## Mathematical moments:

Spatial reasoning with 5 to 7 year olds



## Inside-out box building

Cardboard boxes and packaging turned inside out and re-glued are useful for making model houses and buildings. They also give children opportunities to explore how 3D shapes can turn into flat 2D shapes and fold back up again, as well as to describe routes and use spatial language.



Here five-year old Max has made a house and garden from a variety of inside-out boxes. The house includes a ladder to the rooftop swimming pool (with crocodile), some sun loungers made from egg boxes, a diving board over his pet dinosaur's home to a lower pool and a sunflower garden (made from a tissue box). Max described how the crocodile went *up* the ladder, *into* the pool, sat *on* a sun lounger, jumped *off* the diving board *down into* the pool (watched by his dinosaur friend on the roof of his home) and then climbed *out* and went *along into* the sunflower garden.



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