





## **Icy Farm**

# Tractor Ted

It's winter down on the farm, and the ponds and water troughs are iced over. Ice is a fascinating substance for young children to explore, particularly when combined with a farm animal theme.

#### THIS ACTIVITY...

- enables children to investigate the properties of ice
- helps children to learn about the farm in winter
- encourages children to explore temperature
- introduces the concepts of change and difference
- offers lots of opportunity for developing fine motor skills

#### What to do

Talk about what happens to garden ponds, bird baths, and puddles in the street when the weather is very cold. Look at photos of iced over ponds, water troughs and puddles down on the farm, and link with the children's own experiences. Why is it a problem for the sheep if the water trough is frozen, or for the ducks if the pond is covered with ice? How can the farmer solve these problems?

Using plastic boxes and moulds in different sizes and shapes, freeze ice blocks containing plastic farm animals and natural substances such as twigs, leaves, pebbles and straw. Put the ice blocks in the Tuff Spot or other large tray, and challenge the children to free the animals from the ice. Try the following tools and techniques...

- chip at the ice with toy hammers
- crush small chunks of ice with wooden blocks
- bash the ice with wooden spoons
- sprinkle salt on the ice
- pour hot and cold water on the ice
- spray the ice with warm water from a plant mister
- put blocks of ice in bowls of hot and cold water
- melt the ice with a hair dryer (adult use only)

Join in with the play to offer ideas and suggestions, but let the children find their own ways of exploring the ice.





### THINGS TO THINK ABOUT

- Watch out for fingers getting cold and provide gloves for children to wear if necessary.
- Encourage the children to talk about ways of freeing the animals from the ice, and come up with different ideas and suggestions.
- Include some blocks of ice with no animals or nature items. This allows children to see the beautiful cracks and patterns in the ice.
- Listen out for fizzing, cracking sounds when salt and hot water are poured on the ice, and crunching sounds when the ice is bashed.
- Encourage older children to predict what might happen to the ice when they pour on hot water. Help all children to understand that heat melts the solid frozen ice and changes it into liquid water.
- Put ice cubes in small plastic boxes and place them in different parts of the setting, such as by the radiator, inside the fridge and outdoors. Check which ice cubes melt the fastest and the slowest.

