In the Secret You video the host, Marcus du Sautoy explores how the mind works through witnessing and participating in a series of repeatable, documentable experiments. In the first part of the video Sautoy is looking into when people first develop a sense of self. They tester puts a mark on a young child’s face and then puts the child in front of the mirror. In the video a 16 month old boy doesn’t reach for the mark on his face when looking into the mirror. A 22 month old girl immediately reaches for the mark on her face when she looks into the mirror. The scientists conducting the experiment claim that the child has no sense of self until they reach for the mark on their face after seeing themselves in the mirror. Children are typically able to pass the test between the ages of 18 and 24 months, chimpanzees and orangutans are the only animals that have been able to pass this test. While the results from this test are very interesting they prove when a child recognizes the reflection they see in the mirror as themselves rather than when the child has a sense of self. The 16 month old boy appears to be trying to play with his reflection in the mirror; it appears as though he thinks it is another person.

In the next experiment the scientists are trying to figure out how well someone’s brain works while unconscious, and further how to tell if someone in a coma is still “there.” We see a brain scan of Sautoy thinking about playing tennis while fully conscious, then again while partially under anesthesia. Same parts of the brain are still active while under the influence of anesthesia, but not as crisp. In the next experiment Sautoy sees a projection from a camera that is set up a few feet behind him, giving him the illusion of an out of body experience. The brain is constantly trying to use all sensory information to figure out “where am I?” so by tricking his eyes Sautoy believes he is out of his body. The next test is examining neurons. We see from a brain scan that individual neurons react only to certain images and nothing else. For example one subject had neurons that reacted only to Hallie Berry and nothing else. However the same neurons responded to both a photo of Hallie Berry, and the text of her name. This scientists theory was that one neuron is not conscious, but it is the collection of neurons that makes us conscious.

Later in the video we see a conscious subject administered a measureable shock, a localized area of the brain lights up first, and then appears to communicate with other areas of the brain which then light up, showing that they have become active. When this experiment is repeated on a sleeping subject the localized area lights up, but no other areas of the brain light up. So it appears that communication channels within the brain shut down when someone is sleeping. The last experiment in the video examines how people make decisions. Sautoy is given one switch in each hand and told to decide to choose push one of the buttons. By looking at a scan of Sautoy’s brain the scientist was able to predict what decision he would make 6 seconds before he pushed the button.