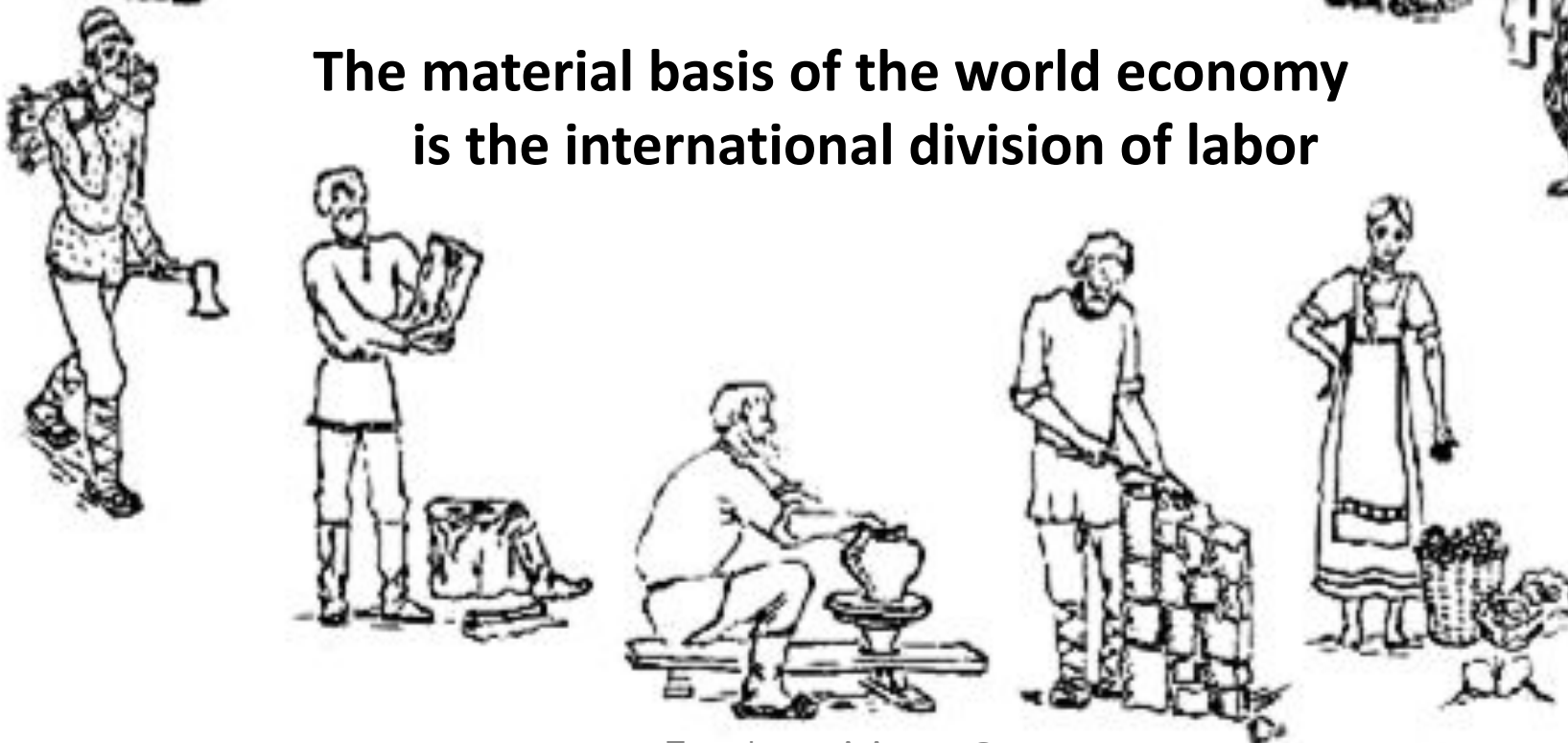# international division of labor

The material basis of the world economy is the international division of labor

The division of labor

is differentiation, specialization of labor activities, leading to the identification and coexistence of its different species,

the separation of labor in society

Functional

Territorial

Public

Technical (isolated)

Regional

international

Differentiation in society of various social functions

The division of labor on the number of partial functions within the enterprise

General

Particular

The selection

of branches

The selection of sub-branches

The classifier of types of economic activity

__Consists of 17 sections:__
__1. Agriculture, hunting and forestry__
__2. Fishing and fish farming__
__3. Mining__
__4. Manufacturing__
__5. Production and distribution of electricity, gas and water__
__6. Construction__
__7. Wholesale and retail trade; repair of motor vehicles, motorcycles, household goods and personal items__
__8. Hotels and restaurants__
__9. Transport and communications__
__10. Financial activities__
__11. Operations with real estate, rent and granting of services__
__12. Public administration and military security; obligatory social security__
__13. Education__
__14. Health and social services__
__15. Other community, social and personal services__
__16. Provision of services for the household__
__17. Activities of extraterritorial organizations__

The social division of labour expressed in the form of specialization of production

Specialization of production

reflects a process of concentration of production of certain products or parts in independent industries and specialized enterprises

The forms of specialization
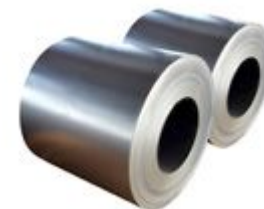
Subject

the production of finished end products
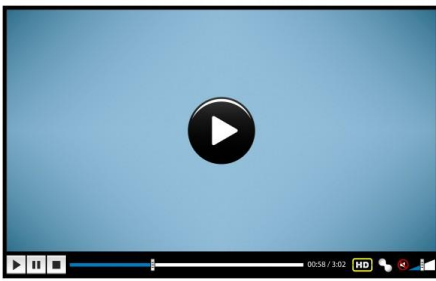
Detailed–

the production of parts and components

Technological –

the production of semi-finished products

the international division of labor forms

International general   International particular   International technical

the international division of labor forms

international specialization

– concentration of resources of the country in those industries, where it has natural or acquired advantages

