

# METEORITE MUSTERS

An interesting activity to try is collecting micrometeorites. Micrometeorites are very small meteorites too little and light to burn up in our earth's atmosphere. Instead they are in the upper atmosphere and brought to earth in rain showers or hail. This is the easiest way to collect them.

## *You will need*

- A plastic container
- Some absorbent paper (paper towel)
- A fridge magnet or similar
- A needle
- Sticky tape
- Small piece of white cardboard

1. Put a plastic container outside in the rain. An ice cream container is suitable but I find a larger flatter container is better as it has a greater collecting area.
2. After a good shower of rain, tip off the excess water until there is only a little water left in the container. Upturn the container onto some absorbent paper (like paper towels), give the bottom a good bang and leave the paper to dry (allowing it to dry overnight is a good idea).
3. Carefully lift up the paper towel and run a small magnet under the paper towel observing what is happening on the towel. Some of the particles will follow the magnet.
4. Magnetise the tip of a needle and carefully pick up these particles. Place them on a piece of sticky tape (they are very light and even your breathing can move them). Attach the tape to a piece of white card.

Collecting micrometeorites can be fun but there is no guarantee that you have the real thing. The closeness to iron sand beaches in particular can give misleading results. By using a strong hand lens, iron sand can usually be separated as the colour is different and iron sand is sharper and more angular. Micrometeorites should have a metallic appearance and have more rounded edges.

Check on an astronomical yearbook (like the "New Zealand Astronomical Yearbook") as to when there are meteor showers and place your container out on a regular basis after this time and by counting the particles, see if there is any increase in numbers. This could indicate the particles have come from the shower.

Good luck with your hunting.