

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: Let's go outside! Making ramps

Playing with ramps is a fun activity that will see children play and explore as they investigate cause and effect and forces.

Learning aims

- Experiment and investigate the concept of cause and effect
- Build and experiment with making a structure for a purpose
- Work together taking turns and sharing ideas
- Develop problem-solving and critical thinking skills.



Resources

- Variety of materials to make ramps with such as tubes, guttering, planks, etc.
- Small balls, toy cars, pinecones, etc. that roll or slide
- Blocks or crates to adjust ramp heights
- A variety of surfaces like carpet tiles, grass, etc.
- Tape measure, or other non-standard equipment for measuring distances.

Activity outline

- Begin by introducing the activity and demonstrating how to build a ramp. Explain how ramps can help objects roll or slide
- Encourage children to design their own ramps with varying heights and angles. Using blocks or crates for support, offer a variety of materials to encourage experimentation
- Follow children's lead and their stage of development and introduce relevant language such as, "1,2,3, go!"
- Support their curiosity and encourage experimentation, critical thinking and problem solving with open ended questions:
 1. "I wonder if a ball will go faster than a car?"
 2. "What might change if we make the ramp higher?"
 3. "What happens if we put something at the bottom?"
 4. "What's different about the ball and the car?"
- Provide a tape measure, or non-standard measuring resources, and demonstrate how to use this to find out and compare how far the items have travelled

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- Encourage children to try again to get different results with question prompts if necessary, e.g. "What could you change to make your car go further next time?"
- Reflect together on what they discovered in their experiments.

Extension ideas

Create a goal for the items to reach, e.g. a box or marker on the floor. Encourage children to choose an item and adjust the ramp to achieve the goal. Engage in critical thinking about what worked well or what needs to change in order to reach the goal successfully.

NDNA products to support you with this activity

[Characteristics of effective teaching and learning nursery training](#) – Face to face training