

RESOLUTION OF PROBLEMS

- Learning how to solve problems using the different kind of intelligences:
 - * linguistic;
 - * logical & mathematical;
 - * spatial;
- Valorizing the use of many strategies;
- knowing how to explain orally and graphically, the used strategies;
- Respecting the relationship among peers.

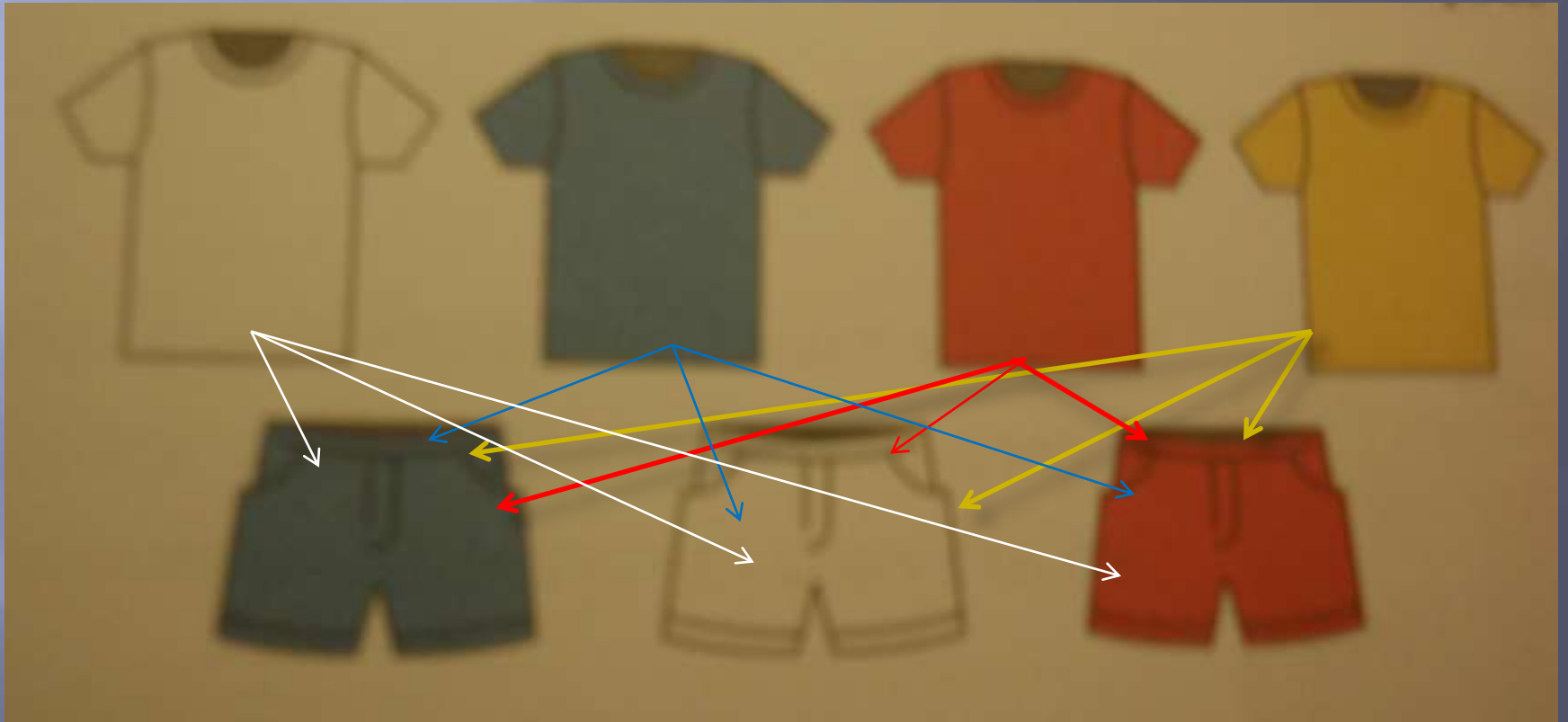
The problem

- ▣ A football player has 4 t-shirts of different colors and 3 different colors shorts too.



- ▣ How many different ways can the player equip himself?

The students interpret and relates the colors of t-shirts with the colors of the shorts (pairs).



