

Activity 1: Memory Card Game

In this activity, a group of four children will be invited to play a 10-minute memory game (try to find matching pairs among cards that have been placed face-down in rows on a table) using Australian native animal cards (or other available cards). Children will play this game in groups of four, plus the facilitating researcher. The children should be familiar with one another prior to playing the game (i.e., attend the same preschool room) and should all be around the same age. The number of pairs of cards included in the memory game depends on the age of the children (i.e., 6 pairs with just quantities for 3-year-olds, 8 pairs of digits and matching quantities for 4 year-olds, 14 pairs of digits and matching quantities for 5 year-olds).

Tell the children that the goal of the game is to collect the most matching pairs of cards, and then explain the rules of the game (e.g., need to take turns, can only flip over two cards per turn, if you find a pair you get to go again). The game should then progress as follows:

1. Shuffle the cards and lay them on the table, face down, in rows;
2. The child sitting to the left of you goes first. Play then continues in a clockwise direction – children should be explicitly shown the order of play, which can be supported by you pointing to each child and telling them who goes ‘first’, ‘second’, ‘third’ and ‘fourth’;
3. On each turn, a child turns over any two cards and keeps them if the cards match (for instance, two kangaroos on one card and the digit 2 on the other card – if playing with 4+ year olds);
4. If a child successfully matches a pair they get to keep the pair, and they gets another turn;
5. When a child turns over two cards that do not match, those cards are turned face down again (in the same position) and it becomes the next child’s turn;
6. The child with the most pairs at the end of the game wins – although emphasis is on counting pairs and congratulating children on their play.

Activity 2: Curiosity Boxes

This activity is done with a child and adult, one on one. In this activity, the child will be presented with 3 square boxes, one at a time, and will proceed through a series of steps to help them guess what might be inside. Each box will contain an object that is unknown to, and unseen by, the child. The boxes will include contents of ‘increasing’ difficulty (for repeated administrations or administration across a large number of children, these contents will likely need to be swapped/replaced at regular intervals to ensure children are unaware of what the hidden objects are):

- a. Box 1 contains something easier to guess (e.g., a small tennis ball)
- b. Box 2 contains something moderately difficult to guess (e.g., small wooden twigs)
- c. Box 3 contains something quite difficult to guess (e.g., a broken CD/DVD)

Each box is presented individually to the child in the order described above. For each box, a series of instructions should be given to the child, directing them to how they can interact with the box in order to guess what is inside. This sequence is as follows:

1. Place the first box in front of the child and tell them you will explain what you want them to do.
2. Explain that for each box you want them to follow these steps, in order: (1) look at the box, without touching it, and try and guess what’s in it; (2) hold the box carefully to feel its weight (no shaking!) and guess again; (3) shake the box and guess again; and finally (4) close their eyes and feel what is inside the box (no peeking!). The child can then make unlimited guesses after feeling what’s inside the box.
3. Have the child proceed through this sequence for each box, leaving sufficient time to see if they can recall the steps/instructions and providing reminders only when necessary.