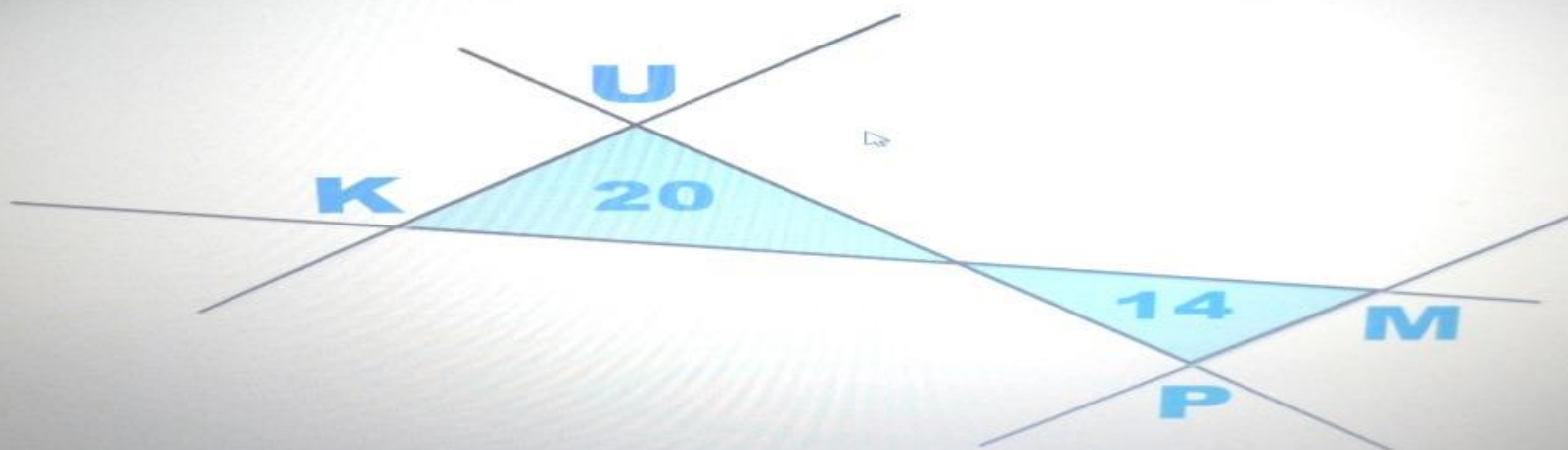
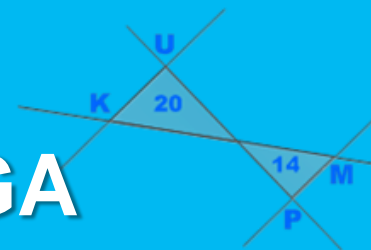


KAKO LAHKO SCIENTIX POMAGA UČITELJEM MATEMATIKE?

