First READ Global Conference «Developing a Vision for Assessment Systems»
September 30 – October 2, 2009
Moscow, Russia

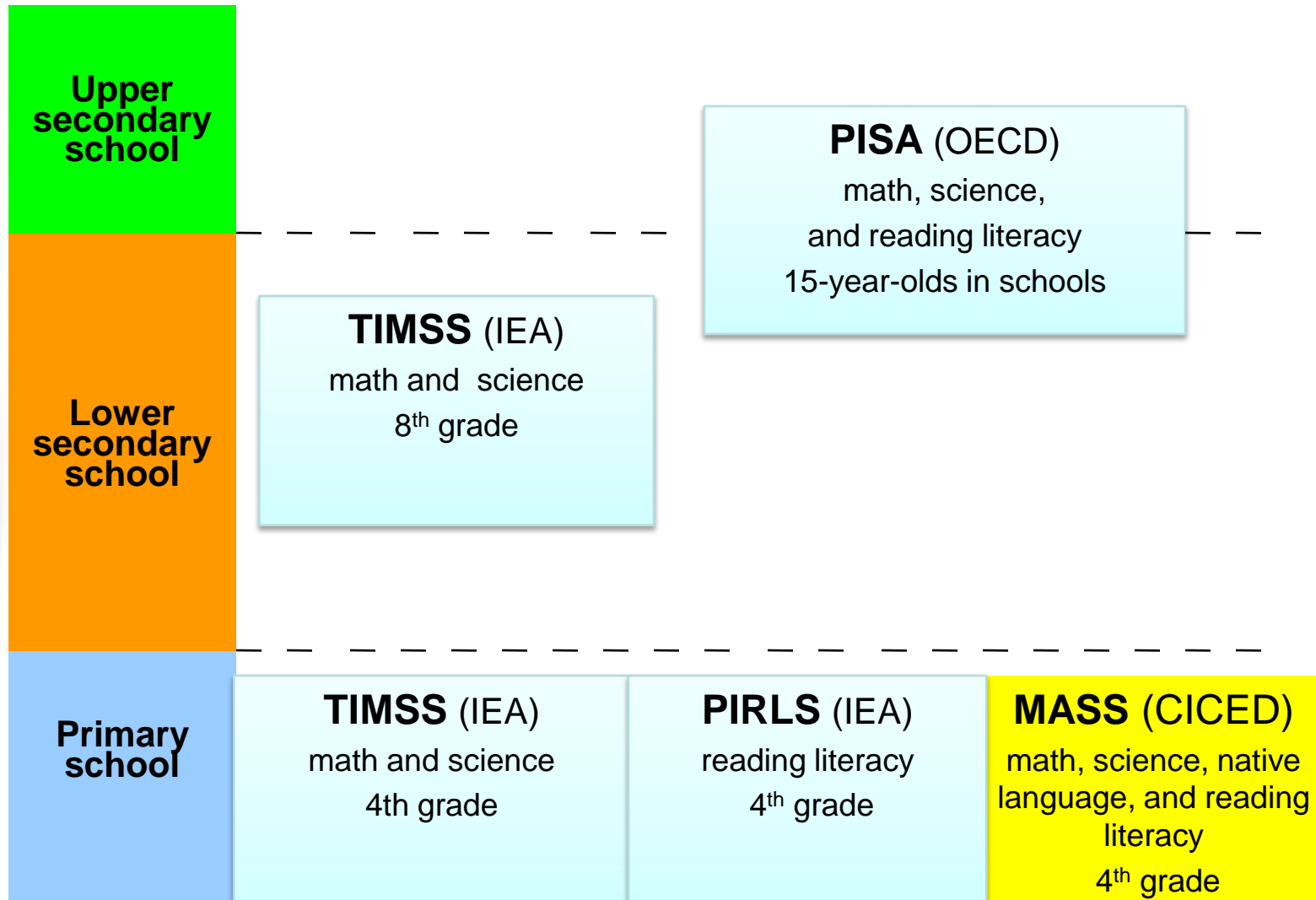# *Assessment toolkit of primary school subject competences*

Открытый институт
«Развивающее образование»

CICED
Center for International
Cooperation
in Education Development

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Monitoring Achievements of School Students (MASS) in subject competencies assessment system

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Upper secondary school

PISA (OECD)

math, science,

and reading literacy

15-year-olds in schools

TIMSS (IEA)

math and science

8th grade

Lower secondary school

Primary school

TIMSS (IEA)

math and science

4th grade

PIRLS (IEA)

reading literacy

4th grade

MASS (CICED)

math, science, native language, and reading literacy

4th grade

Three categories of key competencies (DeSeCo)

