Bottles and Crates

Baseboard
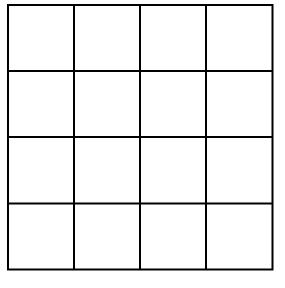
Resources

You need **10 counters or coins** to represent bottles which are going to be placed in a 4 × 4 square crate

Puzzle 1

Instructions Using **six** of these bottles, place them in the 4 × 4 crate such that there is an **even number of bottles in each row**, and an **even number of bottles in each column.**

Puzzle 2 Is it possible to arrange the **six** bottles so that there is an **odd number of bottles in each row**, and there is an **odd number of bottles in each column?**

Puzzle 3

Instructions Using **ten** of these bottles, place them in the 4 × 4 crate such that there is an **even number of bottles in each row**, and an **even number of bottles in each column.**
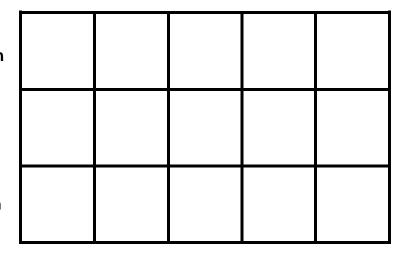
Puzzle 4 Is it possible to arrange the **ten** bottles so that there is an **odd number of bottles in each row**, and there is an **odd number of bottles in each column?**

Puzzle 5

Instructions Is it possible to arrange **six** bottles in a 5 × 3 rectangular crate so that there is an **even number of bottles in each row**, and there is an **even number of bottles in each column?**

Puzzle 6 Is it possible to arrange the **six** bottles so that there is an **odd number of bottles in each row**, and there is an **odd number of bottles in each column?**

Answers