



Number Rhymes

NRICH

Recognising numbers of items in collections,
Counting down from 10 and counting up to 10



Children enjoy singing and saying rhymes and telling familiar stories.

Adults could share the song "10 Green Bottles" with the children in order to involve the children in happily counting

The Activity

Provide a collection of 10 weighted green plastic bottles part filled with sand. Stand them in a row for all the children to see. Act out the song as it is sung with the children.

Encouraging good thinking and reasoning

Describing

What is happening to the number of bottles each time one falls off? What happens to the number of bottles as the bottles fall off the wall?

What if you count the bottles on the wall and those that have fallen off?

Can you see a pattern?

Recording

Can you draw a picture/make a mark, to show me how many bottles there are on the wall now?

Reasoning

... bottles have fallen off the wall. How many are there left?

How do you know that?

Opening out

What if we added ... bottles how many would there be then?

What is ... more fell down? How many would there be then? When might we count down?

Imagine how many bottles there will be on the wall if ... have fallen off.

Resources needed

- Green plastic bottles partly filled with sand or water to weigh them down.
- Big or small sheets of paper and pencils for recording.
- Camera or video camera for recording.

The Mathematical Journey

Counting and the properties of number.

Using mathematical language about counting and number.

Examples: more, less, one, two, three, four, five, six, seven, eight, nine, ten, none, zero, next door number, number neighbor, same, different. . .

Children will begin to be able to predict the next step and visualize the outcome after the next bottle falls.

Recognising Pattern

The structure of the rhyme and the repetition help to develop the children's understanding of patterns and to predict outcomes.

Describing Position.

Examples: on, off, next to, before, after, left, right.

Understanding ordinal number and relating it to counting.

Explore which bottles fell off . first, second, third and so on. The children might hold the bottles so that they can be identified by the children holding them

Additional resources

Animation of the rhyme, which can be stopped, and questions posed.

Video/photos of children engaged in the task.

And more ways into the same mathematics

Counting up and down from a given number in the context of the number of children in the group e.g. group of 10 children and two are away today so there are 8 here.

Counting sets and collections of objects and adding or removing some – hiding objects under a cloth or in a bag

Story, rhyme and song links

Five little ducks went swimming one day

10 fat sausages