

Physical and chemical properties of the Adriatic sea

III. gimnazija, Split

2022.



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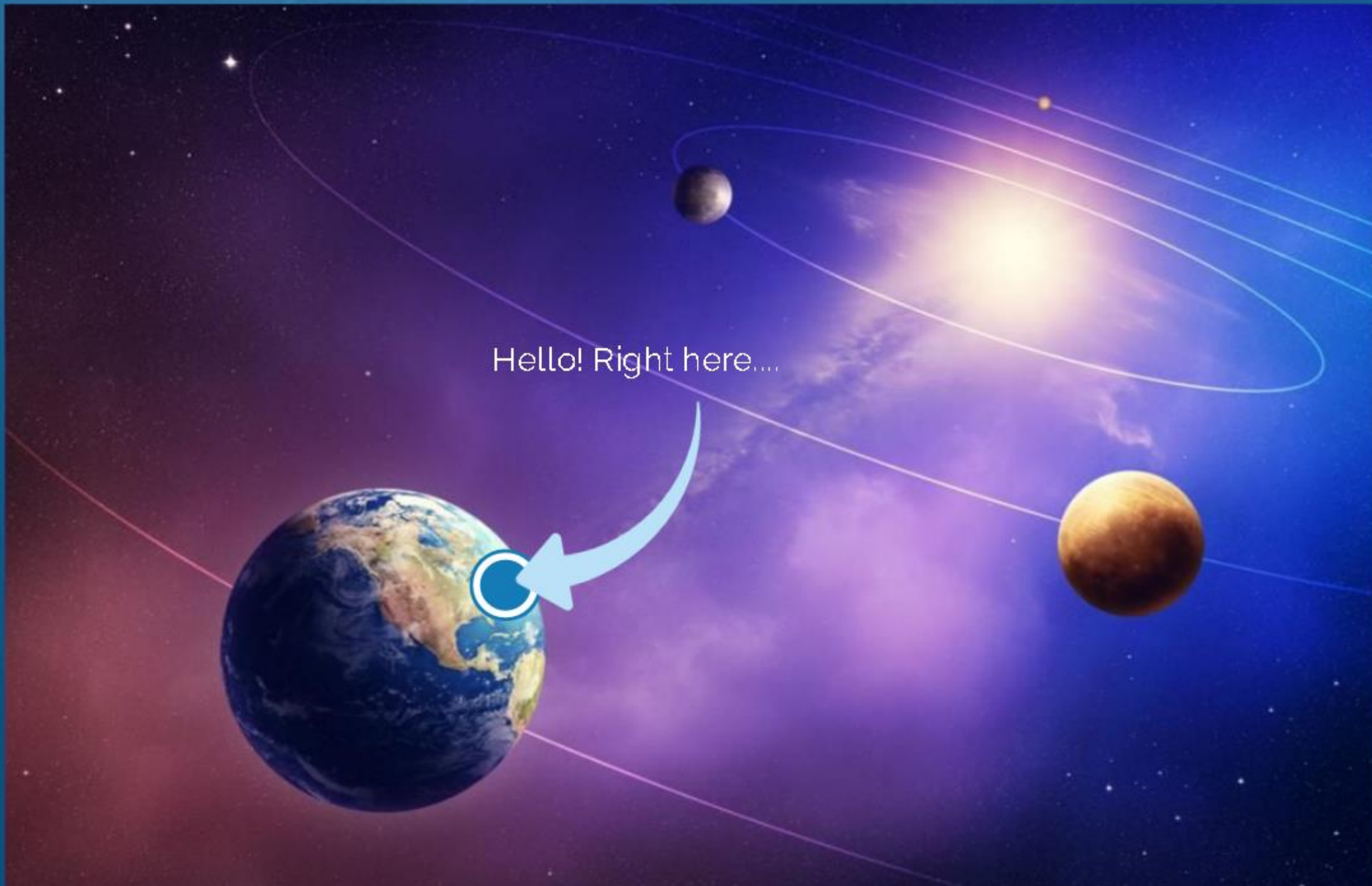
1. Location
2. Water transparency
3. Color
4. Tides
5. pH
6. Temperature
7. Salinity

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Location



Hello! Right here...





Our sea is a part of
the Atlantic Ocean...

...and a part of the
Mediterranean Sea as well.

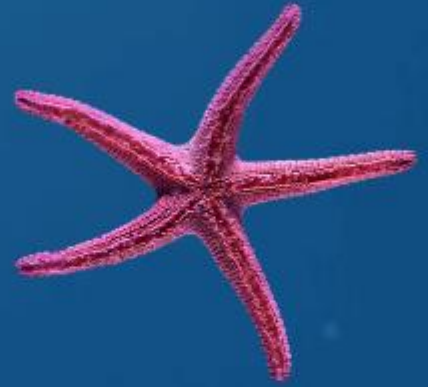




Here we are. Welcome!

