

Rolling rolling rolling !

From the earliest days of infancy, children need experiences of different types of materials. Malleable materials can be transformed into different shapes and sizes, and their properties can be changed (e.g. by adding water). Playing with them provides for thinking about shape, space and area – and the foundations of chemistry.

Malleable materials encourage children to use each of the five senses. Experiences at Oxhill have been planned with the involvement of the Occupational Therapy Service to provide satisfying experiences for children with low-arousal (where sensory feedback has to be strong, in order to help the nervous system to a state of equilibrium – so children can bang, bash, and push hard) and equally to help children who have a highly-aroused nervous system (who are easily overwhelmed by sensory experiences, and so have to be introduced to them very gradually, perhaps a tiny dot of shaving foam on a fingertip or a just few grains of sand to touch). This approach helps children to manage the flow of sensory information, integrate it, and enjoy the stimulation of their senses.

Malleable materials can also be used by children to express symbolic and creative thinking – for example, the bowls of porridge for the three bears. Children can talk and think about the transformation of materials from one state to another (what happens when you put water in the freezer; when you add cornflour to water, baking powder to flour in cooking). They are given experiences of reversals (from water to ice back to water). Children are helped to develop technical competences and skills – for example, learning the different ways of making pots (thumb and coil). Every day, malleable materials are presented at floor and table level, to encourage different styles of interaction, and to suit the different ages and levels of development of the children.

Malleable materials as a context for development and learning in the EYFS

Playing with malleable materials supports **children's personal, social and emotional development** by providing opportunities to explore materials, develop skills in using tools and manipulating the materials, and develop confidence and autonomy, sometimes becoming involved for long periods of time with or without the support of an adult. The materials can provide a further challenge as children seek to develop skills for particular processes, e.g. making a small pot out of clay and feel a sense of accomplishment.

Malleable materials provide a context for children's **developing communication, language and literacy** as they talk about what they are doing and develop ideas with others.

Children's **problem-solving, reasoning and numeracy** are developed through exploring quantities and how a large amount of a material can be split into smaller amounts, and by having real problems to solve around quantity (sharing playdough out fairly, for example) and number (e.g. checking the number of people at the table and the numbers of tools to share). Using shape cutters and other tools, they can develop their understanding of shapes and their names. Children can count the number of items they have made and know how groups change in quantity when items are added or taken away.

Children can develop their **knowledge and understanding of the world**, exploring materials with their senses and finding out about how actions have effects (rolling, squashing etc) and how materials can be changed (e.g. adding water to the clay).

They can use tools for a purpose, also helping their **physical development** as they manipulate materials in different ways with fingers, hands and feet, and use tools, developing their fine motor skills and hand-eye co-ordination. Sensory exploration helps children to feel calm, and in making lines and circles children are experimenting with their first mark-making (and reading for blind children).

Children's **creative development** is supported as they develop a "feel" for different textures and materials, and use malleable materials to make objects according to their ideas and plans, and as representations in imaginative play (e.g. making animals out of playdough and playing with them). Children can develop ideas and plans, and reflect on how pleased they are with the results of what they have made and what they might do differently next time.