JCAS Workshops (school tours at JCAS or	r workshops in your classroom)	2018/19
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ART (T-Thurs)	STEAM: Integrated Arts and Science (T-Thurs)	NATURE (T-Thurs)	TECH (Fridays only)
Portraiture: What makes a face a face? In this workshop students will learn about proportion and use a variety of art materials to create an imaginative self-portrait. Students will view and be inspired by the works of a variety of contemporary artists including Kehinde Wiley and Hung Lui. NGSS crosscutting: scale and proportion Common Core Math: MS. ETS1.A National Core Art Standards: VA CRr2 1.1 - 1.5	Art and Architecture: What makes a good home, city, community? In this workshop students will investigate this question as they explore the built environment. Using recycled materials, glue, and other art materials students will create a structure that reflects their imaginations, sense of place, and unique vision of home. A variety of art, design and engineering techniques will be explored. NGSS: 3 LS1-1 (science and engineering core concepts) K–2-ETS1-1. VA: CR1,2,3 PKa-5a	Animal Exploration: Meet Reptiles, Amphibians, or Invertebrates Why does a cockroach hiss? What does a bearded dragon do when they are scared? Why do some toads have red or "fire" bellies? Our animal workshop are interactive presentations that introduce students to the habitat of specific animals, their special features, and their adaptive behaviors. In these workshops students explore life cycles, the food chain, skeletal structure, and fun facts. NGSS: 3-LS1.1 and 3-LS1.2, K-LS1-1. Crosscutting Effects: Cause and Effect and Patterns.	Stop Motion Animation: Students will be introduced to the basics of stop motion animation using IMOVIE. Working in small groups they will develop a story, make illustrations, and create a short film.
Perspective and Design: How do you make a 2D image look 3D? How can you make something look far away or close up in a painting or drawing? In this workshop students explore the principles of art, math, and design to create a lively multi-dimensional artwork that explores landscape and space. NGSS crosscutting concepts: Systems and System Functions and Scale, Proportion and Quantity CA VA: CR1 and 2 1.1, 2.1, 3.1-5a	Rocket Science: How can we use air to make something fly? Explore the states of matter, gravity, and energy in this exciting workshop where students will build, design, and test their rockets. Collaboration and inquiry are fundamental components of this class. NGSS Standards: Science and Engineering practices: Planning and carrying out investigations, solving problems through engineering 3-PS2 Motion and Stability: Forces and Interactions	Nature study: The World of Lake Merritt How can we explore our local environment using art? In this part walking tour and part observational drawing program students will engage with the plants, trees, and inhabitants of Lakeside Park. In their homemade sketch books students will do texture rubbings, make drawings, label, and classify their discoveries. VA: CRr2 1.1-1.5	Robotics K-8 : We will learn about robotics and coding all at once as we build and program a LEGO Robots from scratch and put them to the test in a competition.

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Exploring Pattern: What do spirals, dots, stripes and swirls have in common? In this workshop students will use various art mediums to gain an understanding of how patterns are carefully crafted organization of line, color, and design that tell a unique story. Students will also have the chance to observe our animal ambassadors as well as the local environment as another way to make connections between the human and natural worlds. NGSS: K-LS1-1. CA VAPA 1.1, 2, 3, 5.4 VA: CR1,2,3	Fundamental Forces: What is force and how does it work? In this workshop students will explore forces such as gravity and velocity through fun hands on art activities and design challenges. This is a creative applied program that encourages experimentation and teamwork. NGSS crosscutting concept: Stability and Change and Structure and Function, 3-PS2 Motion and Stability: Forces and Interactions CA VAPA 2.4, 2.6, 1.5		Computer Science K-8: Coding is all around us-your phone, computer, car, school, and even Fortnite. We will learn what programming is and will code your first program! Computer Science 9-12: We will use Javascript, a popular programming language, to create your own, unique visual experience. We use a software similar to Paint, but instead of using your mouse to draw, you use code!
PKa-5a Ceramics: In this workshop students will learn the basics of hand building such as coiling, pinching, and slab construction. Students are encouraged to explore the materials and experiment with different techniques and tools. VA: CR1,2,3 PKa-5a			Makerspace 9-12: Hacking: A (sometimes) clever modification or fix made to a piece of equipment that improves its performance or makes the equipment do something for which it was not originally designed. Come do some hardware hacking, and take a peek into some of your favorite electronics and toys as we flip them inside out to give them a newfound use.
Art of the Book: How can we combine words and pictures to tell an imaginative story? Make books journals and zines to create a unique story. Students will learn different ways to bind and design books as well as explore pop ups and other 3d connections. VA: CR1,2,3 1a-5a, VA:RE 7.1 Pk-5a			