## City of London School - 10+ Mathematics Checklist

Good sources for revision for problem solving questions are our specimen examination paper, UKMT Primary Maths Challenge papers (which can be found online) and the Bond series of books (particularly 10+).

Any of the topics below can be tested and also candidates' problem-solving skills.

## Number

- Whole number arithmetic
- Adding subtracting and ordering decimals
- Using negative numbers, e.g. temperature scales
- Equivalent fractions
- Simple fractions and percentages of a whole, e.g. ¼ of 240
- Index notation such as 5<sup>2</sup> and 6<sup>3</sup>
- Types of number: primes, squares, cubes, square roots, factors and multiples
- Order of operations
- Sequences, finding the next term

## Shape, space and measures

- Names of simple polygons, e.g. heptagon
- Names of simple solids: cube, cuboid, sphere, cylinder
- Units: time (12 and 24 hour clock), money, compass directions
- Interpreting scale drawings, including maps
- Angles (acute, obtuse, reflex); angles at a point total 360°
- Perimeter of simple shapes involving rectangles
- Find areas by counting squares
- Simple nets of solids
- Reflections in mirror lines

## **Handling data**

• Charts: tally tables, bar charts, pictograms, frequency diagrams, line graphs