

## Making a weather station

### Learning aims

- To observe and experience different types of weather and seasonal changes
- To develop children's vocabulary
- To develop children's gross motor skills
- To develop children's fine motor skills
- To use mathematical language.



### Resources

#### Measuring rain

- Large plastic drink bottles (emptied)
- Scissors, hole punch, waterproof marker
- Measuring tools (ruler, tape measure etc.).

#### Measuring wind

- Plastic or paper windmills
- Pots of soil or sand to stand windmills in
- Ribbons and stick.

#### Measuring temperature

- Outdoor thermometer.

#### Supporting resources

- Clipboards, pens, pencils
- Weather recording book/paper
- Camera
- Binoculars.

## Activity Outline

1. Spring is the time of changeable weather conditions so why not explore the weather with children by creating your own weather station that can measure the wind, rainfall and the temperature
2. Take the children outside to talk about the weather. Encourage children to talk about the weather and ask how they know what the weather is like. Encourage the children to look for signs e.g. on a windy day branches on trees and leaves will be moving. Talk about children's experiences of weather reports or their parents using weather apps to plan journeys or activities
3. Talk to children about their ideas for how you can measure each of the elements and decide where your weather station should be positioned before heading off to create your weather station together
4. Rain - to collect rain you can use large plastic drink bottles. Cut off the top (about a third of the bottle and use a hole punch to put holes into this part of the bottle and put aside for later). Cover the edges of the separate parts with tape to ensure edges feel smooth. Support children to use a measuring tool (tape measure/ruler etc.) and a waterproof marker to mark off a scale on the main part of the bottle starting at the bottom. Ask children to now place the top part of the bottle (in an upside down position) into the main body of the bottle
5. Wind – to measure the wind you can choose a variety of ways to do this, from simple windmills placed in tubs of sand or soil or you can create your own windsock or weather vane. You may also tie different coloured ribbons onto a stick and place this in the ground to measure the direction of the wind
6. Temperature – use an outdoor thermometer to check the daily temperatures, you can encourage children to look at differences between sunny and shady places, different times of the day etc
7. Encourage the children to place your weather measurement devices in your weather station area and support them to think through their choices for positioning
8. Create a box with support resources to monitor the weather e.g. clipboard and writing tools, binoculars, camera to record data etc.

## Extending the activity

- Watch weather reports on the TV then create your own TV station role play where children can report the weather news, sharing daily or hourly weather updates using the data from your weather station.

## Special considerations

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



## **NDNA products to support you with this activity**

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