## Big numbers and counting collections (Early Years)

Provide students with a handful of beans, buttons, counters or even pebbles. Ask them to work in pairs. First they should estimate the amount in the collection. Then they can check their guess. Encourage students to think of a method for counting their collection.

Some children may count all and count by ones; others may group their collection by twos, fives, tens or even twenties (so make sure you have lots!).

After the students have counted their collection they can share their strategies. They could then check their answers by using some one else's strategy.

You might wish to challenge the class tomorrow by giving them two handfuls of items to count.

What is the biggest number the students in your class can count?
Can you join the collections to make a really big answer?!!

## Big numbers and powers of 10

Imagining larger and larger "stuff" in actual magnitude and area is beyond most younger children and they enjoy the challenge of constructing such things repeatedly. The more bizarre the unit they choose, the more enjoyable the activity.

How many workbooks/blocks of chocolate/"ice-cream melts" would you need to cover $1 \mathrm{~m} \times 1 \mathrm{~m}$ ? $10 \mathrm{~m} \times 10 \mathrm{~m}$ ? $100 \mathrm{~m} \times 100 \mathrm{~m}$ ? a square kilometer?

