INCCA Primary Mathematics Toolkit – Support material

Number: Fractions – Suggestions for teaching

FOSTERING PRODUCTIVE DISPOSITION



- Discuss how fractions play an important part in our everyday lives, e.g., *cooking*, *telling the time*, *creating sets*, *fair-sharing*, *etc*.
- Encourage children to observe the real-life application of fractions in everyday situations, e.g., *cutting one banana into four equal pieces*.
- Engage in open-ended fractions tasks such as 'Odd One Out' activities that enable children to express their understanding of fractions in numerous ways.
- Be sensitive to challenging any misconceptions or preconceived ideas about fractions.

ENCOURAGING PLAYFULNESS WITH MATHEMATICS

- Provide children with opportunities to develop their understanding of fractions through actively
 engaging with concrete, pictorial and virtual resources.
- Encourage children to engage in games that reinforce a varied representation of fractions.
- Facilitate role-play scenarios in the classroom that invite discussion around fractions, e.g., *baking, measuring, building, etc.*
- Encourage children to play games with an element of chance, considering how this impacts on the outcome of the game and how this can be represented in fraction form.





USING COGNITIVELY CHALLENGING TASKS

- Provide opportunities for children to connect the abstract representation of fractions to concrete and pictorial examples.
- Encourage children to reflect on the strategies used to solve fractions problems.
- Provide opportunities for children to investigate and engage in open-ended activities involving fractions.

EMPHASISING MATHEMATICAL MODELING

- Ensure children have the opportunity to explore a range of representations of fractions such as the length, area and set models.
- Enable children to explore different representations of fractions using concrete, pictorial and virtual resources.
- Use open-ended problems that enable children to develop their understanding of a model used to solve fractions problems.
- Provide opportunities for children to reflect on, discuss and refine the models they use when solving problems related to fractions.



PROMOTING MATHS TALK

- Provide opportunities for children to discuss how fractions relate to the real-world context.
- Encourage children to listen to, share and explain ideas, strategies and solutions related to fractions.
- Facilitate the use of vocabulary related to fractions across the curriculum, e.g., making sets in data, measuring, etc.
- Revoice strategies used by children to solve a problem, e.g., Seán just showed us how he used the area model of fractions to find ¾ of 24.