Dear Parents and Caregivers,

Willow Oaks Third Graders just finished up a terrific science unit with teachers from the Palo Alto Junior Museum and Zoo (JMZ). You can help solidify your child's learning, and foster a life-long love of science at the same time. Simply ask your child to talk about it! Use the class descriptions below, as well as our suggested questions and web links to guide your discussions, and have fun learning together!

Unit Title: Astronomy

In this unit, students learned that the seasons are caused by the rotation of the earth around the sun and the tilt of the Earth's axis. They also learned that the phases of the moon are caused by changing amounts of sunlight hitting the moon each night. Finally, students explored the night sky and its star patterns (also known as constellations) in the JMZ's *Starlab*—a special dome that mimics the night sky.

Questions:

What is your favorite season of the year? Why? During your favorite season, how much sunlight do we get—a lot or not so much?

Why do you think the moon appears to change from night to night? What is happening?

Look at the night sky together. What do you see? Can you see any pictures in the stars? Try to make up a story about what you see. Why do you think people long ago created stories about the heroes and animals they saw in the night sky?

Web Links:

 $http://www.windows.ucar.edu/tour/link=/earth/climate/cli_seasons.html\&edu=high$

http://www.woodlands-junior.kent.sch.uk/time/moon/phases.html

http://www.moonconnection.com/moon_phases.phtml

http://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html

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The Palo Alto Junior Museum and Zoo (JMZ), located at 1451 Middlefield Road in Palo Alto, is a small children's museum with educational exhibits and live animals. Daily admission to the Museum is free, and they also offer many science classes for families and schools. Each year, JMZ science teachers teach approximately 180 classes in Willow Oaks Elementary School (provided at no cost). Lessons include close encounters with live animals or authentic artifacts, hands-on exploration of science concepts, and work with real scientific tools and equipment. We encourage you to take advantage of this important learning resource by visiting the JMZ often with your child.

Enjoy	!

Sincerely,

Willow Oaks Elementary School Third Grade Teachers