



The way this works

NRICH



Children enjoy ... This section describes an activity that you will have observed that many children enjoy.

Adults could ... This suggests how adults might build on children's interests to foster mathematical thinking and learning.

The Activity

This is a brief description of the activity. It will show ways of sharing it with the children and possibilities for development. It will also mention any health and safety issues.

Encouraging mathematical thinking and reasoning

These bubbles offer lots of opportunities, prompts and possible routes through the activity supporting the children's mathematical thinking, reasoning and communicating. . These activities can be revisited a number of times with different responses from the children on each occasion. Some of the subsections will not be relevant to found in every activity. Each colour links to a different aspect.

Describing

What do you notice? These help children to spot patterns and relationships (pattern sniffing). It is about seeing something general from a range of particular examples e.g the first person is always at the front of the queue.

What can you see? How is it similar to or different from...? These are about exploring, describing and comparing different mathematical aspects of contexts.

Recording

These support mark making & recording. The children might use pictures, their own marks or symbols. It could include taking photos and annotating them with children's comments.

Reasoning

How do you know that? Why is it true? Is it always true? These encourage children to think and reason mathematically. They form the beginnings of mathematical justification and proof. What will happen if you undo that action? If you do it again? Doing and undoing things (like putting it into the basket and taking it out) are very important in mathematics. These help children to engage with these processes.

Opening out

These help children to conjecture & imagine what will happen if they change or alter something.

They may predict what will happen and thinking about these questions can help them to

This is an article that explains the format of our EYFS resources.

These are the main ELGs covered.

Resources needed

In this section we offer a list of all the resources that are required to undertake the task as described with a group of children.

The mathematical journey

In this section we unpack the big mathematical ideas taken from the curriculum strands and elaborate them providing examples. We describe various responses that the children might make. We offer examples of vocabulary that the children might use and illustrate their potential responses and progression through the ideas involved in the activity. These descriptions will help to identify the children's learning journey through the activity. An example might be developing use of language to compare, contrast and describe.

Additional resources

Here we offer you some additional resources to support using the task. These may be video clips or photos or pictures that may be useful for the task. In some cases there may be an interactive environment to explore with the children or other web based resources.

More ways into the same mathematics

This section suggests other linked activities that would cover a similar area of the curriculum. We aim to illustrate a range of other experiences in which the same ideas could be explored. (Many of these scenarios are part of the familiar scene of the EYFS classroom.)

Story, rhyme and song links

We share stories, rhymes or songs that are relevant to the activity.