Jerneja Bone

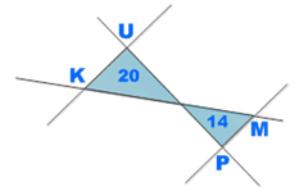


Zavod Republike Slovenije za šolstvo
The National Education Institute Slovenia



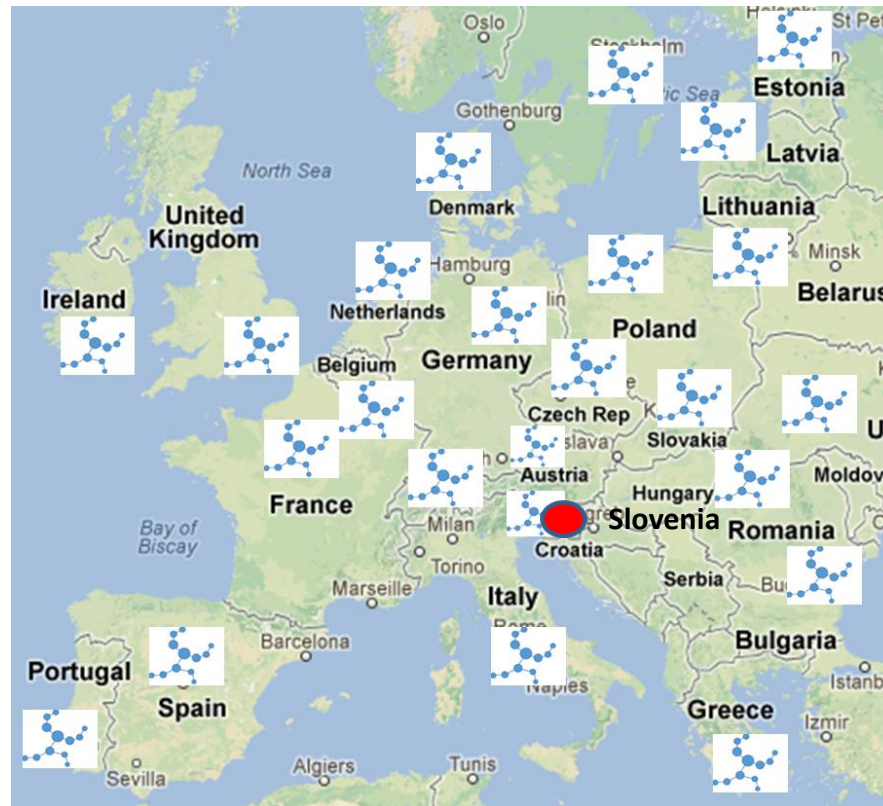
The work presented in this document / workshop is supported by the European Commission's FP7 programme – project Scientix 2 (Grant agreement N. 337250), coordinated by European Schoolnet (EUN). The content of the document/workshop is the sole responsibility of the organizer and it does not represent the opinion of the European Commission nor EUN, and neither the Commission nor EUN are responsible for any use that might be made of information contained

O Scientix-u



- **KAJ JE SCIENTIX?** Skupnost za naravoslovno-matematično (NAMA) izobraževanje v Evropi - „Science“ v Scientix = STEM (*science, technology, engineering and mathematics*)
- **ZA KOGA JE SCIENTIX?** Za učitelje (učencev od 4 – 21 let), raziskovalce, načrtovalce politike, starše in vse, ki jih zanima NAMA izobraževanje
- **ZAKAJ JE NASTAL SCIENTIX?** Z namenom vzpodbujati, razširjati in izmenjevati izkušnje, gradiva, najboljše prakse, raziskave, obvestila ... NAMA izobraževanja v EU
- **KDO UPRAVLJA SCIENTIX?** [European Schoolnet](#) (EUN) – mreža 30-ih Ministrstev za izobraževanje v Evropi v imenu [European Commission](#) (DG Research)
- **KAJ PONUJA SCIENTIX?** ...v nadaljevanju... s poudarkom na matematiki
- **KJE JE SCIENTIX?** <http://www.scientix.eu/>

Scientix National Contact Points – Zavod RS za šolstvo



+ Scientix ambasadorji (učitelji)

Scientix obvešča

SCIENTIX NEWSLETTER

SCIENTIX DIGEST

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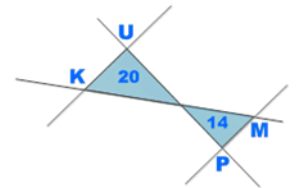
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@scientix_eu
2nd Scientix Projects' Networking Event (Brussels, 5th Sep) on Teacher training and Policy recommendations. Join us!
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Expand

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 **Science Teachers in Europe: Join the discussion!**

Vir: <http://www.scientix.eu/>



Who are our teachers?

68% are women

91% completed university or other equivalent higher education

90% completed a teacher education or training programme

82% are employed full time and **83%** have a permanent contract

88% report that they had participated in at least one professional development activity during the 12 months prior to the survey

This teacher...

Is **43** years old, on average

Has an average of **16** years of teaching experience

Teaches in a class with **24** students, on average

Spends an average of **38** hours per week working

Who are our school leaders?

