Project assignment:

In the form of a short text, answer the questions:

1. The water is unique because ...

2. Water is needed because ...

3. Water should be used wisely because ...

4. The water must be kept clean because ...

5. Illustrate the project with a picture.
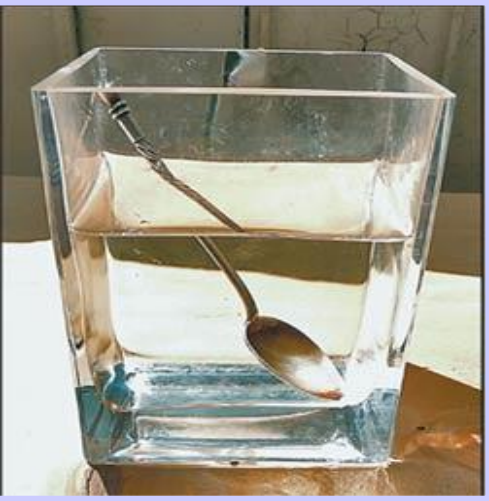
March 22World Water Day

The initiative originated in 1992 during a United Nations conference in Rio de Janeiro.

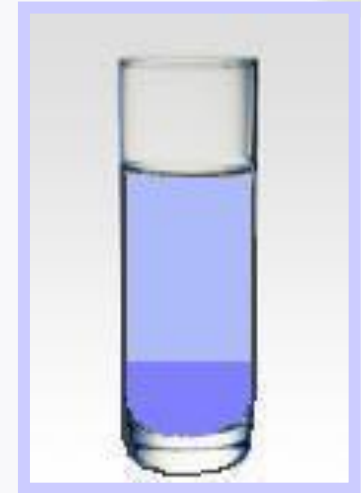# WE LEARN ABOUT WATER WITH FACTS AND FIGURES

Water properties

1. Water has no color, it is transparent
2. The water has no smell
3. The water has no taste.

Water properties

Water is a solvent, but not allsubstances dissolve in it.

Water properties

Give examples of three substances that dissolve and three substances that do not dissolve in water.

Water properties

Thermal conductivity

Ice is a bad heat conductor. Due to this property, when the lake freezes in winter, it freezes only on its surface. In this way the life in the water basins is preserved.
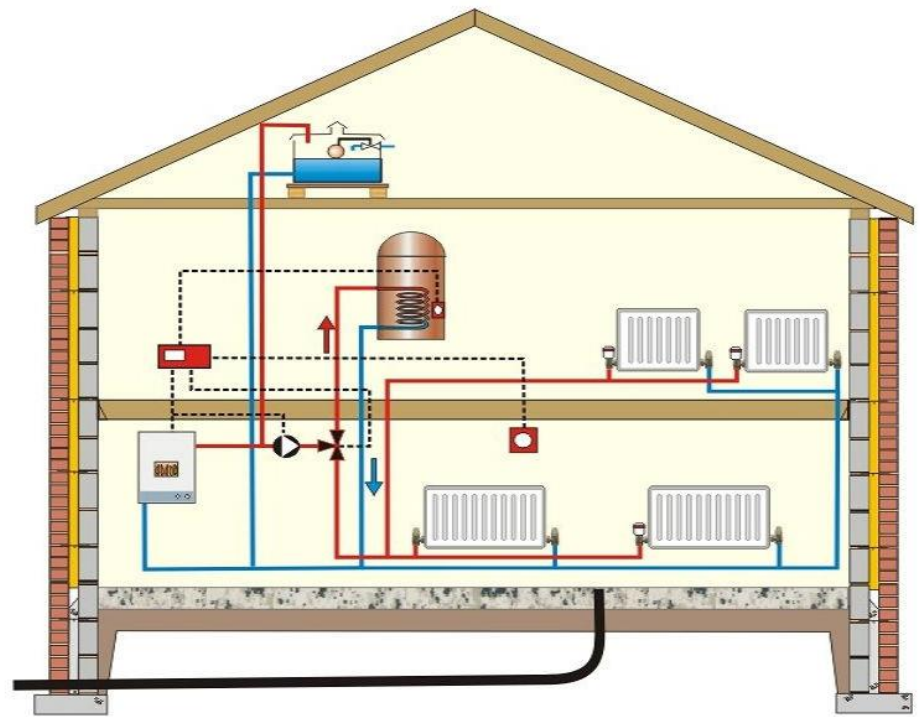
Water properties

Thermal conductivity

The liquid is a good heat conductor. Thanks to this property, central heating i created.

