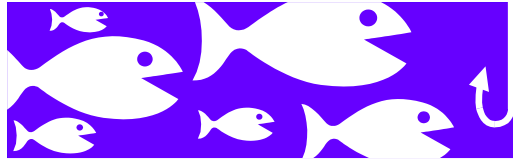


Pebble Pups Program 2013-2014

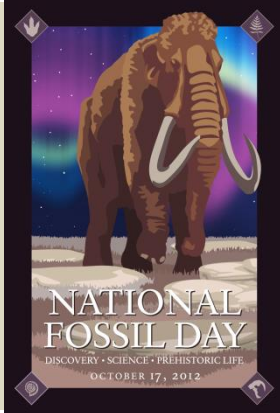


Upcoming Classes



Pebble Pups meet the **third Tuesday** of Each Month in the Academic School Year
 Time: 6:00 p.m. to 6:45 p.m.
 Place: Lake George Community Center

Month	Class Title	Topics	Instructor
September	Orienteering	In this fun class the pups will learn the following: How a compass works and the features of an orienteering compass; how a topographic map shows terrain features; learn about the symbols on a topographic map; learn how to measure distances using an orienteering compass.	Dan Alfrey Note: complete three of these and earn a merit badge: 1 Learn about the different sorts of maps and how to read them.
September	Field Trip Sept 14	Denver Gem and Mineral Show: Tourmaline. Pebble Pups meet at 10:00 at the Denver Merchandise Mart. Pebble Pups may enter a case jointly and some separately in the Denver Gem Show. Four Earth Science Scholars will present programs at noon. On-line info at www.denvermineralshow.com .	Luke Sattler, Liaison
October	Special Celebration Earth Science Week Field Trip Oct 14 10 am	Vindicator Valley Trail. We will learn about Cripple Creek Mining in the early days of the gold rush.  October 14 to Oct 20, 2013 We will explore the trails, take pictures, and have lunch at noon. The field trip will end at the end of the picnic.	Caleb Bickel 

October	The Garnet Family of Minerals	The minerals of the garnet family will be explored	Hunter Bickel
October	Special celebration October 13	National Fossil Day Special activities for National Fossil Day will be posted to this Blog http://pebblepups.blogspot.com/	
November	Fossil Phenomena Found at the Cripple Creek and Victor Mining District	The most unusual and improbable fossil wood ever found in a volcanic complex will be presented. How did the trees, branches, and trunks survive the heat of igneous rocks.	Caleb Bickel
December	NO MEETING	NO MEETING	NO MEETING
January	Field Trip TBD Denver Museum of Nature and Science	Meet Dr. Ian Miller at the Denver Museum of Nature and Science and go behind the scenes and view the latest discoveries in paleontology . There will also be a trip to the paleontology and the mineral hall. Arrival time 9:15 am. Return early	Steven Veatch Julie Shimon Betty Merchant Luke Sattler Blake Reher
January	The Colorado-Wyoming Diamond District	We will explore this diamond district, how they are formed, and how they are mined.	Hunter Bickel
February	Field Trip Science writing and research	This will be a special class for the junior members to learn about science writing and research methods. The class will be at the Western Museum of Mining and Industry in Colorado Springs. Date TBD	Steven Veatch

March	March TBD Field Trip	There will be a Saturday field trip to the Cave of the Winds.	Steven Veatch
April	The World of Tourmaline	We will look at the many kinds of tourmaline and some famous localities.	Caleb Bickel
May	The World of Fossils	This class is a basic introduction to fossils and paleontology	Hunter Bickel

For more information, possible updates and/or weather cancellations please see our club web site at: www.LGGMclub.org or call Steven Veatch, Pebble Pup Leader, at (719) 748-5010

The **Future Rock Hounds of America Program**, sponsored by the American Federation of Mineralogical Societies, is an important part of the Lake George Gem and Mineral Club Pebble Pup program. All pebble pups are urged to participate in the program and earn merit badges. Instructions for earning each merit badge are on the following blog:

<http://pebblepups.blogspot.com/>

Pebble pups that have an interest in a deeper dive in earth science projects are urged to work with Steven Veatch, who can supply individual projects to pebble pups where they will learn basic research, science writing, and experience the excitement of having their research published. Several of the pebble pups have published some of their work on the pebble pup blog.
Lake George Gem and Mineral Club Pebble Pup Program