51% are men

96% completed university or other equivalent higher education

90% completed a teacher education or training programme, **85%** completed a school administration/principal training programme, and **78%** completed instructional leadership training

62% are employed full time without teaching obligations, and

35% are employed full time with teaching obligations

This school leader...

Is **52** years old, on average

Has an average of **9** years of experience as a principal and **21** years of teaching experience

Works in a school with **546** students and **45** teachers, on average

Profiles based on averages of lower secondary teachers / school leaders in TALIS-participating countries and economies

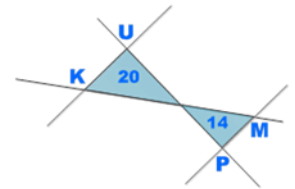
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Zavod
Republike
Slovenije
za šolstvo



By ELIENE AUGENBRAUN / CBS NEWS / August 13, 2014, 12:12 PM

First woman wins Fields Medal, top prize in mathematics

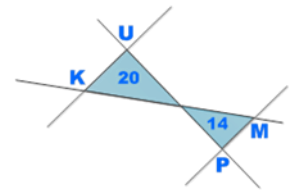


2014 Fields Medal winner Maryam Mirzakhani, a professor of mathematics at Stanford University. /

INTERNATIONAL MATHEMATICAL UNION



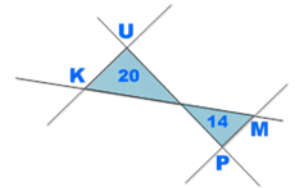
Vir: <http://www.cbsnews.com/news/first-woman-wins-fields-medal-top-prize-in-mathematics/>



Vzorci – o njih tudi na Scientix-u

- Scientix Twiter račun [@scientix_eu](https://twitter.com/scientix_eu)





Vzorci – o njih tudi na Scientix-u

- Facebook profil Scientix

| | | | | | | | | | |
|---|---|---|---|----|----|-----|-----|------|-----|
| 1 | 1 | 2 | 3 | 5 | 8 | 13 | 21 | 34 | ... |
| 1 | 1 | 4 | 9 | 25 | 64 | 169 | 441 | 1156 | ... |