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Water
transparency



FACTS:

- relates to the depth that light can penetrate water
- presense of particles (seaweed, sand particles...) = lower transparency
- more transparent in the south (max. 56 m)

- Secchi disk - determining the limit of visibility



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Color



FACTS:

- light interacts with water and material in waters
- CDOM: colored dissolved organic matter
- more CDOM = brown, yellow color
- less CDOM = blue
- types of blue



Cyan blue color - sand beaches



Lošinj



Mali Lošinj



Mala Raduča, Primošten

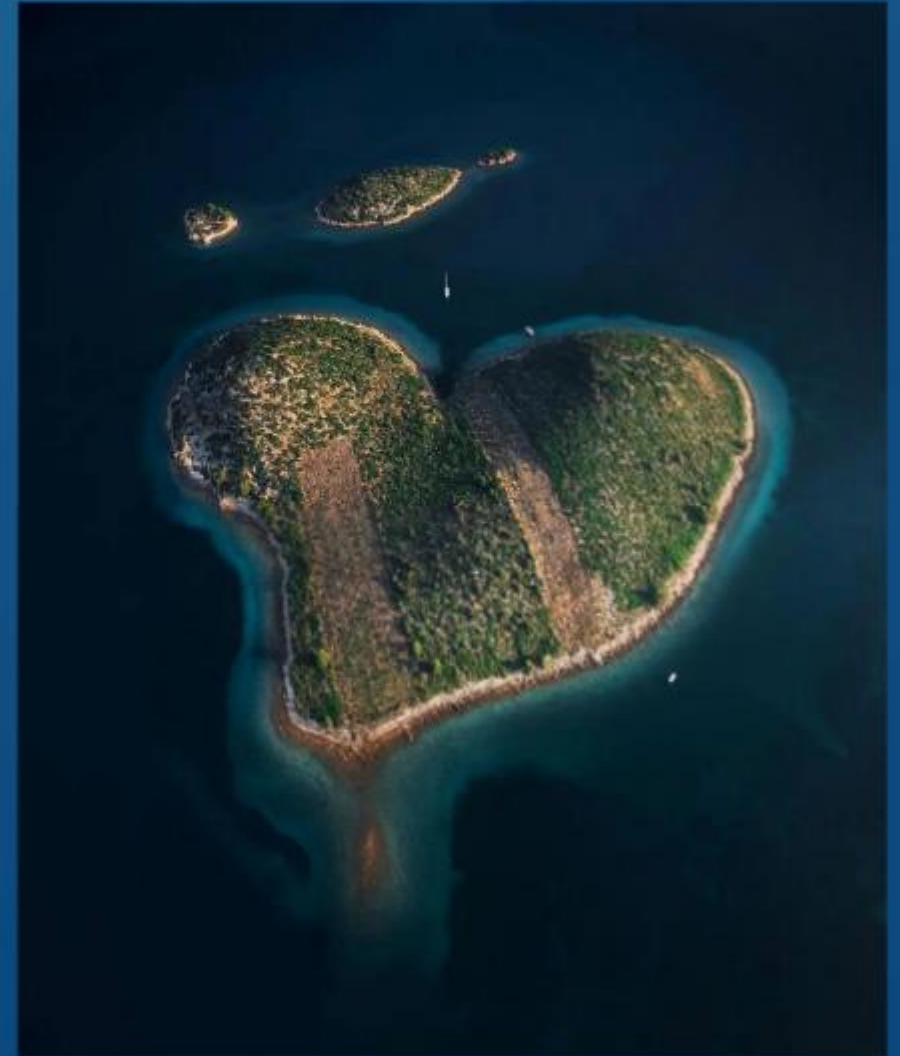
Shades of blue - gravel beaches, depth



Pasjača



Brač



Galešnjak

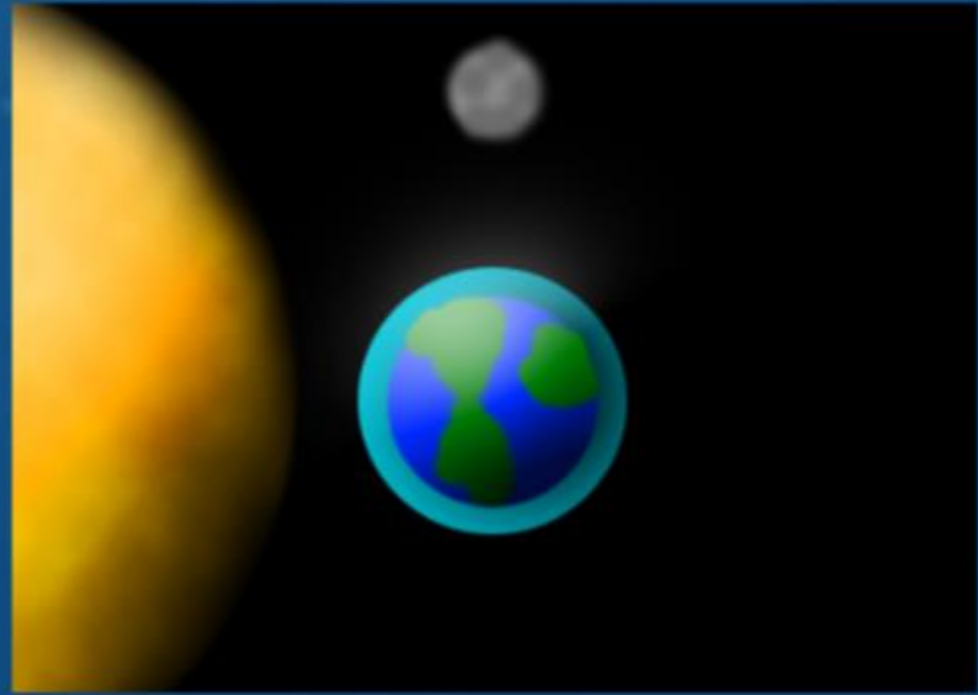
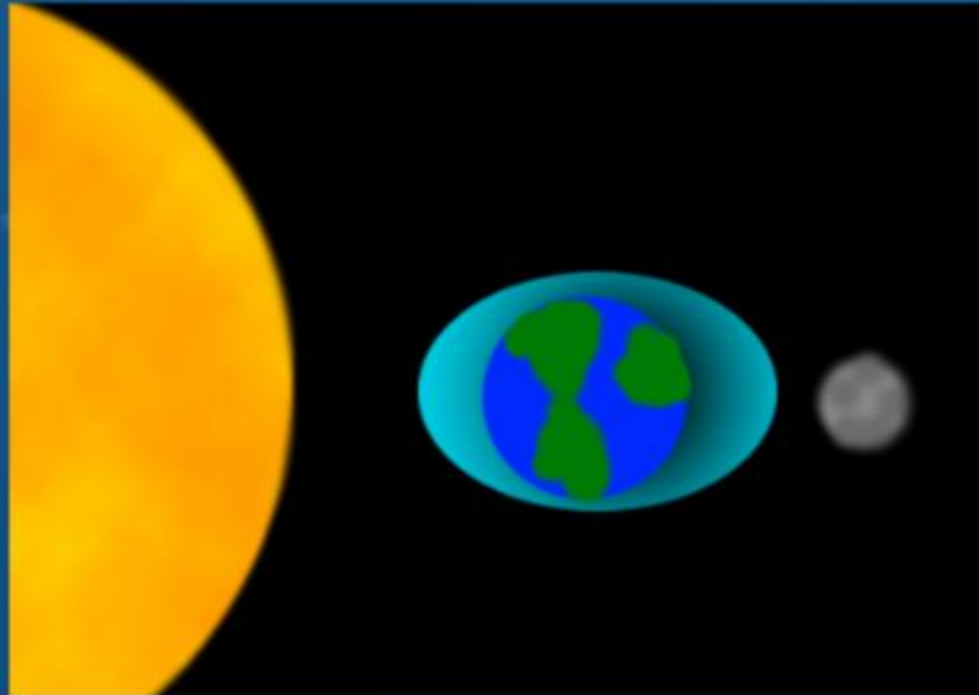
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Tides



FACTS:

- rise and the fall of sea levels
- gravitational pull of the Sun and the Moon
- the rise = tide
- the fall = low tide





Omiš, 2019.

