A day of math, engineering and science

More than 500 students compete against peers

By TARMO HANNULA

SANTA CRUZ — The and Science Achievement preliminary competition unfolded at UC Santa Cruz

More than 500 educationally disadvantaged middle and high school students from partner schools in Santa Cruz, Watsonville, Salinas, Gonzales, Castroville and Soledad convened at the Jack Baskin School of Engineering to compete against their peers in a va-riety of science, technology, engineering and mathemat-ics projects, that tested their design, presentation, critical thinking, problem solving and teamwork skills.

Students got to show off home-engineered projects such as prosthetic arms designed to accurately toss a ball and move objects, mousetrap cars designed to stop after an exact distance. balsa wood gliders and eggdrop contraptions.
Antonio Hernandez, a

ninth-grader from North Monterey County High, earned high marks for his mousetrap car that utilized

old LP records as wheels.
"I got the idea to use re cords from a middle school class I was in," Antonio said. "At first I thought I was going to lose, especially after my first try. But on the second

chance I did really well." Indeed, on his second attempt to have his invention stop on a strip of tape after rolling about 8 feet, the rickety jalopy wheeled slowly past the mark, stopped and then backed up and parked nearly on target,

triggering a roar of applause.
"I knew it was going to go backwards," Hernandez said.

This year's MESA Day com-petition featured new events, including video gaming and a prosthetic arm competition. In the video game design com-petition, which was held at an earlier date, a team of students from Alianza Middle School (Zuli Alcantar, Isa Moreno and Jose Campos) won second place in California and will now move on to the national



Santa Cruz High School student Samantha Gervacio (left) tests her skill at tossing a tennis ball with a prosthetic arm that she and her partner, Morgan Gervacio, built for their entry in the MESA competition Saturday at UC Santa Cruz. BELOW: J.P. Chavez, a sixth-grader from Lakeview Middle School, tests his balsa wood airplane.

For the prosthetic arm com petition, students must build an arm with movable fingers and use it to pick up objects, toss a ball into a target bucket and fasten screws into a board.

Saturday's event opened with a keynote address by Danielle Feinberg, an anima-tion expert from Pixar Films. She explained to students how math is used in animation using examples from the Oscar-winning film, "Brave."

Alexandria Leckliter, MESA director, said about 200 students, who would have been left out of the event due to fund-

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Comet Pan-STARRS on parade in western sky

By TARMO HANNULA

WATSONVILLE - The comet Pan-STARRS is putting on a show in the early evening sky for the rest of this month Traveling inside the orbit of Mercury, the bright comet can be spotted in the western sky with the naked eve.

According to Earthsky.org, "the comet should be visible, and at its brightest because it is passing closest to the sun — as close as our sun's innermost planet, Mercury, about 28 million miles away. Comets are typically brightest and most active around the time they are closest to the sun when solar

heating vaporizes ice and dust from the comet's outer crust. Expect the comet to brighten quickly around this time. Look for it low in the west after sunset. Bring binoculars to help you spot it in the twilight sky."

Dates of special interest include tonight and Wednesday when Pan-STARRS passes close to the crescent moon The tight conjunction tonight will offer sunset photographers a dramatic photo opp Observers should look low

Officials say the best view ing time in our area is about 30 minutes after sunset. The sun sets about 7:10 p.m.



This photo, made available by spaceweather.com, shows the comet Pan-STARRS seen from Queenstown, New Zealand.

PV trustees to consider budget, testin

School board to hear report on ne academic standards coming in 201

By TODD GUILD

WATSONVILLE The Pajaro Valley School District Board of Trustees Wednesday will hear a positive budget report, meaning that the district is projected to maintain a positive fund balance over the next three

But the news will come with a caveat, as the dis-trict's long-term health is still an issue

That's because of \$20 million that has been cut over the past five years, affecting classrooms, pro grams and services throughout the district.