0

100

1) When heated, melting occurs

2) When cooled, frost occurs

Boiling of clean water occurs.
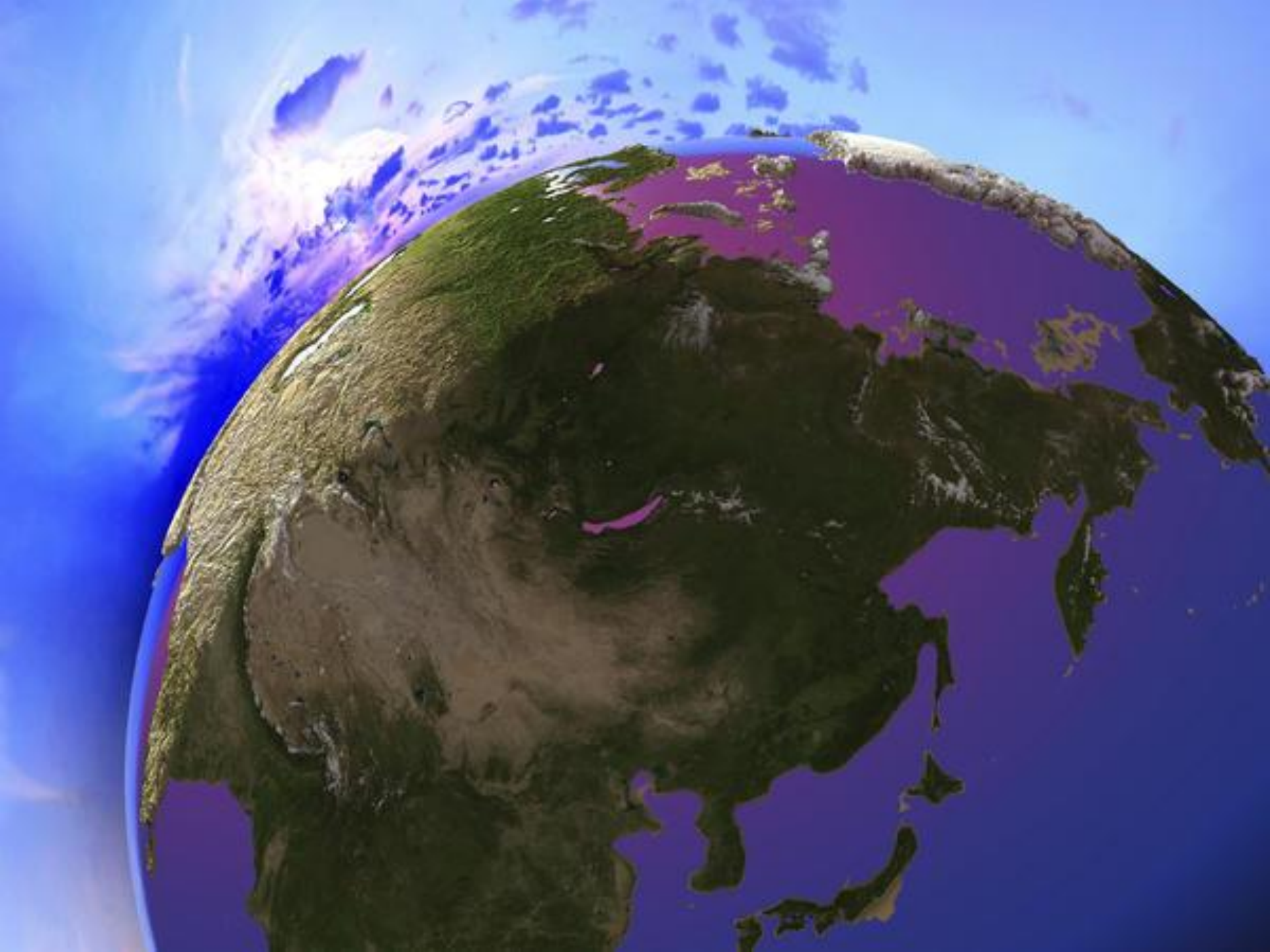
The distribution of water and land on the surface of the globe

