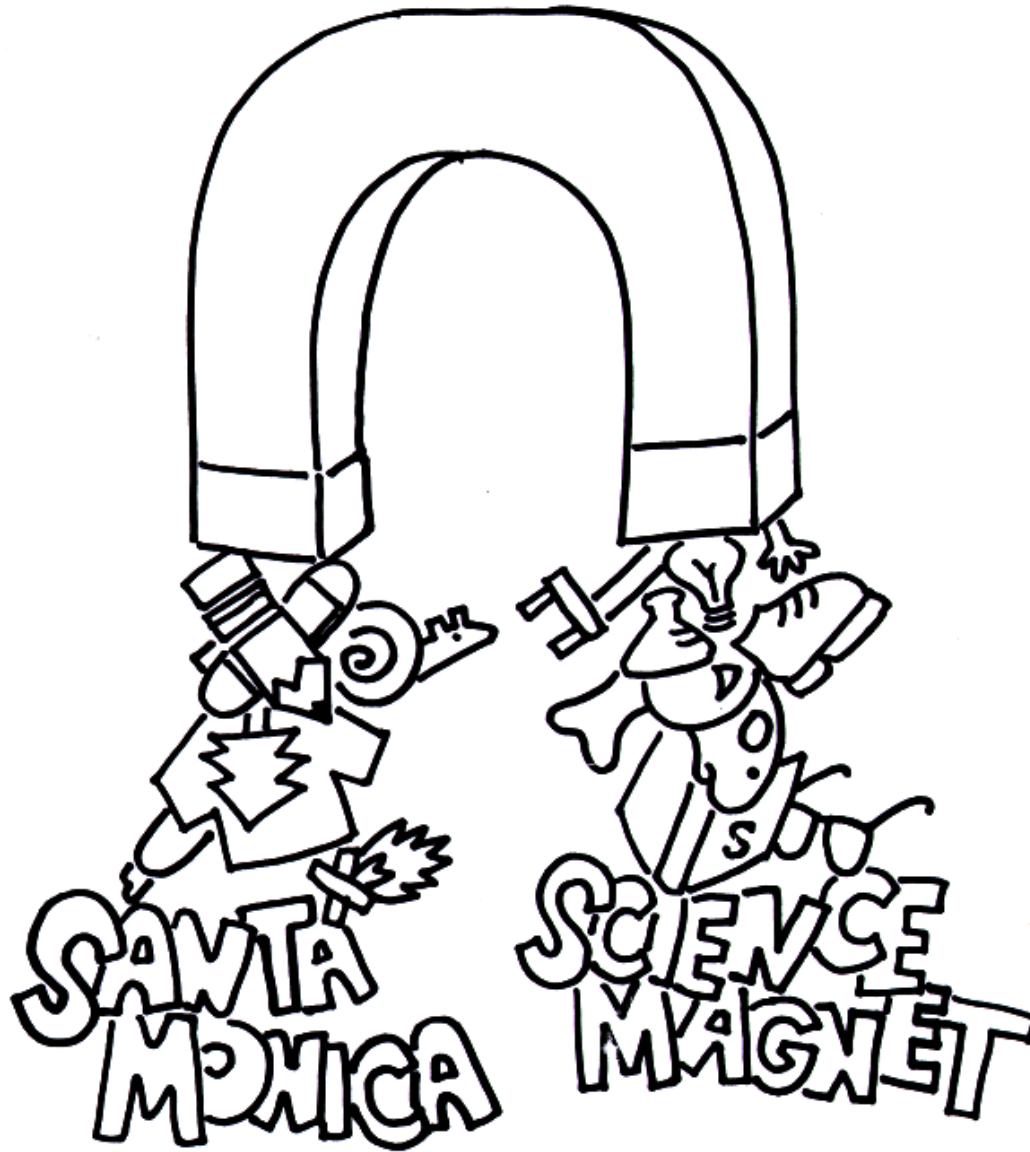


SANTA MONICA SCIENCE MAGNET HANDBOOK



John Adams Middle School
2425 16th Street
Santa Monica, CA 90405
310-452-2326 (school office)
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www.adams.smmusd.org
www.santamoniscienceomagnet.org

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Welcome to the Santa Monica Science Magnet (SMSM)! You and your child have an exciting and rewarding two years ahead of you. The year for SMSM officially begins with our Summer Institute.

