

Met Office

How to spot clouds

James Chubb

If you're outside and look up at the sky, you'll more than likely see clouds.

Some are big white puffy ones like cotton wool hanging in the sky. Others are dark and gloomy, bringing drizzle, rain or even snow, the kind of weather you don't want to be stuck outside in. And, did you realise all those different clouds have all got different names?

But, How do they form and how can you tell them apart? In this short video we'll answer these questions and show you how to spot some of these clouds yourself.

All clouds start in the same way. How high they are in the sky and the conditions up there determine what they will look like.

It all starts when heat energy causes water molecules from rivers, ponds, lakes or oceans, to evaporate into the air. This moist air rises and expands as it gets higher into the atmosphere where the pressure is lower than down here on the ground. As the air rises it cools, changing into very small water droplets that form into clouds.

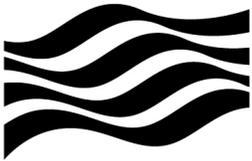
But, the conditions have to be spot on. The temperature needs to be right and the water has to hold on to something, such as particles of dust, salt or smoke. If neither of these elements are right, then the cloud won't form. When the water droplets grow large enough they then fall as rain which goes back into the oceans, lakes, rivers and ponds and the whole thing starts again!

So that's how clouds form. But how can you tell one cloud from another? Although clouds form in the same way, there are a number of factors that will determine what they will look like and what type of weather they will bring.

There are three basic types of cloud, Stratus, Cumulus and Cirrus.

Stratus clouds are somewhat featureless – fog, for example is Stratus on the ground. They are often found around coasts and mountains and are one of lowest forming clouds. They usually bring drizzle, mist and dampness so they are a pretty miserable cloud!

Cumulus is the commonest cloud. These are the puffy white clouds that you see forming on a sunny day with flat bases and tops that look like cauliflowers. They usually form over land on sunny days and are known as fair weather clouds. But watch out, some Cumulus clouds can develop into threatening thunderclouds with sudden downpours, hail and thunderstorms. If you see these guys before midday then get prepared for some rain! A great way to remember this is “In the morning mountains, in the afternoon fountains!”



Met Office

The final type of cloud to look for is the Cirrus. Cirrus clouds are one of the highest clouds in our atmosphere. The word Cirrus is Latin for a 'lock of hair' and they usually cover the sky in wispy streaks. But why do they look this way? Why aren't they puffy like other clouds?

High in the atmosphere it's so cold that clouds are made of ice crystals rather than water droplets. As the ice crystals fall they are whipped up by very strong winds and fall in streaks. Because they are so high up it looks like they aren't moving but of all the clouds, they move the fastest. Cirrus clouds are also very useful for telling us that there will be a change in the weather and the possibility of storms so it's always a good idea to keep a look out for them and see how they change.

When you look up at the sky you might not see just one type of cloud, but many different types of clouds all at the same time! Stratus, Cumulus and Cirrus are the three main types of clouds you can find but there are many other different types you can look out for. You can download our cloud spotting guide from the Met Office website, which will tell you all about all the different types of clouds and how you can spot them.

Next time you're outside, look up at the sky and see what you can find.