Total area of the Earth - 510.2 million sq. Km		
Occupied by land - 149.0 million sq. Km	Occupied by water -361.2 million sq. Km	Everything 510.2 million sq. Km

Task 1: Express water and land in percentages.Round the percentages to an integer.

The distribution of water and land on the surface of the globe

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DROUGHT:

WATER:

The distribution of water and land on the surface of the globe

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Occupied by land -149.0 million sq. Km	**Occupied by water -**361.2 million sq. Km	**Everything** 510.2 million sq. Km

Task 2: How many times is the area occupied by water larger than the land area? (Round to the tenth).
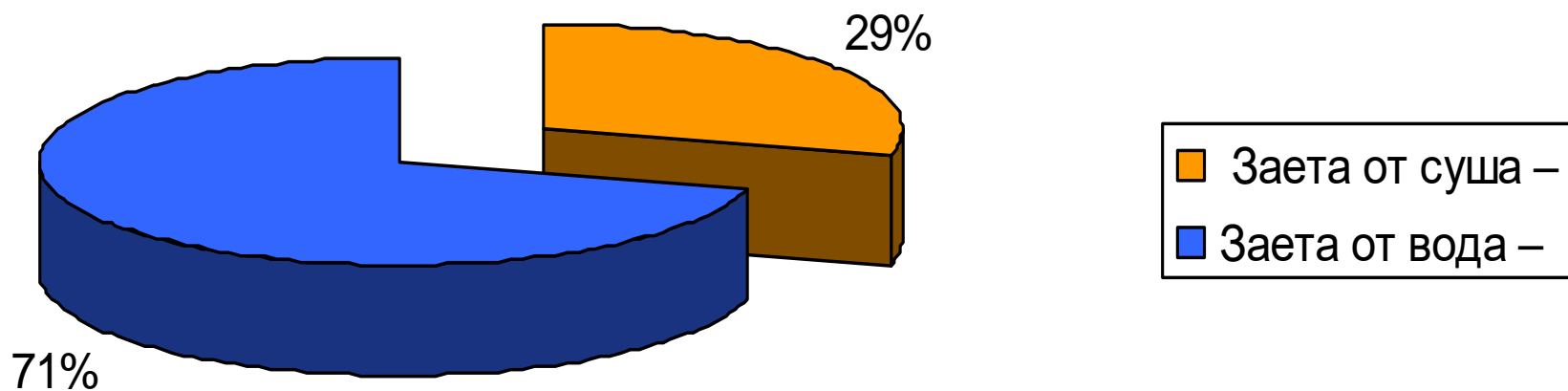
2,4

Homework: Based on the data given in the table, create a pie chart of the distribution of land and water on Earth.

Total area of the Earth - 510.2 million sq. Km	
Occupied by land –	Occupied by water –
149.0 million sq. Km	361.2 million sq. Km

The distribution of water and land on the surface of the globe

29%

71%

☐ Заета от суша –
☐ Заета от вода –

Distribution of water on the Earth's surface

	mass million tons	Type of water %
World Ocean	142	Saltwater 97.5%
Rivers and lakes	0,05	Fresh water 2,5%
Glaciers	3,53	
Atmosphere	0,0013	

WHAT CONCLUSION CAN WEDO WE DO IT?