International cooperation –

the process of establishment and development of production linkages between firms in different countries

Methods for determining the international specialization

●On the basis of the commodity structure of export

●On the basis of the index of revealed comparative advantage (formula Balazs)

●On the basis of the index of revealed comparative advantage (formula Niven)

●On the basis of territorial coefficient of specialization

Commodity structure of exports

characterizes the share of certain commodities in total exports

COMMODITY STRUCTURE OF EXPORTS OF THE RUSSIAN FEDERATION

Percent of total

Exports - total including:	2000	2005	2008	2009	2010	2011	2012	2014
foodstuffs and agricultural raw materials (excluding textile)	1.6	1.9	2.0	3.3	2.2	2.6	3.2	3.1
mineral products	53.8	64.8	69.8	67.4	68.5	71.1	71.3	71.6
chemical products, rubber	7.2	6.0	6.4	6.2	6.2	6.3	6.1	5.8
leather raw materials, fur and articles thereof	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
wood, pulp-and-paper products	4.3	3.4	2.5	2.8	2.4	2.2	1.9	2.1
textiles, textile articles and footwear	0.8	0.4	0.2	0.2	0.2	0.2	0.1	0.2
metals, precious stones and articles thereof	21.7	16.8	13.2	12.8	12.7	11.4	11.1	10.5
machinery, equipment and transport means	8.8	5.6	4.9	5.9	5.4	5.0	5.1	5.4
others	1.5	1.0	0.9	1.3	2.3	1.1	1.1	1.2

- revealed comparative advantage index – **RCA formula Balazs**
- Compares the share of a particular product in a country's exports with its share in world exports.

$$RCA_{ij} = \frac{X_{ij} : X_{wj}}{X_{it} : X_{wt}}$$

$$RCA_{ij} = \frac{X_{ij} : X_{it}}{X_{wj} : X_{wt}}$$

Where RCAij is revealed comparative advantage of country i in exporting product j;

Xij – export of commodity j from country i;

Xwj – world export of product j;

Xit – total export of country i;

Xwt is total world exports.

RCAij > 1 – the product of specialization of the given country in international trade

RCAij < 1 – this product cannot be regarded as an object of specialization of the country.

Commodity structure of exports in 2014

	Exports	в том числе					
		food products drinks, tobacco (- sections of 0.1 SITC(3)	raw material-except fuel , animals oil and fats (sections 2,4 SITC(3)	mineral fuels, lubricants and similar materials (section 3 SITC(3)	chemical substances and similar products (section 5 SITC(3)	machines and equipment (section 7 SITC(3)	other industrial goods and end products (sections 6,8,9 SITC(3)
Russia	100	2	3,6	69,1	4,4	3,2	17,9
Germany	100	5	2	1,9	14,7	46	30,3
Italy	100	7,3	1,8	4,9	11,5	35,5	39
Great Britain	100	6,1	2,6	12,7	17,9	31,6	29,1
Ukraine	100	12,2	15,3	7,1	6,7	17,3	41,3
China	100	2,7	0,8	1,7	5,5	49,5	39,8
Japan	100	0,6	1,4	1,7	10,2	59,5	26,6
World	100	11,9	7,6	16,4	9,7	24,4	29,7

- revealed comparative advantage index– RCA. formula Niven

$$RCA_i = \left(\frac{X_i}{\sum X_k} - \frac{M_i}{\sum M_k} \right) * 100$$

- Compares the share of a particular product in a country's exports with its share in imports

Where Xi – export of product i;

Mi – import of product I;

ΣXk – of a country's exports;

ΣMk – imports of country K.

-100> RCAi <100

The maximum and minimum values reaches theoretically in models of 2X2 in complete specialization.

In real conditions, rarely exceeds 10.

A higher index value indicates greater specialization of countries in international trade.

Characterizes the intensity of intra-industry trade: the stronger the bilateral exchange of goods, the closer the indicator value to zero (intra-industry trade – countries export and import products of the same industries).

Commodity structure of exports and imports in 2014

Exports

15,2	Machinery, equipment and transport vehicles
17,3	Chemical products, rubber (including chemical fibers and filaments)
34,2	
6,5	Mineral products
15,3	Ferrous, non-ferrous metals
11,5	Food goods and agricultural raw materials
	Other

Imports

25,3
14,2
30,0
9,1
11,8
9,6

- **Territorial coefficient of specialization**
- Shows to what extent certain industry represented in the region compared with its share in the whole economy.

$$t = \frac{E_{ir}}{E_{in}}$$

Eir – the share of industry i in region r;

Ein – the share of industry in the whole economy.

t = 1 - the product of specialization of the given country in international trade

t > 1 – this product cannot be regarded as an object of specialization of the country.

Questions:
- ❏ Classification of labor division
- ❏ General division of labor (definition, examples)
- ❏ Particular division of labor (definition, examples)
- ❏ Technical division of labor (definition, examples)
- ❏ International division of labor (definition, examples)
- ❏ The forms of specialization. Reasons for specialization
- ❏ International cooperation (definition)
- ❏ How you can define country's specialization in the world economy? (to be able to create your own indexes)
- ❏ Be able to explain country's specialization
  - ▪ On the basis of the commodity structure of export
  - ▪ On the basis of the index of revealed comparative advantage (formula Balazs)
  - ▪ On the basis of the index of revealed comparative advantage (formula Niven)
  - ▪ On the basis of territorial coefficient of specialization