



## Reach the sky

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I am working as primary teacher at Scoala Gimnaziala Dumbrava, Timis County, Romania & my pupils has 6 to 10 years old. I was & I am a main pillar in my community, always disseminating knowledge and experience to students, other teachers in the school area & Timis County. Astronomy is the most favorite subject of my students from my classes. They are very curious & always come to me with questions about Earth and Sky because Curriculum scientific disciplines provides too little information about Earth and Sky. I need to know more about how to teach space contents into my classes & what competencies can form in elementary school and also to share my experience to the others. As a result of participation at this meeting I want to attract as many students to astronomy, science/STEM disciplines & space technologies, to astronomy topics and exploration of outer space. Schools needs to be prepared for social life needs, new generations needs, on science/space technologies, which are one of the key points for developing the knowledge society. I intend to introduce new scientific activities as part of the existing curriculum. I am passionate about astronomy, I need to know new approaches and new ideas for primary because I think Science is very important in daily life.

Here are some developed activities with pupils from K-2 grade levels wich I wish share with colleagues in Viena.

Subject: MATHEMATICS. Primary Topic: MEASUREMENT : -+=<>

[U+263C] Rockets by Size. Students cut out, color and sequence paper rockets/Read the information on the International Space Station and rockets/Gather pictures of different types of rockets/Print/cut out/color & laminate rocket drawings/Find objects in the room to put in order by height.

[U+263C] Oil Spot Photometer - Measure the brightness of the sun using cooking oil and a white card. A smear of oil on a white card becomes a powerful tool for comparing the brightness of two light sources, including the sun.

[U+263C] The Sundial & Making Shadows-device to measure time by the sun: make a gnomon pattern/Refer to the latitude table to determine the correct angle to mark- 45°/Place the sundial outdoors, with the gnomon pointing North/Record the outline of the gnomon's shadow and record the time next to it/Repeat this process each hour/See if the students notice a pattern in the movement of the shadow.

[U+263C] Play Dough Planets-To demonstrate the size(volume) differences between Earth, Earth's Moon and Mars through a hands-on activity: Make a play dough ball about the size of a marble(Moon). How many "Moons" it would take to make a ball the size of the Mars or Earth? Students combine 8 of the Moon-size balls to make one "Mars" ball. The students have a Moon and a Mars and after that they combine 50 Moon-size balls, to make "Earth." By second to fourth grade age, students are increasingly able to think about abstractions and different perspectives. They can reflect on their thinking and can consider whether their reasoning follows well from the evidence that they have collected. knowledge. They will be learning that science is a continuing process of seeking answers. "We learn best when we learn from our own experiences."