Conclusion:

Man needs fresh water, and there is little fresh water on Earth.

Did you know that: There is water in plants, in animals, in man and even in stone ...

Task 3: Spruce weighs 100 kg, of which 85% is water.

How many kilograms is itthe water?

Раньо Е. А.

Solution of the problem:

85% от 100 kg $=$

$= \dfrac{85}{100} \cdot 100 = 85$ kg water

Did you know that: There is water in plants, in animals, in man and even in stone ...

Task 4: The salmon weighs 2 kg, of which 1 kg and 500 g is water.

What percentage is water?

Solution of the problem:

X % from 2 kg. = 1.500 kg

$$\frac{X}{100} \cdot 2 = 1,500$$

X= 1,500 .(100:2)

X=75% water

Раньо Е. А.

Did you know that: There is water in plants, in animals, in man and even in stone ...

- **Task 5: In granite, the water is about 0.5%.**

- *In a ton of granite, how many kilograms is water?*

Solution of the problem:

1 t= 1000 kg

0,5% from 1000 kg= $\underline{0,5}$. 1000=
 100

= $\underline{5}$ .1000 = 5 kg water
 10.100

Water in the human body

There is nothing more precious in the world than the beautiful, most ordinary, pure water.

Водата е около 80% от теглото на едно бебе и 70% от теглото на възрастния човек.

Ако човек изгуби 20% вода от теглото си, той умира.

WHAT CONCLUSION CAN WEDO WE DO IT?

Conclusion: Water is everywhere. In plants, animals, people, even in inanimate nature!

DEFINITION OF WATER POLLUTION

Water pollution is defined as the pollution of lakes, rivers, oceans and groundwater caused by human impact, which can lead to the death of organisms and plants living in these environments.

European Union policy for the protection of the World Window

- **Everyone is obliged to protect the water and take care of this invaluable natural resource.**
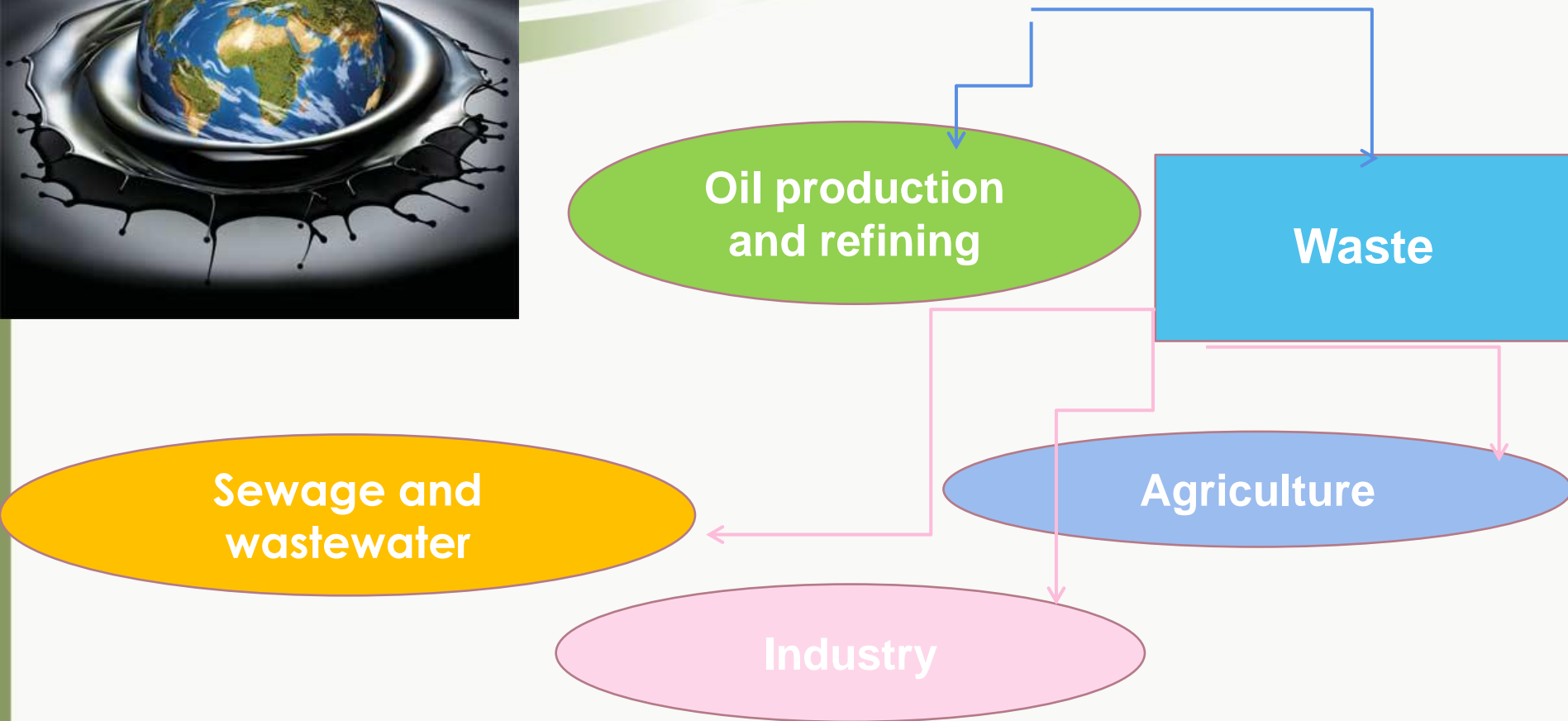
Task: What are the sources of water pollution?

