Marble Mania

You need ☑ marbles or counters (optional)   ☑ a classmate

Activity

Marble mania has hit Newmarket School! Everyone wants to play marbles at lunchtime. To stop arguments, the teachers look after the marbles and the children share them out when it's time to play.

1. These 4 children are given a bag of 24 marbles for their game.

> We need to work out how many 4s there are in 24.

> Why?

> So that we know how many marbles each person gets.

    a. Find two ways to work out how many marbles each child gets.

    b. If another group of children shared 24 marbles equally with none left over, how many children could be in that group? (There is more than one answer.)

2. Some of the bags of marbles have different amounts in them. Show how these bags of marbles could be shared equally:

    a. 21 marbles among 3 people

    b. 25 marbles among 5 people

    c. 18 marbles among 6 people.

Solving division problems

3. One group is playing marbles in the goal-shooting part of the netball court. Jake puts down a big marble near the outside of the circle and measures the distance from the pole to the marble. The players then stand by the netball hoop to roll their marbles.

a. Jessie's marble stops 1 metre past halfway to the target marble. How far does it roll?

b. For their next game, the children put the target marble 6 metres from the pole. Daniel's marble goes $\frac{1}{3}$ of the way to the target. How far does it roll?

4. Make up a marble problem for a classmate to solve.