$$1 + 1 + 4 = 6 = 2 \cdot 3$$

$$1 + 1 + 4 + 9 = 15 = 3 \cdot 5$$

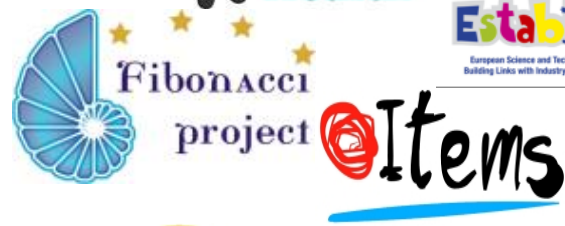
$$1 + 1 + 4 + 9 + 25 = 40 = 5 \cdot 8$$

$$1 + 1 + 4 + 9 + 25 + 64 = 104 = 8 \cdot 13$$

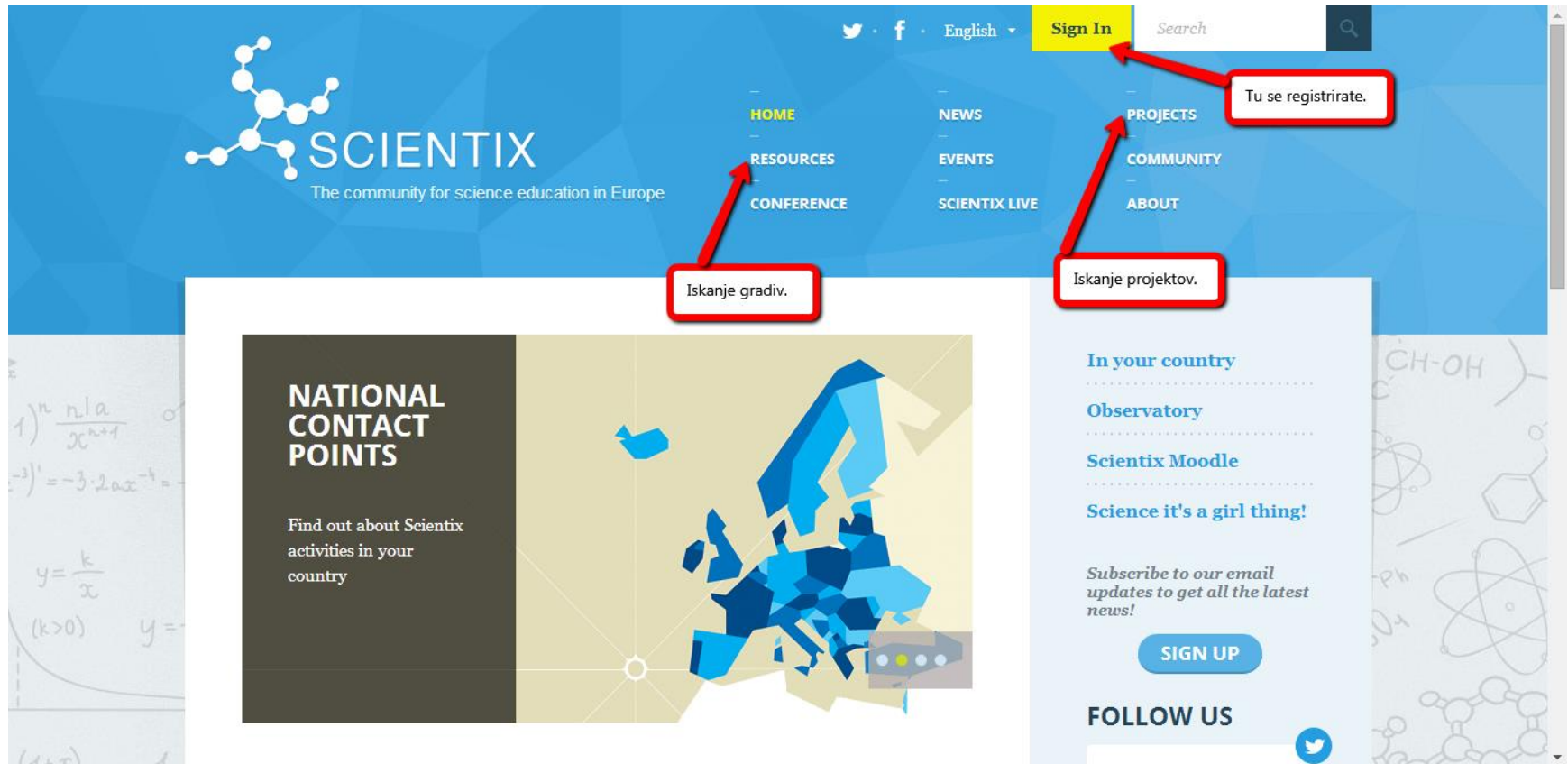


Projekti iz naravoslovja in matematike v Evropi

Evropi



Scientix – izmenjava gradiv in projektov



The screenshot shows the Scientix website interface. At the top left is the logo and tagline "SCIENTIX The community for science education in Europe". The top right contains social media icons, a language dropdown set to "English", a "Sign In" button, and a search bar. A central navigation menu lists: HOME, RESOURCES, CONFERENCE, NEWS, EVENTS, SCIENTIX LIVE, PROJECTS, COMMUNITY, and ABOUT. Three red arrows point from text boxes to specific elements: "Iskanje gradiv." points to the "RESOURCES" link; "Iskanje projektov." points to the "PROJECTS" link; and "Tu se registrirate." points to the "Sign In" button. Below the navigation, there are three main content areas: "NATIONAL CONTACT POINTS" with a map of Europe, "In your country" with links to "Observatory", "Scientix Moodle", and "Science it's a girl thing!", and a "Subscribe to our email updates" section with a "SIGN UP" button and "FOLLOW US" social media links.

Iskanje gradiv.

Iskanje projektov.

Tu se registrirate.