One important thing we have learned during these years is that the parents are a key component in our success. Your contribution of time and participation in our various activities helps expand and enrich the SMSM program for all involved. You can become involved by:

- Assisting your child and/or a group of students as they complete homework and projects throughout the year;
- Volunteering in our state-of-the-art science labs;
- Volunteering as a chaperone for any of our seminars or special programs;
- Participating in the independent family trips organized by SMSM;
- Becoming a seminar instructor yourself – teach 25 students in the area of science you feel confident in – these three-hour seminars are to be designed by you;
- Donating supplies, equipment or money to SMSM;
- Becoming a member of the SMSM board.

SMSM will also need your support in fundraising. Funding for the enrichment activities (such as field trips and extended educational trips for each grade) is up to the SMSM families to provide. Every child participates. Every family needs to contribute to the best of their ability financially and/or by volunteering time (or both!). We have a gift wrap fundraiser and a yard sale in the fall.

Please become involved – for the sake of your child and for every child in the Santa Monica Science Magnet program at John Adams Middle School.

CURRICULUM

The Santa Monica Science Magnet employs an integrated approach to teaching science. It is interdisciplinary in content, spiraling through biology, chemistry, physics, and earth science in an age appropriate manner. The theme for the seventh grade is how organisms have changed over time through the interaction and interdependence of the environment and the imposition of the human species. The eighth grade curriculum consists of four main units of study. Unit 1 involves chemistry including chemical reactions and environmental issues. Unit 2 deals with physics of motion and space science. Unit 3 involves human physiology. Unit 4 focuses on human health issues, human development and the study of genetics.

During the year, students will use many scientific processing skills – such as observation, experimentation, and model building. Creativity, curiosity, originality and problem-solving skills will be stressed. Students will demonstrate their knowledge of the material they have been taught through projects, activities and experiments. The SMSM program incorporates a wide variety of learning experiences designed to foster students thinking and working as budding scientists. This will be accomplished by working with problems and questions dealing with natural phenomena – identifying, defining, proposing solutions and testing them. In this process of experimentation, data will be collected, analyzed, synthesized and applied to explain the results. Documentation will be recorded daily in a notebook.

To be successful in the SMSM program a student should:

- Have a high interest and commitment to science and technology
- Be a self-starter
- Be able to listen to and follow directions
- Be able to take lecture notes

- Be able to design and implement projects
- Be able to follow rules of the classroom and lab
- Be willing to read, research and experiment
- Be curious
- Be able to spend a week away from home
- Be able to work in a group
- Be able to ask for help

The “ideal” SMSM student would have all of these qualities. However, this is middle school and they are adolescents, so these characteristics are desired, but not required.

MAGNET ACTIVITIES

The Santa Monica Science Magnet is a special program that requires participation in a wide variety of events, classes, seminars and trips. Full participation in these activities will allow students and parents the most benefit from the SMSM program.

Some activities are required; some are optional – all are designed to enhance the student’s science experience. We recommend that students try to participate in each optional activity at some point during their two-year SMSM experience.

Required	Extended Trips	Field Classes
Summer Institute	Yosemite Institute (7 th)	Pismo Beach/Morro Bay
6 seminars per year	Astro Camp (8 th)	Joshua Tree
Peak Project (7 th)	Japan	Math and Science Day
Ocean Globe Project (7 th)		Wildlife Rescue
Science Outreach Project (8 th)		Hikes to Various Wilderness Areas
Environmental Issues Project (8 th)		Cross-country Ski
Genetic Disease Project (8 th)		Ecostation
Mouse Trap Car Project (8 th)		

The 7th grade Science Magnet projects include the following:

- Ocean Globe Project – see description below.

The 8th grade Science Magnet projects include the following:

- Science Outreach Program - a hands-on experiment to be taught to an elementary classroom
- Environmental Issue Project Interview – designing a brochure and instructing others about the student's environmental issue project.
- Mousetrap Car Project - designing and building a car using a mousetrap and completing a report explaining how the car relates to various physics concepts.
- Genetic Disease Project - a creative group lesson on a specific genetic disease which will be taught to the class.

** Please note that the above projects are in addition to the regular science curriculum. Other projects that are a part of the standard curriculum will be completed.

THE SUMMER INSTITUTE

SMSM students have the unique opportunity to have college experience. During the Summer Institute, the students will be with JAMS science teachers for the entire week. We also use this time to introduce our unique programs.

In 7th grade students will participate in real-time data collection – the Ocean Globe Program. The Ocean Globe Program has students collect data at the beach using protocols established by scientists. This data is then input into a computer data program that these scientists and other students may use throughout the year. This program will continue through the school year and require students to write a scientific paper reporting their findings.