Proposition 30, passed by voters in November, used a series of new taxes for education but only allowed the state to avoid further cuts to education.

While it allowed the district to avoid a \$7.69 illion reduction, it did not allow for an increase in revenues. Still, under the new law district officials must determine how the funds will be utilized.

The problem is further compounded by uncer-tainty from Sacramento, where Gov. Jerry Brown has proposed a shift in the way schools are funded. In his January 2013 bud-

get proposal, Gov. Brown

proposed a plan to funding to all scho base further funand English langua

PVUSD stands t from the plan, but, much won't be kno Brown's budget is later this year. Sch ers must still begin pare their budget. the uncertainty

To make matter the federal seque could force district to slash \$4.9 millio

The trustees hear a report abou new academic st set to be fully impl throughout Calif 2014.

That's when t will become one begin testing stu their knowledge mon Core Stand mathematics and language arts.

The Common C dards will replace dardized Testing porting system, known as the STA

Educators say system will help a tech-savvy worl boosting students solving skills and

See SCHOO

2 nabbed for allege bringing drugs to j

By TODD GUILD

WATSONVILLE — Two

women were arrested Monday after allegedly bringing tobacco and marijuana for an inmate at the Rountree Lane Sheriff's Detention

Facility in Watsonville. Michelle Cacchiola, 50, and Jasmine Prasad, 29, allegedly brought the con-traband during a scheduled visit, according to Santa Cruz County Sheriff's Lt. Shea Johnson, who oversees the facility.

Sheriff's deputies patrol-ling grounds saw the women drop an envelope into bushes. Upon investigation they found approximately seven grams of marijuana and an unknown amount of tobacco, Johnson said. The deputies also ob-

served the vehicle as it en-tered the secure gate, which gave them a description and a license plate number.

"It was good observation on the part of our officers," Johnson said.

The driver, a male, did not get out of the vehicle while at the facility and was not arrested.

Deputies are not armed while in the jail facility, so

they allowed the Using the de

deputies stopped cle at the corner and Freedom b within five minut "If you're goir an arrest, it's best

the tools at your possible," she sa to smuggle cont occur, but are le

since jail officia contact visits. Occasionally inmates doing la work will ask as to stash drugs s on the grounds

retrieve. They ar

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behind the gate With numero on patrol around and steep penal risky propositio

Cacchiola an facing felony of bringing in the and as many as

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A model rocket launches skyward during one of several demonstrations during MESA Day.

MESA

tend thanks to funding provided by the Santa Cruz County Medical Society. Dr. Jack Watson, who is on the board of SCCMS, is a long-standing judge for the biology-related events at MESA

Day.
"He was outraged that students who wanted to attend MESA Day would not be able to because of a lack of funding," Leckliter said. "He suggested that MESA request funding from SCMS to cover the costs of the additional students, which was granted. The competitions at MESA Day provide an opportunity for students to apply their knowledge in science and engineering in a hands-on, creative way that's exciting and fun. It's

also important for students to spend the day with scientists, engineers, and other experts in the field who act as role models

Santa Cruz High School students Samantha Gervacio, grade 12, and her sister, Morgan, ninth grade, teamed up to build a prosthetic arm.

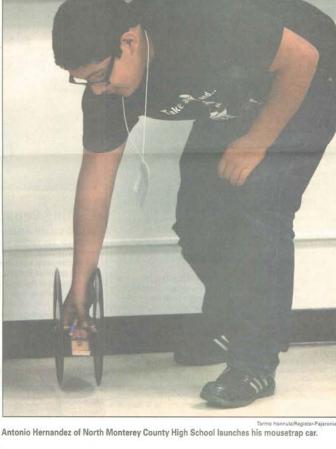
"It took us many, many hours to build," Morgan said. "It was not easy. But it worked. We even tossed one of the tennis balls into the target bucket. That was amazing."
Her sister said tossing the

ball with the device was "really

"You kind of have to use your whole body to throw the ball," Samantha said. "It took

me a while to figure that out."

