

Science, Technology, Engineering and Mathematics (STEM) in the Early Years



Wonderful Wellies Activity



Mathematics

What you need for this activity:

- A collection of wellington boots
- Large pieces of white paper
- Chunky wax crayons



What to do:

1. Look at the collection of wellies and talk about what you see.
2. Begin to sort the wellies.
3. Talk about how they have been sorted.
4. Each person chooses one welly and talks to one other person about what is the same and what is different about their wellies.
5. Look specifically at the treads on the soles of the wellies.
6. Each person chooses a welly and makes a wax rubbing of the sole of the boot.
7. Compare rubbings. Talk about the patterns and shapes you can see.

Other ideas you could try....

1. Let the children wear the wellies and take them to a muddy area where they can stamp in the mud.
2. Look at the different tracks made by the boots. Use a spade or piece of wood to smooth out the mud and try again.
3. Encourage the children to talk about the different patterns they have made. Try jumping, skipping and marching and look for any difference in the patterns.
4. Go back later and see what has happened to the muddy patterns e.g. if it has been sunny or if it has rained.
5. Alternatively explore welly patterns using paint. Have shallow trays of different coloured paint which the children can walk through and then step across a long roll of paper.
6. Talk about the different marks that have been made e.g. straight and wavy lines, circles and stars etc.



What you need to adapt the activity:

- A muddy area
- A spade or flat piece of wood
- Paint
- A roll of paper

Key Mathematical Concepts

- Objects can be sorted according to their similarities and their differences.
- Patterns are repeated sequences of shapes, objects or numbers.
- Patterns are everywhere in the world around us.

Vocabulary

- Encourage children to use words like *same, different, sort, match, pattern, repeat, wavy, straight, circle, line* and *shape*.
- Emphasise mathematical process words like *describe, compare, observe, experiment*.