

The Albuquerque Astronomical Society



Presents

Comet Making

What's in a Comet?

A comet is a roughly spherical body made of

1 - 75% ice (water ice, mainly, but also solid carbon dioxide (dry ice), ammonia and methane ices)

2 - 25% dust (silicates).

3 - Organic molecules



Comet Making Ingredients

2 cups of water
2 cups dry ice (frozen carbon dioxide)
2 spoonfuls of sand or dirt
a dash of ammonia
a dash of organic material (coke works well)

Cut open one garbage bag and use it to line your mixing bowl.
Have all ingredients and utensils arranged in front of you.
Place water in mixing bowl.

Add sand or dirt, stirring well.
Add dash of ammonia.
Add dash of organic material (e.g. corn syrup), stirring until well mixed.
Place dry ice in 3 garbage bags that have been placed inside each other. Be sure to **wear gloves** while handling dry ice to keep from being burned.
Crush dry ice by pounding it with hammer.
Add the dry ice to the rest of the ingredients in the mixing bowl while stirring vigorously.
Continue stirring until mixture is almost totally frozen.
Lift the comet out of the bowl using the plastic liner and shape it as you would a snowball.
Unwrap the comet as soon as it is frozen sufficiently to hold its shape.