

Mathematical Problem Solving for Parents with Children in Primary 5

19 Jan 2018

Cedar Primary School



Format of Examination Papers

Paper 1 (55%)

15 Multiple choice questions

15 Short answer questions

Duration : 1 hour

Calculators are not allowed

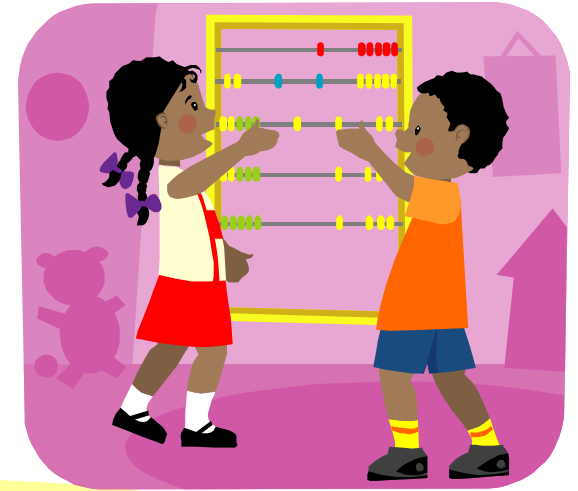
Format of Examination Papers

Paper 2 (45%)

17 Word problems

Duration : 1 hour 30 minutes
Calculators are allowed

Heuristics For Problem Solving



- Act it out
- Use a diagram/model
- Make a systematic list
- Look for a pattern(s)
- Work backwards
- Before-after concept
- Guess and check
- Make suppositions
- Restate the problem in another way
- Simplify the problem
- Solve part of the problem

Today's Focus...

- Use a diagram or model
- Use geometrical concepts
- Tree diagram and working backwards
- Look for a pattern



Model Drawing

- Translates a word problem into drawings or 'models'
- A picture (or diagram) is worth a thousand words.
- Helps to convert the data provided in a problem into concrete visual images.
- Enables the student to comprehend and convert problem situations into relevant mathematical expressions or number sentences and to solve them.

Some model drawing problems can be solved using the before and after concept.

Make a Systematic List

- Organise numbers and information logically and systematically into lists or tables
- Organised tabulation helps the child to perceive trends or patterns

In a tournament, each team had to play with every other team only once. If there were 7 teams, how many matches will be played?

Let us name the teams, A,B,C,D,E,F and G.

AB, AC, AD, AE, AF, AG : 6 matches

BC, BD, BE, BF, BG : 5 matches

CD, CE, CF, CG : 4 matches

DE, DF, DG : 3 matches

EF, EG : 2 matches

FG : 1 match

**Total of 21
matches**