

Disclaimer: Activities with children must always be risk assessed, including for allergies or choking. Children must always have adequate supervision. Resources and materials must always be appropriate for children's age and stage of development.

Activity: big stick, little stick

Take your maths outdoors with this measuring and comparison activity.

Whether in your nursery grounds or on a trip to the local park, this activity will get the children talking about length through an engaging experience.

Learning aims

- Measure and compare length and size
- Develop mathematical vocabulary.

Resources

- Selection of long and short sticks (children may be able to collect these from the grounds or local area)
- Outdoor area
- Camera (optional)
- Clipboards, paper and pencils (optional).



Activity outline

1. Share the collection of sticks with the children and encourage them to describe and compare the sticks using mathematical vocabulary e.g. long, longer, longest
2. Ensure the children are familiar and confident with the terms 'shorter,' 'longer' and 'the same'
3. Each child chooses a stick and takes it to the outdoor area
4. Encourage the children to gather a collection of three items which are shorter than their stick. They could photograph their stick and the collection or record it on the paper
5. With items which are longer than their stick, they may be unable to collect the items. For example, they may choose a fence, the building or a tree. Again, they can record their 'longer' items using the camera or paper. Make sure they include their stick and the object in the photo or drawing so the comparison can be seen
6. Finally, see if the children are able to find an item which is the same length as their stick. Make sure that they are making a fair comparison by lining up the end of the stick with the other object
7. Display the photographic or drawn recordings so children can continue to practise their vocabulary when talking about what they found.

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Extension ideas:

- Encourage estimation of how long some items may be, using their stick as a non-standard measure. For example, do they estimate the planter to be two or three sticks long? Demonstrate how they can test their guess by lining up the end of the stick with the end of the planter and using chalk to measure where the stick ends and then measuring again from that point
- Discuss the breadth of their sticks. Support the children to describe whether they have a thin/narrow/skinny stick or a fat/wide/chunky stick. See if they can find items narrower or wider than their stick. For children who find the comparative vocabulary tricky, use the terms wider/not wider or narrower/not narrower.

NDNA products to support you with this activity:

- [Maths Champions Programme](#)
- [Online course – Let's look at maths: Shape, space and measure](#)
- [Online course – Mini maths explorers outdoors challenge.](#)