Good afternoon, children! I am glad to see you!

 The theme of our lesson is « Environmental aspects of hydrocarbons production and refining»

 Let’s start our lesson! We see products every day.

For example petrol, plastic, medicines, colorant, explosives, food…

Objectives of the lesson (цели урока):

 1) consider methods of production and oil refining;

 2) consider its environmental aspects.

 Use of oil in antiquity in medical, building and war purpose.

 Lesson epigraph: « Burn of oil is the same as to heat the stove with banknotes»

 (Mendeleev).

 Oil is miracle of nature. 1 drop of oil contains 900 different chemical combinations, more than 50 percent of chemical elements of Periodic system.

 Oil refining.

 1) Physical method is fractional distillation of oil. Refined products are petrol, ligroin, kerosene, diesel fuel, black oil.

 2) Chemical method is cracking. Products of oil refining are plastic, medicine, colorant, rubber, cleaning materials.

 Environmental aspects of oil. Oil spills pollute the world ocean.

 Oil films on water affect marine organisms.

 ? List the processing products of oil:

 ? What types of pollution are caused by oil processing?

 Natural gas.

 Composition: methane, ethane, propane, butane.

 Natural gas application.

The use of natural gas in energy production, an important raw material for rubber and synthesis gas.

 The environment suffers from contamination: soil, water bodies, air suffers.

? List the processing products of gas

? What types of pollution are caused by gas processing?

 Coal.

 Coal processing is coking. Products are gas, alcohol, ammonia, naphthalene.

 Coal pollution. Intense burning of coal has shifted the balance of the oxygen, ozone and carbon dioxide in the atmosphere, making the ozone «shield» of the planet thinner. It results in global climate changes.

? List the processing products of coal.

? What types of pollution are caused by coal processing?

 So, children, our lesson is over! Thank you for your participation at the lesson. Homework is essay on hydrocarbons.