# Counting and subitising

Counting is used to determine how many are in a collection.

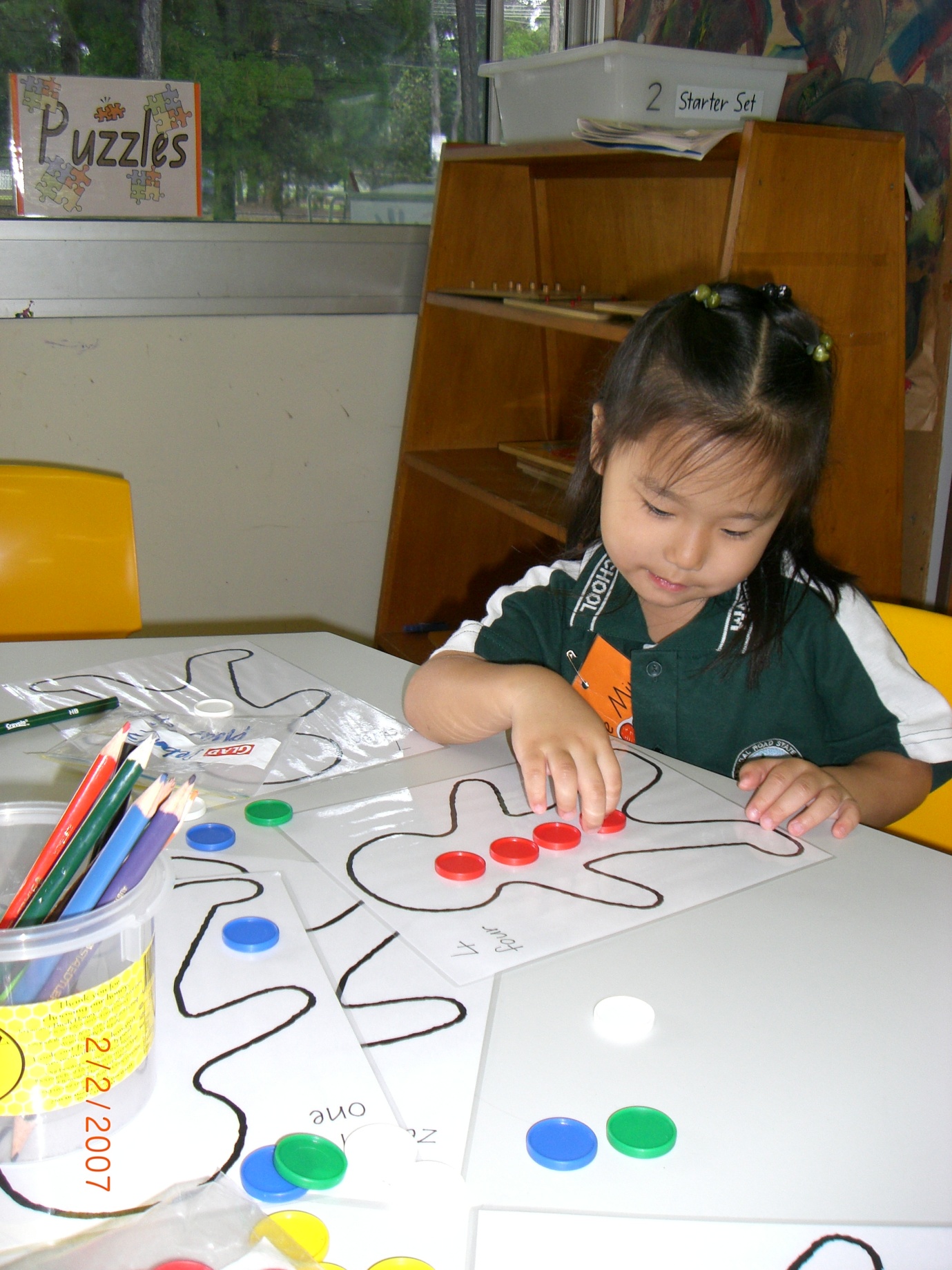
Subitising is an efficient way of counting.

Counting

Students require efficient counting skills to function in everyday contexts and to make sense of the world around them.

The study of number in the Early years,aims to develop a deep and flexible understanding of number and quantity. The development of counting principles becomes a major focus for young learners as they underpin the development of number concepts.

The counting principles identify that:

* each object must be counted and counted only once
* numbers must be said once and in the conventional sequence
* the arrangement of the objects does not affect how many there are in the collection
* the starting point or the order in which objects are counted does not affect how many there are in the collection
* the last number said tells how many in the collection; it does not refer only to the last object counted.

Students develop these skills:

* in everyday contexts
* by seeing these skills modelled
* with frequent practice
* supported by explicit instruction and discussion of counting.

Subitising

The Australian Curriculum refers to the use of **subitising** to order and compare collections. The definition of subistising is *recognising the number of objects in a collection without consciously counting.[[1]](#footnote-1)*

Many students can see how many in a collection at a glance before they learn to count. Students’ ability to subitise extends to larger quantities and to seeing parts in a collection as they progress through the early years.

Students recognise quantities at a glance based on:

* a strong sense of a particular quantity, for example, ‘twoness’ or ‘fiveness’
* familiarity with a collection or arrangement such as dice patterns

This is 5 because I know what 6 looks like and this has 1 missing.

* rearrangement of the collection to make it more recognisable
* seeing smaller familiar parts within the collection.

e.g.

This is 5 just like the dice arrangement.

This is 3 just like the domino tile.

This is 3 because I can see 2 and 1.

Subitising assists students to quantify collections and explore part-whole relationships.

Students need the ability to recognise parts and to count to calculate whole and decimal numbers.

1. The Australian Curriculum: Mathematics for Prep (F)-10 Version 5.0 [↑](#footnote-ref-1)