Use tools interactively (e.g. language, symbols, texts, technology)

Interact in heterogeneous groups

Act autonomously

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Academic content assimilation levels

construction
(free action – focus on method options field, going beyond it)

reflection
(action with understanding – focus on principle, on substantial aspect of a task situation)

reproduction
(actions per sample – normally, focus on rule, algorithm)

curriculum studied

| B. Bloom	I.Y Lerner
Knowledge Recollecting or recognizing information approximately in the form it was presented ...	**Knowledge** Recognition of a perceived object or reproduction of knowledge about it
Comprehension Translation, explanation, summarizing, interpretation … of mastered information...	
Application Use of mastered information in new contexts...	**Application** Reproduction of activity methods and application of knowledge in a familiar environment per sample, including easily identifiable variations
Analysis Subdivision of the material, categorization of elements, establishment of interrelations, identification of a unit structure principle...	**Creative application** Creative application of mastered information in new unfamiliar environment (transfer, identification of a problem, identification of an alternative solution, combination of earlier mastered methods…)
Synthesis Integration of mastered information for development of new concepts, action plans, generalizations and schemes...	
Evaluation Formulation of evaluation judgments based on existing facts and preset criteria...	

Samples of problems for maths monitoring

I. How many square centimeters are there in the area of rectangle *ABCD*?
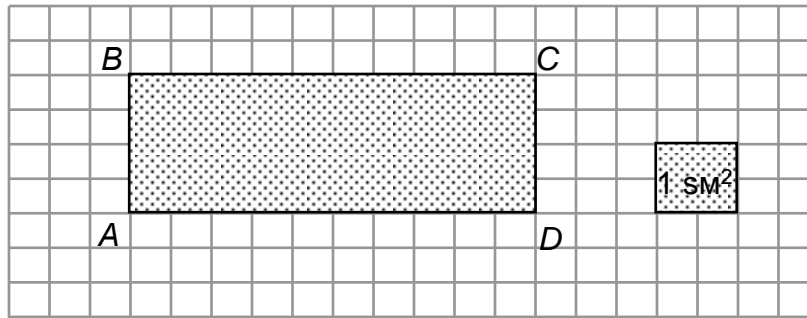
II. Measure the shaded area of the figure shown in Fig. 1 using the shaded figure shown in Fig.2 as a unit area. Write down the resulting number.

