

ARCturus – website for astronomy teaching

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The Arcturus site (www.arcturusastronomy.fi) is a frame for Astronomy Resource Center, the purpose of which is to support the teaching of astronomy at school. The site has primarily been designed for the teachers of natural sciences, but it also includes information for everyone who is interested to know more about astronomy.



The Arcturus site consist of:

- ready-to-use teaching entities in order of the constructive appearance of the universe
- 34 lessons, each 2 hours, with as many topics for all class levels
- practical instructions for preparing observation tools and using them
- tips for observation in nature with the naked eye and by using apt equipment
- information on the latest results and observations in space research
- links for acquiring teaching materials and advanced teaching content
- introducing organizations with a close connection to the astronomy teaching
- descriptions of astronomical events and training sessions

All materials are free of charge and, with reference to the source, available for use.

The teaching entities are practical, educational and ready-to-use. Their purpose is to give inspiration for further explorations. The materials are cheap and commonly available. All student tasks have been thoroughly tested with the students at school.

Website as an operational environment in teaching

The structure of the section with ready-to-use teaching entities follows the natural sequence: starting from the familiar neighbourhood it continues to all the bigger entities in the universe.

The way of proceeding takes into account the level the student is on in his development and perception as well as the speed he needs to assimilate knowledge. The first tasks in the exploration section are easy and apt also to younger students. The tasks with an asterisk (*) are challenging and meant for the older and more advanced students.

In addition to *the constructional units of the universe*, there also are ready-to-use teaching entities with the topics *observation* and *astrophotography*. Their contents include preparing simple observation tools and testing them in nature, learning to use various cameras in astrophotography and processing the photo material gained.



The teaching methods should also include activities outside the classroom. In the *General*-section there are some suggestions for such activities, e.g. excursions to the astronomical places of visit in the neighbourhood or even abroad, special events, net meetings and further trainings.

Website for acquiring information

On the right hand side of the site there are sections with information on the astronomical events and fact-finding as well as a list of links providing further information.

Events present observation situations, trainings and visits to interesting places. Celestial Stories is a section informing on publications of the previously mentioned events and descriptions of recent observations.

Links has been created for wider search of data needed in teamwork or when searching for more detailed knowledge. Like all other sections, this collection is also updated for most recent information. *The teaching materials* introduce mainly tool manufacturers as well as producers of literary material and online content. The section *Organizations*

introduces the most well-known ones concentrating on the research and teaching of astronomy. *Links according to topics* offer additional information on a single astronomical topic or concept for further studies.



Welcome to ARcturus website! Learn and enjoy!

www.arcturusastronomy.fi