Program Chair: Steven Veatch
(719) 748-5010 or steven.veatch@gmail.com

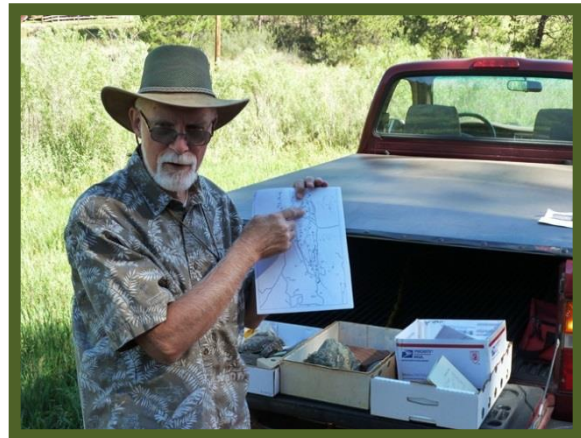
Biography of Pebble Pup instructors:

STEVEN VEATCH conducts educational geoscience programs and research throughout the Pikes Peak region. Steve is an adjunct professor of earth science at Emporia State University where he received an MS in earth science. Steve



studied oceanography and meteorology while serving in the U.S. Navy. Steve has contributed chapters to 3 books: *Field Trips in the Southern Rocky Mountains, USA, Field Guide 5*, *The Paleontology of the Upper Eocene Florissant Formation, Colorado*, and *The World's Greatest Gold Camp: An Introduction to the History of the Cripple Creek & Victor Mining District*. Steve teaches graduate classes on geoscience courses for the Colorado School of Mines in the Special Programs and Continuing Education (SPACE) department. He is active in the Kansas Academy of Science, the Colorado Scientific Society, and the National Earth Science Teachers Association, and the Geological Society of America.

BOB CARNEIN has collected minerals since he was twelve years old, starting at sites in New England, New York, and New Jersey. His collection now numbers over 1500 catalogued specimens, specializing in fluorescent minerals, crystallography, and the minerals of Franklin, NJ, the Cripple Creek district, CO, and



Chuquicamata, Chile. After receiving degrees in geology and glaciology at Ohio State, Bob taught undergraduate geology courses at Waynesburg College and Lock Haven University, in Pennsylvania. From 1972 through 1988, he taught students from all over the U.S. through Waynesburg's field-geology course, offered during the summer at a field station in Florissant. He recently retired and does volunteer work at the Florissant Fossil Beds National Monument and Arabian Acres Metropolitan District. He is the editor of the Lake George Gem & Mineral Club's monthly newsletter.

JOHN RAKOWSKI collected minerals and fossils since his early teens and read extensively about geology. John earned his degree in Geology and has worked as a Petroleum Geologist since 1968 exploring and developing oil and gas fields throughout the USA and several foreign countries.



He has run his own geological consulting company since 1984. John continues an interest in geology as a hobby with mineral collecting and lapidary interests. John is a Certified Petroleum Geologist by the American Association of Petroleum Geologists, a Certified Earth Scientist and former Denver Chapter President and National Director of the Society of Professional Earth Scientists, a member of the Rocky Mountain Association of Geologists, member of Colorado Scientific Society, member of the Houston Geological Society, member of the New Orleans Geological Society, Board Member of the Pikes Peak Historical Society, President of the Lake George Gem & Mineral Club and active in the Indian Creek Property Owner's Association (was treasurer for 11 years).

DAN ALFREY has been conducting outreach programs through the LGGMC study group that connect people with the Earth sciences. Dan is also the chair of the Lake George Gem and Mineral Show for 2012.

Lake George Gem and Mineral Club Pebble Pup Program

- Program Chair: Steven Veatch
- Program Co-chairs: Bob Carnein and John Rakowski
- Program assistants:
 - Dan Alfrey
 - Media and Press: Jo Beckwith
 - Liaison to the LGGMC show: Caleb Bickel
 - Liaison to Cool Science: Caleb Bickel
 - Liaison to the Family Day at the WMMI: Hunter Bickel
 - Science Olympiad Liaison: Caleb Bickel
 - Assistant to the Olympiad Liaison: Hunter Bickel
 - Outreach: VACANT
 - Blog: Steven Veatch
 - Facebook: Allison Schlesinger
 - Merit badges: Luke Sattler
 - Field trip planner: VACANT