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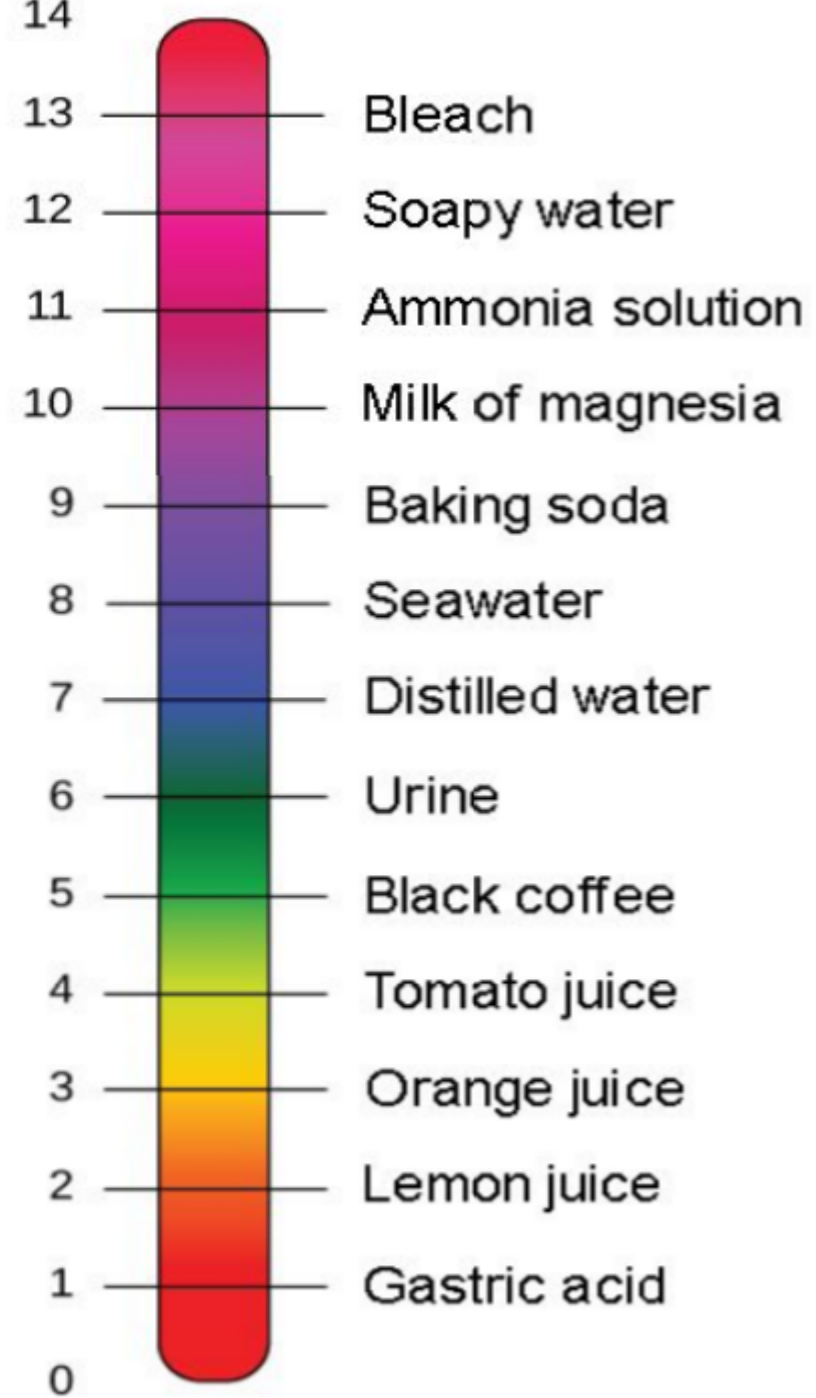
pH



FACTS:

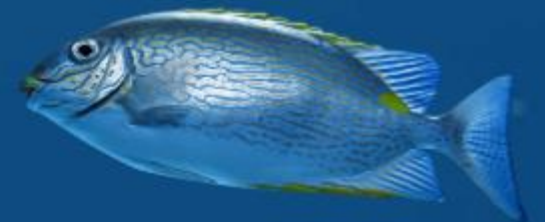
- pH is a measure of how acidic/basic water is
- the average pH of the Adriatic Sea is 7.9-8.1.
- due to climate change, pH of the Adriatic Sea is decreasing
- decrease of the pH is bad for the organisms in the sea and for the environment overall

- 50-80% of oxygen comes from the sea (plankton)





Why is the decrease of pH bad?



Some animals that are endangered because of this problem:



Seaturtles



Mediterranean monk seal

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Temperature



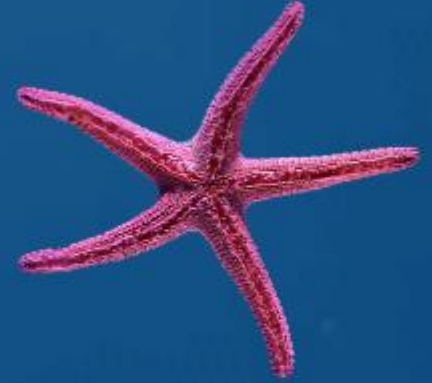
FACTS:

- surface: lowest in February and March
highest in August
- winter - South and East: 13°C, North and West: 5-8°C
- summer: 24-25°C
- thermocline - transition layer between the warmer and cooler water



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Salinity



FACTS:

- total mass of dissolved salts per 1 kg of seawater (‰)
- dry area + a lot of sun + little river waters = salty sea
- surface salinity = 38,3‰ (world's average = 35‰)
- saltworks:

Pag (the largest distributor)

Ston (the oldest, traditional)

Nin (traditional)



THANKS!