Fig. 1   Fig. 2
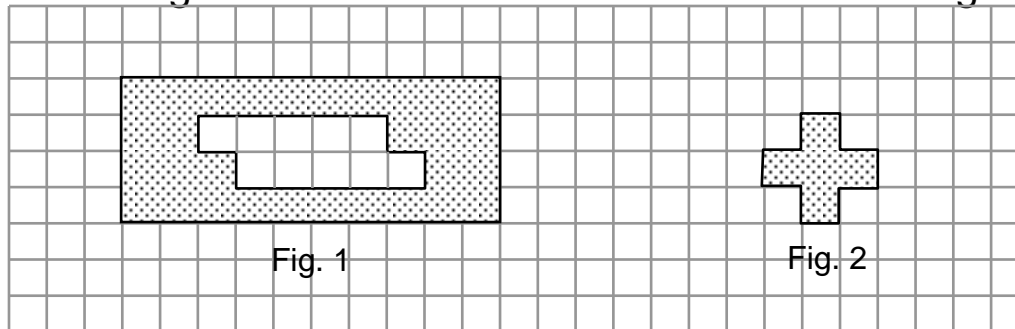
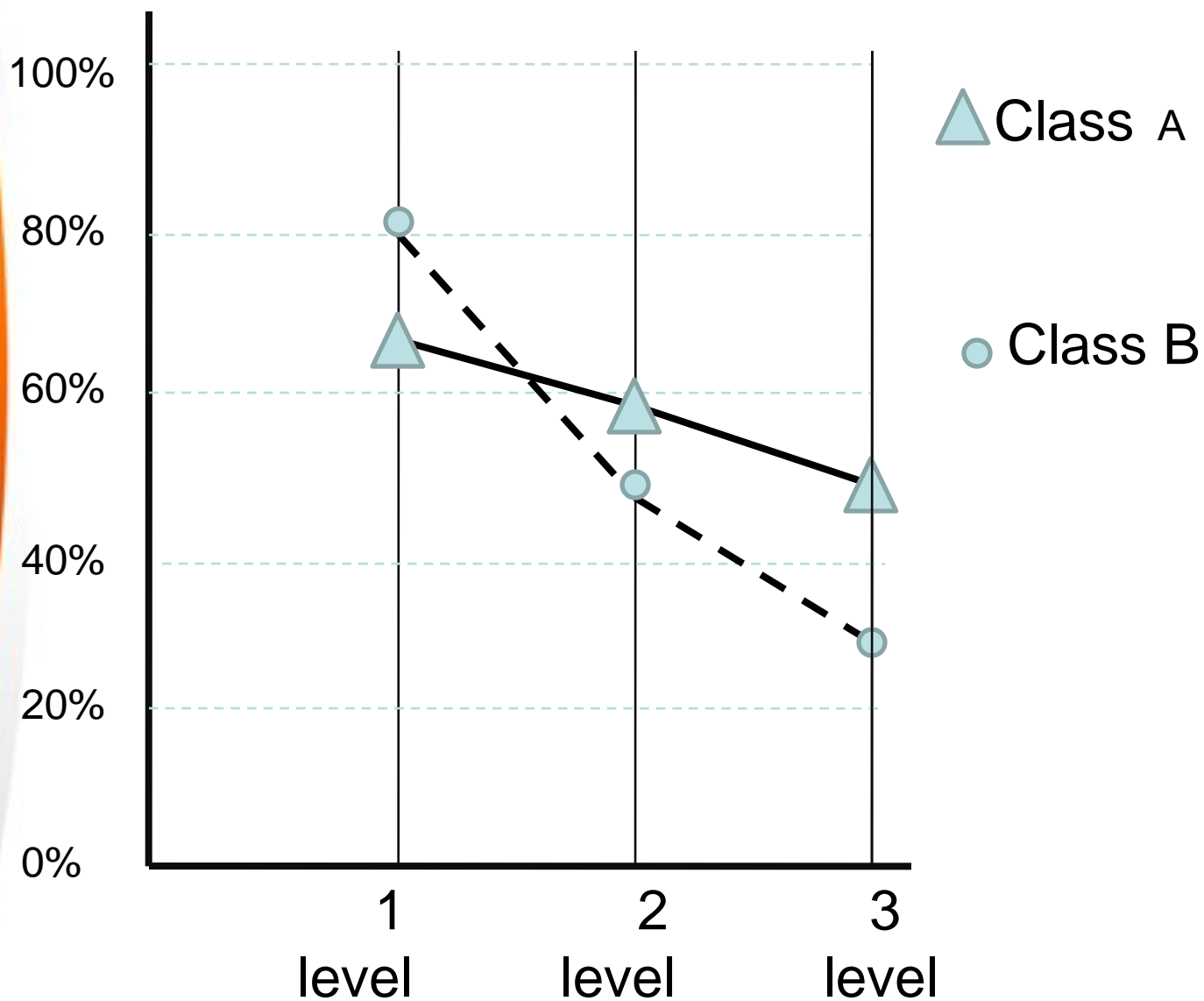III. Measure the area of the big triangle using the small triangle as a unit area. Write down the resulting number.
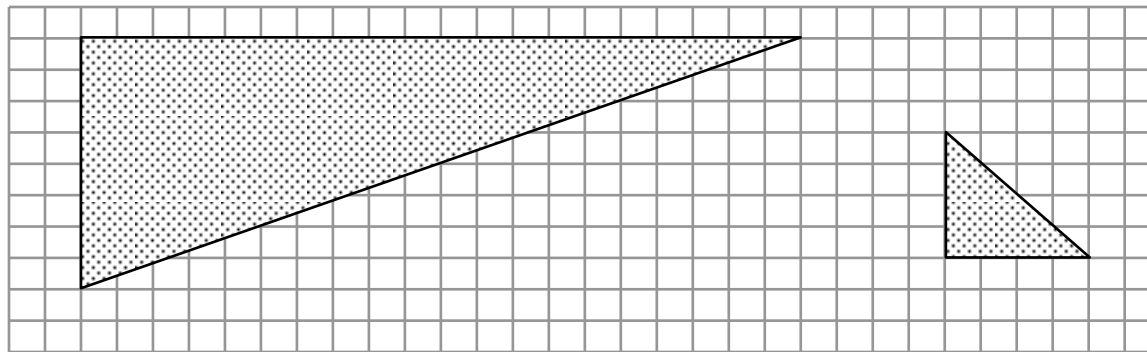
Academic content assimilation profile