The Summer Institute will introduce the incoming 8th graders to the following topics:

- Chemical Reactions
- Chemical Solutions
- Physics of Sound
- Civil Engineering
- Sports Physiology
- Additional classes will be added as needed.

All students are expected to attend the summer institute. However, we understand that vacation plans may have been pre-arranged. If your child cannot attend, you must attach a letter explaining why your child will be absent, attach it to the summer institute form (handed out in May), and return to your child's science teacher by the due date listed on the form. Your child will be expected to complete an alternative assignment while on vacation and will be expected to complete the alternative assignment given. Those who miss the summer institute and do not complete the alternative assignment risk being placed on probation at the start of the school year.

SEMINARS

During the school year, various teachers, parents or other professionals offer seminars after school or on weekends in subjects that interest them. Seminars address the needs of students who desire to expand their knowledge of various fields of science that may not be emphasized in the regular curriculum. Each seminar is limited to 25 students (although occasionally more students may participate, depending upon space availability or area requirements). Seminars are usually three hours long, but could be set up as two ninety-minute classes during the week.

- The seminar schedule is issued every six weeks, just before the new grading period.
- Students return a signed (**parent signature required**) seminar request sheet to their teacher by the due date.
- Teachers return this request to the student, indicating which seminar the student has been assigned to.
- Students can try to find a seminar on their own – if they either didn't turn in their request on time, or didn't get the seminar they really wanted
- If a student finds they cannot attend a seminar they have signed up for, they **MUST** give the seminar instructor (as opposed to their science teacher) at least 24 hours notice so that they don't get penalized for non-attendance
- Students must participate in 6 seminars (one per grading period), including one self-designed seminar (see below)

Parents are welcome to attend most seminars as by-standers or chaperones. Most seminars do not supply transportation, but the instructor may try to match students with rides when possible. It is the students' responsibility to inform the instructor if transportation is an issue. There could also be a cost of admission to some of the seminars.

Because of budget cuts, all SMSM students will now complete a three-hour seminar of their own design. The student must get pre-approval and a focus assignment from their science teacher. This self-designed seminar must show proof of attendance and the student must submit a full-page report of the science observed. Each science teacher will have a posted list of the approved possible choices for these self-designed seminars. Family outings to exciting places around LA, the country or the world can be examples of self-designed seminars. We hope that this new approach to seminars will help students with very tight schedules. However, do remember to check with your science teacher before you complete your seminar of choice.

FAMILY PARTICIPATION TRIPS

Each year SMSM plans various trips that can include the whole family. In early October, our annual camping trip to the beach has become very popular – this year it will be in Morro Bay. In January (weather permitting) there is a cross-country skiing trip to Frazier Park with Gwynne Pugh (a former SMSM parent and National Ski Patrolman). April brings the flowers to Joshua Tree, so that's when we hold our spring campout in the desert. All these trips offer seminar credits to the students attending.

On the family participation camping trips, SMSM reserves the camping sites but the families are responsible for everything else – their own transportation, tents, food, firewood, etc. Camp sites are shared (8 people per camp site). When the students are not in the actual seminars, they are under the jurisdiction of their parents.

We invite parents to participate and help with the seminars and trips that are conducted throughout the year. We are open to new suggestions for exciting trips and new experiences. Check the web site and our newsletter for dates of the trips.

EXTENDED TRIPS

Typically, 7th graders attend the Yosemite Institute for one week (January) and 8th graders attend Astro Camp for three days (February). The cost for the Yosemite Institute is anticipated to be around \$450. The expected cost for Astro Camp is around \$220. A deposit is required in the beginning of October. Payment plans and scholarships are available (applications required). More details will be given out at the Science Magnet meeting at the end of September.

** Please note that the prices listed above are estimates. Prices may change year to year.

CHAPERONES

The district requires that we have adult supervision for every twelve students when we leave campus. We need parents for our extended trips as well as our shorter seminars (such as the Science Museum, the Challenger Center, the SMC planetarium, and so on). The seventh graders participate in the Ocean Globe Program, which requires our students to collect data at Santa Monica beach once a month. We would like to train parents in the protocols so that this can be a meaningful seminar experience. The extended trips have more specific requirements for chaperones and parents must submit a letter of intent. Please contact the appropriate SMSM Board member for more detailed information. Chaperoning is a good experience for all involved.