Jose Moreno, an assisting academic intern at UC Santa Cruz who now works with



middle school students, said his education in engineering stemmed directly from his experience with the MESA program when he was in middle school.

"Even when my inventions failed or messed up I came away from it a better student because I was still learning," Moreno said. "It made me want to get in there and do better. By the time you've gone through four years of MESA events you've really learned a lot. MESA gave me the opportunity to learn about college as well, because you feel welcome and you're invited to get to know what a university is like

In the "speak easy" competition students randomly chose one official topic that they had to deliver a short, focused, impromptu oral presentation on For the "model human brain" event students constructed original displays and models of

a bisected human head and addressed questions drawn from an assigned list using reading material provided in the MESA Day curriculum.

Maria Rocha Ruiz, executive director of the Educational Partnership Center, said she was "very encouraged" by the outpouring of attendance Sat-

urday.
"These students are here to learn and have a good time," she said. "It's a great environment for them to use math and science in a fun way.

Almanac

Temperature

SCHOOL

them to think critical PVUSD has alread implement the chang schools, with teache sessions.

The state plans to 1 ment the system by t school year.

Similar to the S the new assessmen given during the last of school.

Under the new sy dents will take tests of ers and be given pe tasks such as readi and answer in-depth in essay form.

Additionally, secon will no longer be teste ments will be giver through eighth-grade at the end of 11th gr said

Older students wi a real-world situation several days to work tively with their fellov

The Pajaro Valle School District Boar ees will meet Wedn p.m. in the District Of room at 292 Green V in Watsonville. For in visit www.pvusd.net.

Got ne or a lo event

Email the Register nian your news tip releases, meeting or letters to the

newsroom register-pajar com

Monterey Bay Tonight



Sheriff deputies team up with Watsonville Police Monday on a vehicle stop on Airport Boulevard after deputies spotted one of the occupants toss a bag of marijuana over a fence at the Rountree Lane Sheriff's Detention Facility.

JAIL From page 1

inmate they were visiting, will face conspiracy charges and will be shipped to the signifi-cantly more restrictive Main

Jail, Johnson said. The women will also be

barred from future jail visits, while Alvarez will not be able to take part in programs offered to low-risk inmates such as sub-stance abuse counseling, anger

management and GED classes. Alvarez was in the Rountree facility on drug sales and pos-session charges. The women were described as family mem-

"(Being housed at the Rountree facility) is an opportunity for them to change their lives, and we're not going to put up with this," Johnson said. 'We're zero tolerance on any sort of contraband coming in. It poses a danger not only to the inmates, but to the deputies as well.

Watsonville Today Sunny to mostly sunny, very nice

Extended Forecast

Wednesday Sunny and very mild

High 75 / Low 47

Thursday Mostly sunny, dry and pleasant

Friday Partly cloudy breezy

High 70 / Low 45 Saturday Partly cloudy



Monday

Partly cloudy.

High 68 / Low 44 showers High 60 / Low 42

38° 64° / 42° 84 in 1916 27 in 1912 Santa Clara Vall Precipitation Tonight Yesterday's Precip Month to date 40's Around The Regi Sunrise/Sunset Sunrise: Sunset: 7.22 AM 7.12 PM 7:20 AM 7.13 PM 75 40 0.00° 76 46 st 75 37 0.00° 78 47 st 78 36 0.00° 80 45 st King City 7:19 AM 7:14 PM 7:17 AM 7:15 PM 73 43 0.00° 76 48 st 69 36 0.00° 73 48 st DayWeather, Inc. Santa Cruz San Jose 75 37 0.00° 57 45 st 70 40 0.00° 77 48 st Oakland 69 43 0.00" 71 50 st Los Angeles 67 49 0.00" 84 55 st San Francisco 64 43 0.00" 85 51 st



Tomorrow's Regional Map