Answer $4 \times 3 = 12$

Making a double entry table

1.ª estratégia:
Tabela de dupla entrada

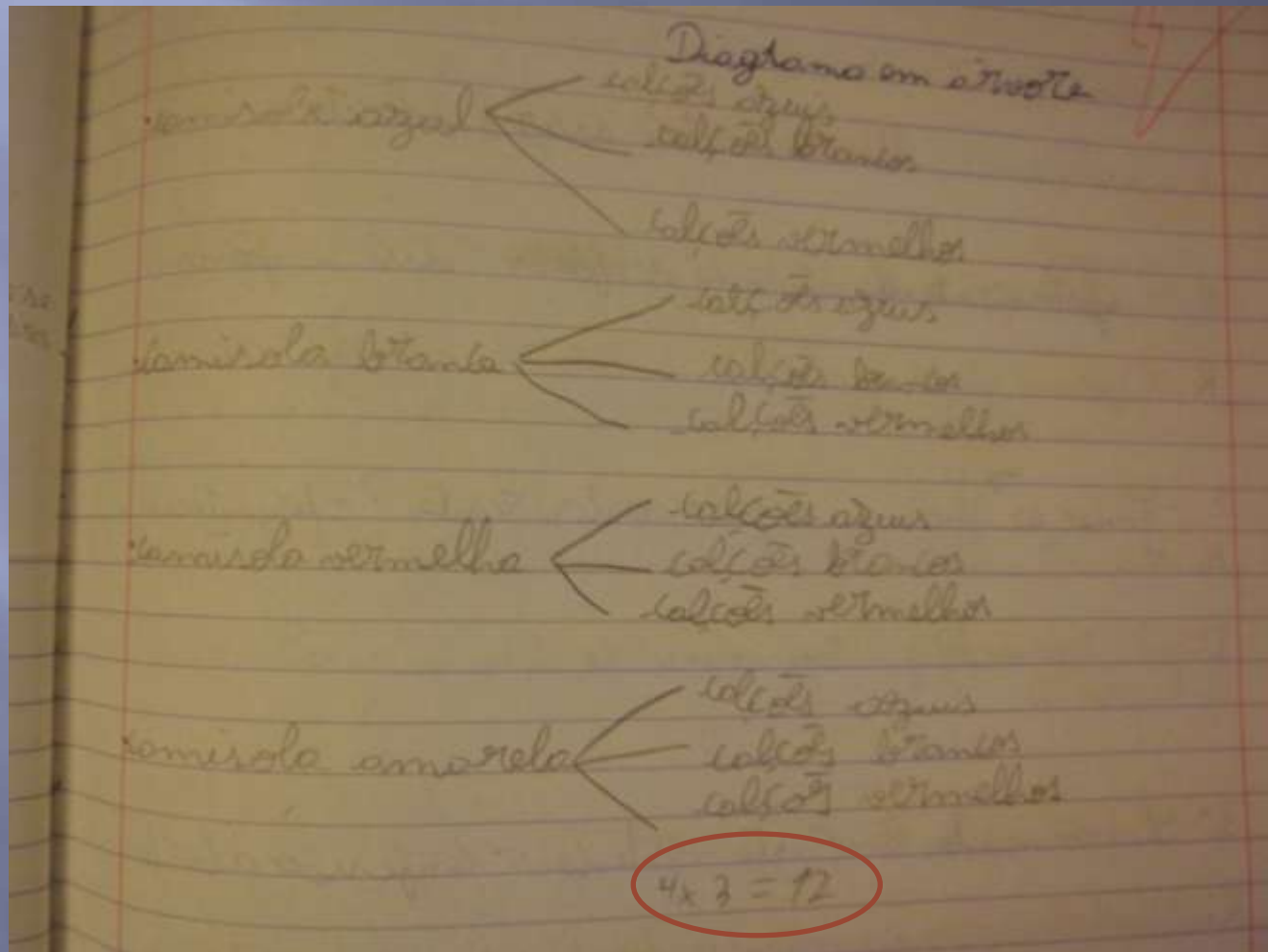
	Comidas ↓				
↓ salgões	azul	branca	marrom	verde	
azul	X	X	X	X	4
branca	X	X	X	X	4
marrom	X	X	X	X	4
total	3	3	3	3	12

$4 + 4 + 4 = 12$
 $3 \times 4 = 12 \rightarrow$ total de comidas
 de comida
 de comida

$3 + 3 + 3 + 3 = 12$
 $4 \times 3 = 12$
 nº de comidas
 de comida

B: 6 jogadas
 pode resultar-se de
 12 maneiras diferentes.

Realization of a tree diagram



- ▣ The students solved the problem in 3 different ways and presented their resolution to colleagues.
- ▣ Finally all students write in their notebooks the all ways discuss in the class to solve the problem.

Notes...

- ▣ This kind of resolution of maths problems appears in the new programme of the subject;
- ▣ With this new programme the students try to find their strategies to solve problems;
- ▣ Each strategy is discussed in the classroom and all the children try to participate;
- ▣ In the end of one of this moments, I believe that a bigger group of students can explain the solution to all group.
- ▣ This situation appears because the students can use more than one kind of intelligence.