ELIGIBILITY

The Science Magnet Program is a high interest program which includes many activities and enrichment opportunities. In order to maintain the integrity of this program each student is expected

to perform to his/her best ability. Therefore certain requirements must be met to avoid probation or dismissal. The minimum requirements are as follows:

- **Grades** – Students must earn at least a “C” in science. Students must have at least a “B” in science and a “C” in all other classes to attend the Yosemite trip.
- **Citizenship** – Students must earn at least a “S” in science. Students must have “E”s and “G”s in all classes to attend the Yosemite Trip.
- **Work Habits** – Students must earn at least a “S” in science. Students must have “E”s and “G”s in all classes to attend the Yosemite Trip.
- **Projects** – Students must complete all major projects on time.
- **Seminars** – Students must attend one seminar during each 6 week grading period (6 for the year).
- **Summer Institute** - Students must earn credit for the summer institute.

If you students do not meet the minimum requirements listed above the following will take place:

- **1st Offense** – Student will be placed on probation.
 - Probation contract will be sent home to be signed and returned by parents.
 - Parents and students must attend the science magnet probationary meeting.
 - Teachers, parents, and students will work together to come up with a plan to get the student off probation and help them maintain the minimum requirements.
- **2nd Offense** – Student will be removed from the program.
 - Removal letter will be sent home.
 - Student will be removed from the magnet class and place in a regular science class OR the student will remain in the magnet class and not be recommended for 8th grade science magnet (at teacher’s discretion).

The SMSM program is a special program for students who wish to challenge themselves in science. More students want to participate in the SMSM program than we have room for. We are obligated to offer this program to the students who will most benefit from it. Students who consistently do not meet the standards will be asked to step aside so that students on the waiting list can participate and enjoy the SMSM program. The students removed from the SMSM program will be placed in the regular science class at JAMS; the counselor will try to place the student with the same science teacher.

COMMUNICATION

Please stay informed. We are a very dynamic and varied program. We cannot contact you every time there is a new or changed opportunity. Teachers responsible for seminars will pass out information in the class. It is the student’s responsibility to tell you. We try to keep the website up-to-date. An SMSM newsletter comes out four times a year.

CHECKS

All checks must be made out to the “Santa Monica Science Magnet” – no abbreviations are allowed by the bank. If there has been an overpayment for any reason, the difference will not be repaid but rather credited towards the next event (unless you are an outgoing student and there are no future events).

WEBSITES TO BOOKMARK

<http://www.santamonicasciencemagnet.org>
<http://www.adams.smmusd.org>

FAQ

Q: How do I get into the Science Magnet program?

A: If you are a 7th or 8th grader, you must attend 2 seminars, fill out an application, and get a recommendation from your science teacher. If you are a 6th grader, then you must complete 4 seminars instead of 2.

Q: How do I sign up for seminars?

A: There is a process. Your science teacher will hand out seminar sheets to the class. These must be filled out and returned by the due date with a parent signature. Seminar choices are based on seniority (8th graders first, 7th graders second, 6th graders last). Your teacher will return your seminar sheet to you. At the top of the list, a seminar will have been circled. It is so happens that "CLOSED" is written on your sheet, then you must find another seminar on your own. Also, if you do not turn in your seminar request on time with a parent signature, then you must find a seminar on your own.

Q: How do I find a seminar on my own?

A: Go to the teacher whose seminar you want to attend and ask to sign up on their seminar list. You may be put on the waiting list. If you are, make sure you consistently check to see if there have been any cancellations.

Q: How many seminars do I need to stay in the SMSM?

A: You need to attend on seminar each 6-week grading period (for a total of 6 in the school year). One of these is a seminar of your own design.

Q: What happens if I don't complete my seminars on time?

A: If you miss a seminar for the grading period, your grade will be lowered 5% for each seminar missing. You will also be put on a probation contract.

Q: What is a probation contract?

A: This is a contract that informs both you and your parents that you have fallen below the minimum requirements to be in the SMSM program. If the contract is broken (meaning, if the minimum requirements are not met the following grading period) then the student will be dropped from the program and placed in the regular education science classes.

Q: What is the minimum requirement to be in the SMSM program?

A: You must have at least a "C" or better in all your classes and must attend a seminar every six-week grading period. Also, you must attend the summer Science Institute (or do the make-up work).

Q: What can I do to stay in the SMSM program if I can't attend the Summer Institute?

A: You will be required to do an alternative assignment, as well as make-up both the Peak and the Ocean Globe seminars (on top of the required 6 seminars per year). Incoming 7th graders should speak with Ms. Cady (Room 70) and incoming 8th graders should speak with Mr. Brown (Room 71) about the alternative assignment before the end of school in June prior to the Summer Institute.