Explorer John's Science Worksheets

Did you know that meteorology is the study of weather? Explorer John knows that if he looks at the clouds, it can help tell him what the weather might be like. If he wants to go out for a bike ride or play with his friends in the park, he wants to know if it's going to be a nice day or not.

Clouds are made up of millions of tiny water droplets which form when moist warm air rises into the sky and is then cooled down. If the cloud is really cold it is made up of ice crystals. It can take between a few minutes and an hour for a cloud to form.

Are you going to get wet if you see these clouds?

There are names for the different types of clouds:

- *Cirrus* - tufts or wisps, usually fine weather
- *Cumulus* - a heap or pile, the weather may change
- *Stratus* - a layer, it could rain within 2 days
- *Nimbus* - rain bearing, you'll be lucky if you don't get wet!

Cloud pictures are easy to paint. Using watercolours, paint your picture blue all over. While it is still wet, using a dry paint brush, take away some of the blue to leave white clouds. Instead of taking the clouds away, you can add them by dropping dark grey paint into the wet blue sky to make storm clouds. If you are using poster paint, you can add fluffy clouds using cotton wool, or torn up tissues. The more practise you do, the better your pictures get.

You can also make your own cloud, here's how to do it.

What you will need:

Does your cloud look like this?

- A clear glass or similar see-through container
- Warm water
- Ice
- Metal dish

Place the ice into the metal dish and pour a small amount of warm water into the bottom of the glass. Once the dish is really cold, place it on top of the glass. Watch the inside closely. You should see a 'cloud' form near the top of the glass.

This is the way clouds form in the real world. Warm, moist air, like that in your glass, is cooled (your ice). When it is cooled it condenses into tiny water droplets, which appear as clouds.

What sort of clouds can I see today?