INCCA Primary Mathematics Toolkit – Support material

Data and chance: Chance - Suggestions for teaching



FOSTERING PRODUCTIVE DISPOSITION

- Highlight that chance plays an important part in our everyday lives.
- Encourage children to make appropriate decisions based on analysing the likelihood of an outcome.
 - Be sensitive to challenging any misconceptions or preconceived ideas about chance such as lucky numbers etc.

ENCOURAGING PLAYFULNESS WITH MATHEMATICS

- Provide children with opportunities to develop their understanding of chance through actively engaging with trials and experiments with dice, spinners etc.
- Encourage children to play games with an element of chance and consider how this impacts on the games and their outcomes.
- Explore a common misconception called The Gamblers Fallacy a belief that the onset of a particular random event is less likely to happen following an event using dice or coins.





USING COGNITIVELY CHALLENGING TASKS

- Vary the complexity of activities by increasing the amount of trials.
- Encourage children to represent outcomes of an event or experiment in a variety of ways, e.g., *numerically*, *pictorially* with tree diagrams and concretely.
- Provide opportunities for children to use systematic approaches to counting a set of outcomes, e.g., *using tally marks*.

EMPHASISING MATHEMATICAL MODELING

- Provide tasks that encourage children to consider all possibilities of an event rather than the possibility of one particular outcome, e.g., *find all of the possible combinations of a two scoop ice cream from 4 particular flavours*.
- Select tasks and activities that relate to the children's life experiences such as ice cream flavour combinations, menu combinations etc.
- Ensure children have opportunities to design their own trials to test the probability of an event, e.g., *drawing a particular coloured cube from a bag or a coloured sweet from a packet*.





PROMOTING MATHS TALK

- Provide opportunities for children to discuss likely outcomes of events based on their own life experiences.
- Ensure children have sufficient time to present and justify their ideas about chance and the likelihood of outcomes.
- Encourage the use of chance related vocabulary across the curriculum, e.g., *making predictions about outcomes while reading*.

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