NATIONAL CONTACT POINTS

Find out about Scientix activities in your country

In your country

Observatory

Scientix Moodle

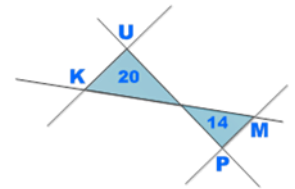
Science it's a girl thing!

Subscribe to our email updates to get all the latest news!

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Modeliranje – tudi na Scientix-u



Light bulbs

- The comparison of conventional and energy saving light bulbs
- How can individuals contribute towards the needs of society?

Age of students

10



Why have traditional light bulbs been abolished by the EU?

In Germany, as in many other European countries, conventional light bulbs are to be abolished. From 2009 to 2012 conventional light bulbs will vanish from shops in stages, starting with the most powerful ones. This task aims to provide students with opportunities to discover why the EU introduced this change whilst exploring relevant mathematical and scientific content.

| Mathematics | Science |
|---|---|
| <ul style="list-style-type: none"> • Proportionality • Working with variables • <u>Modelling</u> • Linear equations • Simultaneous equations | <ul style="list-style-type: none"> • Efficiency • Production of light • Light spectrum |

Download



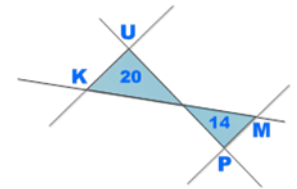
Worksheets



Lightbulbs



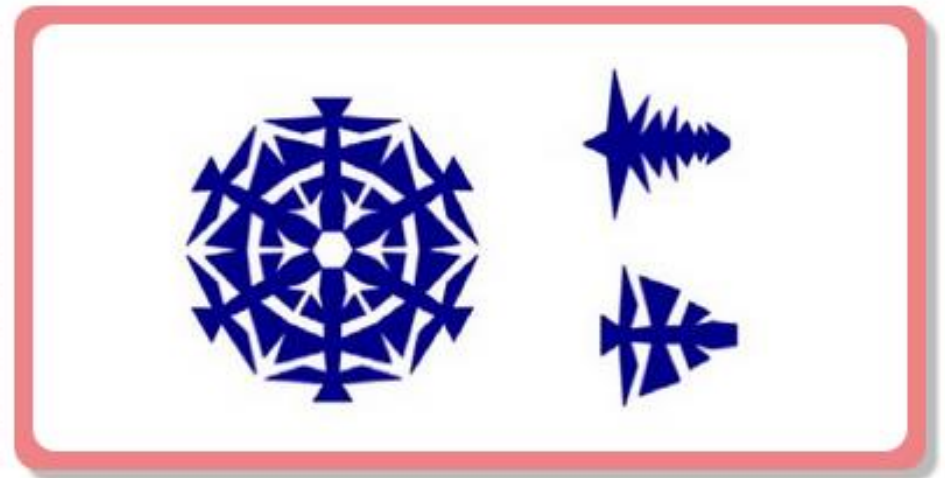
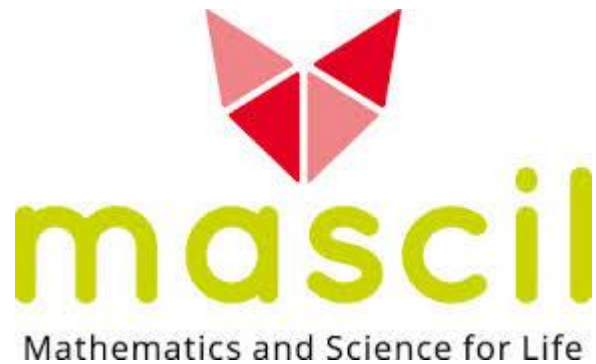
Applet



Modeliranje – tudi na Scientix-u

Snowflakes

Dynamic snowflakes



? World of Work

The project deals with modeling of snowflakes after inquiry based study of their basic properties. The modeling could be part of various decorative art and crafts, including graphic design.

Raziščite Scientix



<http://www.scientix.eu/>