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| **SEASON** | **6** | **EPISODE** | **11** |
| **TITLE** | **The melting mystery** | | |
| **EPISODE THEMES** | * Changing states; liquid (water) > Solid (ice) > liquid (water). | | |
| **EPISODE BLURB** | Hey! What happened to the ice in Possum’s drink? Is this another case for Police Officer Possum? Or does Possum need to learn more about how things change? | | |
| **STORY SUMMARY** | After playing outside in the warm sun, Possum is looking forward to having a drink of iced water he had prepared earlier. But, Possum doesn’t understand where the ice cubes he put in his drink have gone? After some investigating he sees that Sally has ice cubes in her drink did Sally take Possum’s ice cube? Sally explains that while Possum went outside to play, the heat made the ice cubes melt. Sally and Possum talk about how by freezing and melting water, it can change states; liquid (water) solid (ice) liquid (water). They do an experiment to observe and record how long it takes for an ice cube to melt in; hot water, tap water, cold water and no water. It’s now time for Sally and Possum to make Coconut Muffins. When collecting the ingredients, Possum discovers that the coconut oil jar, which was once full of liquid coconut oil, now has a white and hard substance inside of it (solidified). While Possum tries to solve the mystery, they watch children experimenting how long it takes for different types of chocolate to melt when under heat lamps. Possum realises that the liquid coconut oil turned into a solid because it was cooled. With the coconut oil out of the fridge, it has now melted back into a liquid and Possum and Sally are ready to make the muffins. Before digging into the freshly baked muffins, Possum and Sally reflect on what they have learned; some things undergo change when the temperature changes. | | |
| **ACTIVITY** | * Ice cube melting experiment | | |
| **VIGNETTES** | Children doing a chocolate melting experiment | | |
| **FINGERSPELLING** | M-E-L-T, L-I-Q-U-I-D | | |
| **SALLY'S DRAWER** | ‘Healthy Coconut and Carrot Muffin’ recipe | | |
| **CURRICULUM GUIDE\*** | **EARLY YEARS LEARNING FRAMEWORK** | | |
| **Children are confident and involved learners**   * Children develop a range of skills and processes such as problem solving, inquiry, experimentation, hypothesising, researching and investigating | | |
| **QUEENSLAND KINDERGARTEN LEARNING GUIDELINE** | | |
| **Communicating**   * Exploring numeracy in personally meaningful ways   **Active Learning**   * Building positive dispositions towards learning * Showing confidence and involvement in learning | | |
| **AUSTRALIAN CURRICULUM** | | |
| **Science**  **Science understanding**   * Chemical Sciences   **Science as a human endeavour**   * Use and influence of science   **Science inquiry skills**   * Planning and conducting | | |