Causes of water pollution

Oil production and refining

Waste

Sewage and wastewater

Agriculture

Industry

Scientists have estimated that every year around the world so many harmful substances fall into the water that they can fill 10,000 trucks.
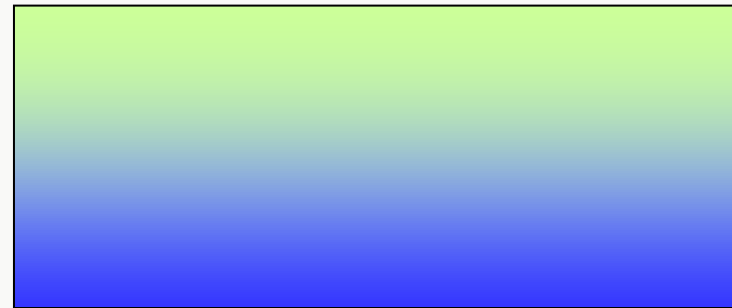
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Environmental pollution

Task 6: Oil is spilled on the surface of the water. The spill of oil on the surface of the water occupies a rectangular area. It is 26 meters long and 11 meters wide. Find the area of the oil slick.

Solution of the problem:

11 m.

26 m.

S = 26 x 11 = 286 sq. M.is the oil slick

How does water pollution harm:

Plants

The animals

People

all living things suffer from water pollution.

Save water!

WHAT CONCLUSION CAN WEDO WE DO IT?

Conclusion: Do not pollute the water! Dirty water kills all living organisms!

Do not drink contaminated water

Contaminated water contains many impurities that are harmful to humans. To prevent unpleasant consequences, filter the water.

WHAT CONCLUSION CAN WEDO WE DO IT?

Conclusion: Filter the water to be healthy!

Did you know that:

One consumes a huge amount of fresh water.

The water used to produce agricultural or industrial goods is called 'virtual water', which is contained in the goods.

To receive:1 ton of steel, you need 150 tons of water250 tons of water are needed to produce 1 ton of paperTo make 1 cup of coffee, you need 140 liters of water.To produce enough flour for one loaf (400 grams), you need 550 liters of water.The production of 1 liter of milk requires 1000 liters of water.Production of 1 kg of rice requires 3000 liters of waterProduction per 1 kg of corn requires 900 liters of water

Task 6: A person uses an average of 6 liters of water to brush his teeth.To rinse a toilet bowl, use 2.5 times more water than to brush your teeth.For bathing - 10 times more than for rinsing a toilet bowl.How many liters of water will a person consume per day if he brushes his teeth twice a day, rinses the toilet 5 times and bathes once a day?

