1 Work in pairs. Ask and answer the questions.

1 What weather do you prefer?
2 Is there any weather you don't like? Why?
3 How do you feel when it is sunny, windy or humid?

2 Quickly read the text and choose the best summary.

a How to be happy in bad weather
b The effects of serotonin
c The weather's influence on us



Do you sing in the rain?

Does your mood change according to the weather? Are you happier when the sun shines? Do you feel healthier, more optimistic, even more generous when it's warm and bright outside, and grumpier when it's cold and wet? If you do, then you are not alone. Researchers have found that people's moods change according to the temperature, number of hours of sunshine, humidity and wind strength. The more sunshine there is, the more optimistic people are likely to be. Conversely, short winter days with few hours of sunshine can lead to a type of depression called SAD (Seasonal Affective Disorder).

Part of the reason for this is that sunshine increases the amount of serotonin we produce. Serotonin controls a number of our bodies' activities including appetite, sleep, memory and learning, temperature regulation, mood, and behaviour. Generally speaking, this chemical makes us more alert and happier. At night we stop producing it and instead we turn the serotonin in our bodies into melatonin. Melatonin helps us sleep. It's thought that in winter this serotonin-melatonin mechanism doesn't work in some people and that they produce melatonin during the day. As a result, their body clock no longer works: they are tired during the day and they can't sleep properly at night.

Scientists have experimented with some people suffering from SAD and found that if they are given melatonin at the right time before they sleep, their body clocks return to normal and their moods get better. Some people also improve if they spend a couple of hours a day sitting near special lights to increase their serotonin levels.

But our mood is not just affected by sunshine. Humidity is also important. High levels of humidity make it difficult for us to sleep and we also lose concentration particularly when humidity is combined with heat. This is because it is more difficult for us to regulate our body temperature in warm, humid weather as sweat doesn't evaporate and we feel hot and damp.

Windy weather can lead to other problems because wind can produce positive ions. When there are lots of positive ions in the atmosphere, we tend to feel more anxious and nervous.

In addition, when the wind hits your head you can find it difficult to think.

Luckily, not everyone is significantly affected by changes in the weather. They may not feel as happy when it's cloudy as they do when it's sunny, but this doesn't necessarily cause a problem. People who are sensitive and prone to changes in mood are probably more likely to be badly affected by weather than others. So, if you are feeling down, and difficult weather is on the way, make sure that you organise your time so you have things to do which cheer you up and keep you busy.

3 Read the text again and answer the questions.

1 Which four factors can affect people's mood?
_____
2 What chemical determines how much we eat and sleep?
_____
3 When do we produce melatonin?
_____
4 What treatments are there for sufferers of SAD?
_____
5 What can't our bodies do well when it is hot and humid?
_____
6 What does the wind do which can then lead to problems?
_____
7 Which type of people are more likely to be influenced by the weather?
_____
8 What can you do to minimise the effect of the weather?

4 Read the text again. Which conditions are likely to make us feel:

1 depressed? _____
2 distracted? _____
3 worried? _____
4 happy? _____

LIVEWORKSHEETS