construction

reflection

reproduction
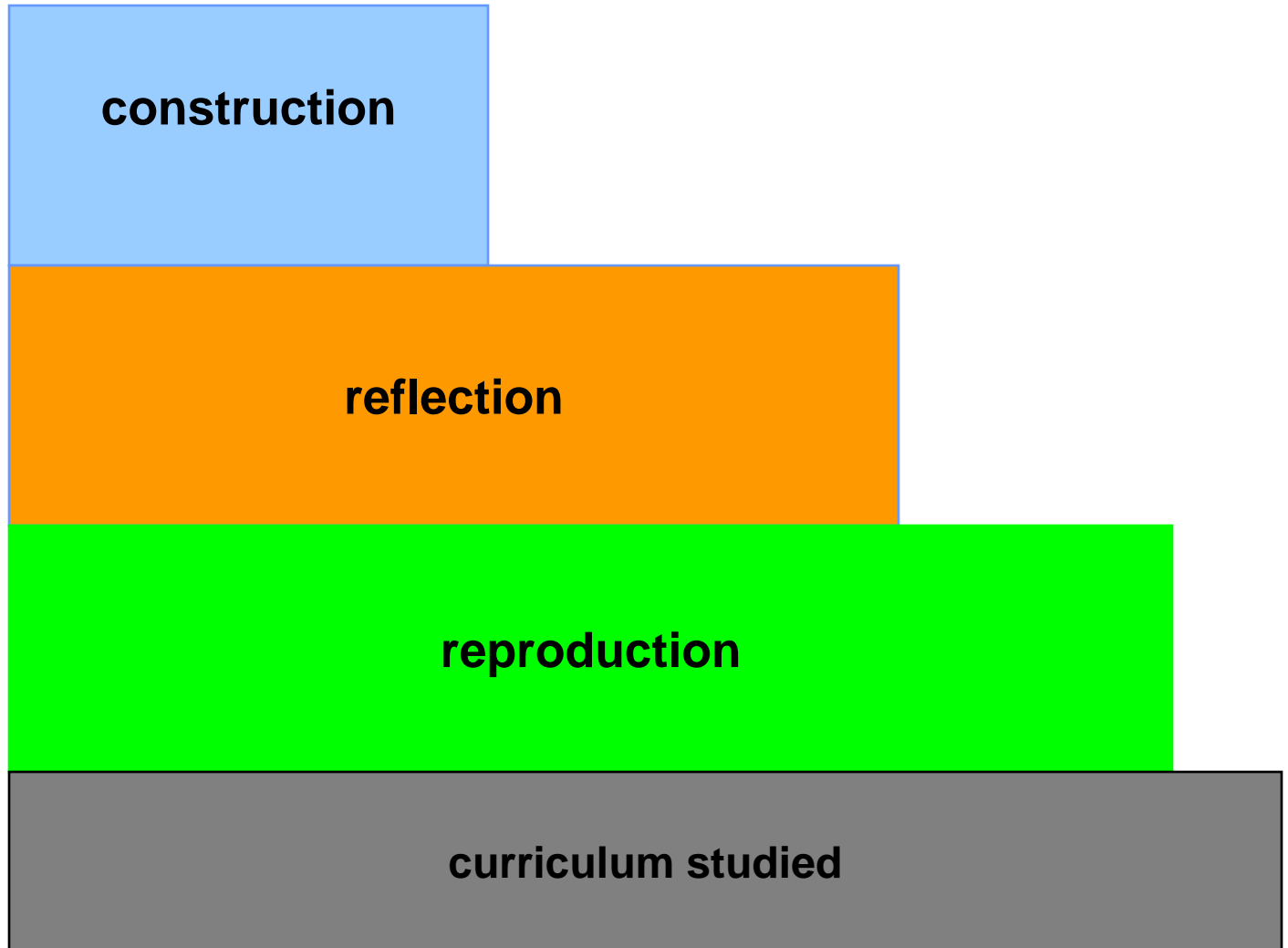
curriculum studied

Natural science class profile

Testing coverage of the survey toolkit

Number of participants of testing	2006	2007	2008	2009
Subjects of the Russian Federation	1	9	4	4
Schools	5	40	15	30
Students, persons	150	1 150	300	500

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Potential users of the sample frame

- Students and their parents;

- Teachers;

- Methodologists;

- School administration;

- Federal and regional executive authorities in charge of education

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Thank you for your attention!

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