Solution of the problem:

2 x 6 liters of water for brushing teeth = 12 liters per day2.5 x 6 l. = 15 l.

Water for one rinsing of a toilet bowl5 x 15 liters = 75 liters of water per day for the toilet10 x 15 l. = 150 l.

Bathing water.12л. + 75l. + 150l. = 237 liters of water per day

We all think we use water wisely, but is that so?

Arrange in the fields "CORRECT" and"WRONG" how you use water in your daily life.

Human water consumption

Mankind consumes a huge amount of fresh water. By the beginning of the 21st century, water consumption is more than 200 liters per person per day. According to the latest data in large cities, one person uses more than 500 liters per day. Although according to the calculations of specialists per person does not need more than 250 liters of water per day.

WHAT CONCLUSION CAN WEDO WE DO IT?

Conclusion: Save water! It is not inexhaustible!

Wash your hands and don't forget to turn off the tap!

It is estimated that 8 liters of water will flow in a minute from a faulty tap.

Save water!

Three drops of water per second from a poorly closed tap is almost 30 liters per day. Remember: Water supplies are not infinite!

Task 7. It is known that 200 liters of water flow through a poorly closed fountain per day.Estimate the losses if there are 2 unclosed taps in your home.What will be the loss for one day?

And for a week?

Task 8: In Petya's house, the kitchen faucet breaks down and drips for 12 minutes and fills a two-hundred-gram glass of water. How many liters of water flow in an hour?

Solution of the problem:

For 12 minutes - 1 cup of water = 200 g.

1 hour = 60 minutes = 5. 12 minutes

5. 200 g = 1000 g = 1 liter of water

WHAT CONCLUSION CAN WEDO WE DO IT?

Conclusion: Keep the taps in good condition. Save water!

By saving water, you save family money.

Imagine that there is not a single drop of water left on the planet. What will happen then? Instead of the ocean of the world - the desert!

- **All life on Earth will die, the planet will be left without living beings. Scientists have found: a person without food can live 3-4 weeks, and without water 3-4 days, then he will die.**
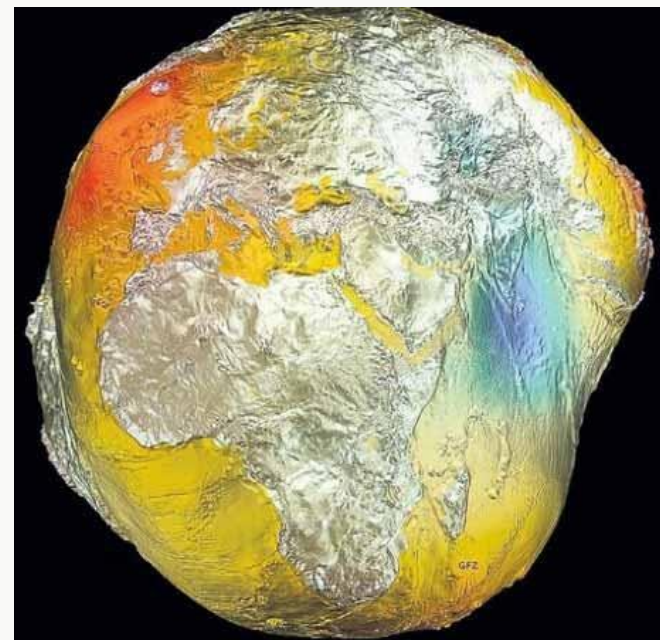
This is what our planet will look like ...

Unpleasant picture ...

Only drought

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- **It's time to think seriously about how to save every pond, every drop of clean water! Humanity is not threatened by a lack of water. It is threatened by something worse - the lack of clean water.**

The change is in Our hands and this is one of the ways to feel truly significant.