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## Questioning as we learn: An introduction to critical thinking

### Material for Higher Education students in Sierra Leone by INASP, UK



Provided by the Critical Thinking Taskforce (CTTF)  
within the project AQHEd-SL

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#### *Unit 5 - Snippet 122*

Could you spot anything in the cloud picture in snippet 121?

One of our content development team saw a woman looking up to the sky in the middle of the clouds. But you may have seen something totally different. Some people even 'read' messages when looking at the sky. This phenomenon of seeing familiar shapes and objects in a vague and often random input is the result of your brain trying to make sense of your environment even in situations in which there is no sense to find. This phenomenon is also called '**Pareidolia**'.

By the way, if you have just seen clouds that's of course totally normal too. There is a wide range of sensitivity to this phenomenon.

In a very similar way to how your brain made sense of the clouds in the picture above, researchers may also see patterns in data collections that may only be random sequences of numbers or events. This tendency to recognize accumulations or clusters in random distributions is called a **clustering illusion**.

Also, take the popular saying "good things come in threes", which is really a superstition feeding on our **selective perception**. The reasonable explanation for it is that when we are looking for the good things, we will find them, and three being a 'magical' number, we will look until we find at least three in a row. In fact, how many times are we likely to have experienced good things that have come in more than three in a row or perhaps fewer? However, telling the story of three good things happening to us is much more interesting than telling the story of just one or two, and also such a story is much more likely to stick in our mind than a less spectacular one.