Scooters, Bikes and Trikes

Counting reliably
Using everyday language to talk about size, position, distance; to compare quantities and objects and to solve problems

Children often enjoy riding scooters, bicycles and tricycles around the play area with friends.

Adults could provide an assortment of wheeled vehicles, a suitable safe place and then ask some good questions.

The Activity
Children make their own way round the area, each on a scooter, bicycle or tricycle chosen from the variety on offer. Every now and again a child might stop to have a conversation with practitioners. A board attached to the front of the scooter/bicycle/tricycle can allow a child to write/mark/draw as s/he wishes.

Encouraging mathematical thinking and reasoning:

Describing
Tell me about your scooter/bike/trike.
Where are you going next?

Reasoning
Why will you need to go that way?
Is there another way of getting there?

Opening out
Tell me about the wheels.
Are there other scooters/bikes/trikes like this one?
How is that one different to/the same as yours?

Recording
Would you like to remember this by asking a friend to photo/video you?
The Mathematical Journey

Same and different

- developing the use of language to compare and contrast scooters/bikes/trikes with each other e.g. bigger, smaller, longer, shorter, larger ...

Position and spatial properties

- using positional and spatial language to describe their position relative to something/someone else e.g. ‘behind’, ‘next to’ …; or to describe a route e.g. ‘straight’, ‘corner’, ‘bend’ …

Counting

- saying one number for each object (e.g. when counting wheels)
- remembering the pattern of the number sequence
- understanding cardinality i.e. that the last number gives the total
- estimating the number of objects and checking by counting
- finding the total number of objects in two groups (e.g. the total number of wheels on three bikes)
- using the language of ‘more’ and ‘less/fewer’ to compare e.g. number of wheels

Development and Variation

You may wish to introduce the idea of a map by asking children to draw a picture of their journey so someone else could follow their route. You could also create your own simple map, marking ‘landmarks’ in the area. If laminated, children could use these maps in their outdoor play.

Children may wish to label each bike/trike/scooter in some way, rather like buses are numbered. Having resources available for them to be able to do this would be advantageous.

The following NRICH Early Years materials give opportunities for similar areas of mathematics to be experienced: ‘Tidying’, ‘Packing’, ‘Washing Line and ‘Queuing’.

Resources

An outdoor area with suitable paths
A variety of bikes, trikes and scooters with boards and pencils attached to the front
A camera


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