCPS Science website (http://gwinnettk12online.net/).		