

The  
Vision  
System

# The visual system

*The book about how the  
visual process functions*

# Introduction

This Project deals with an exploration of the visual process, from when an object being viewed becomes one, which the viewer understands through experience and learning. This is based upon notions of semiotics, psychology and the role that graphic design plays in the process of understanding, therefore there has been clear consideration of issues such as layout and visual style in an attempt to make the information more accessible. The style employed has been partly inspired by street

art in terms of the way a visual highlight can provide text with three-dimensional impact. This has been combined with a simple black and white colour scheme, to ensure the messages that are communicated are not over complicated. This approach aims for clarity whilst retaining personality. Graphic information design has also, been inspirational in terms of codifying the individual components of the scheme and the respective interaction of parts.

# Icons

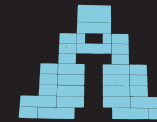
*The purpose of these icons is to create visual links between the different elements within the scheme, whilst reflecting their meaning in a graphically economic fashion. Notions of semiotics have been explored in terms of the visual signs established and their intended meaning.*

Object



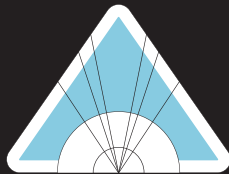
The object icon is based on the 'High voltage' sign to establish a degree of familiarity with the audience, as this is an internationally recognized symbol. This icon is depicted as empty to reflect the viewers unknown knowledge of the icon. Furthermore this icon is the main focal point which is apparent throughout.

Information



This icon is the most abstract of all and is based on the symbol for information. This should be internationally recognized by the viewer because it is traditionally used to symbolise an information source.

Eye



This icon is based on the idea of the eye in a basic graphic form.

Memory



This icon represents memory and the idea that the brain filters information that is received.

Brain



This icon represents the surface structure of the brain.

Understanding



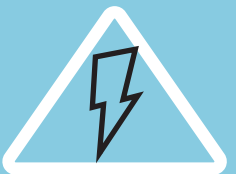
This icon represents understanding. The bolt hitting the brain represents the recipients thoughts becoming apparent as the bolt is solid instead of outlined reflecting the idea of understanding

# Object

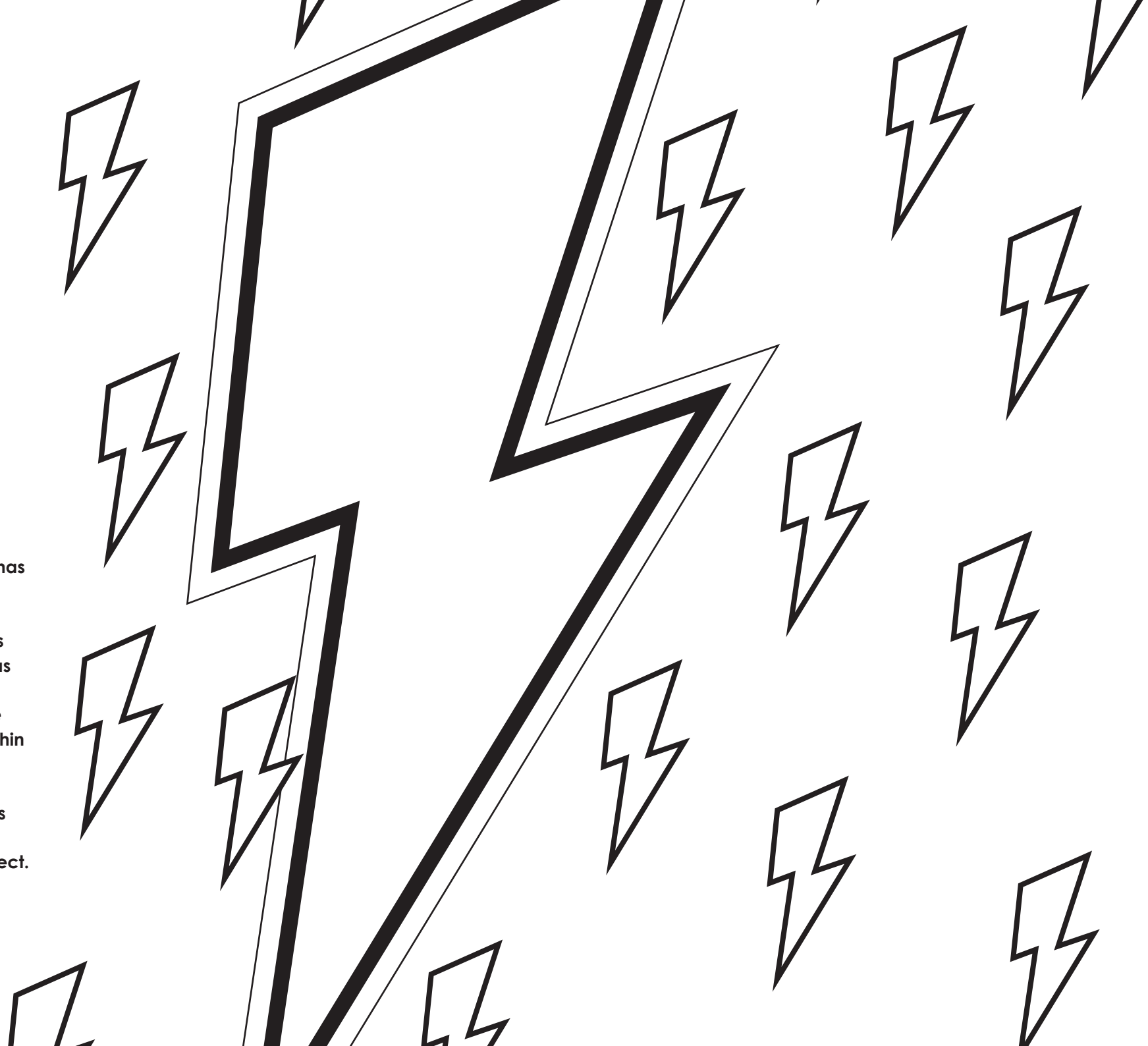
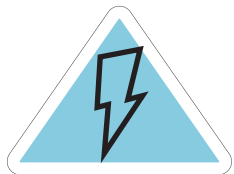
## Definition

## Ob•ject

Anything that is visible or tangible and is relatively stable in form and the context that individuals create for objects based on their experience and the environment in which they live.



This visual outcome represents a simple form 'lightning bolt' which has been inspired by the high voltage sign and the 'eureka moment' indicated on the previous page as understanding. The term 'object' as defined on the previous page as 'Anything that is visible or tangible and is relatively stable in form'. Within the scheme the empty lightning bolt represents the object prior to understanding. A filled bolt reflects when the individual has made meaning of or understood the object.



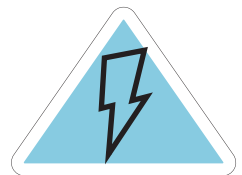
The style of the outcome is simplistic as such illustrations need to be functional so the message is conveyed clearly. The laws of semiotics 'the science of signs' affects all objects. The chosen icon capitalizes upon the target audience's recognition of the sign



The empty bolt symbolises the object before the audiences understanding



The solid bolt symbolises the object once the audience has understood it



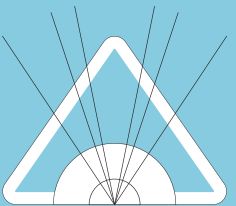
# Eye



## Definition

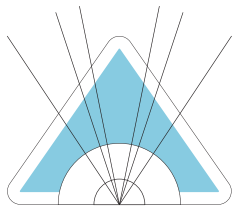
### Eye

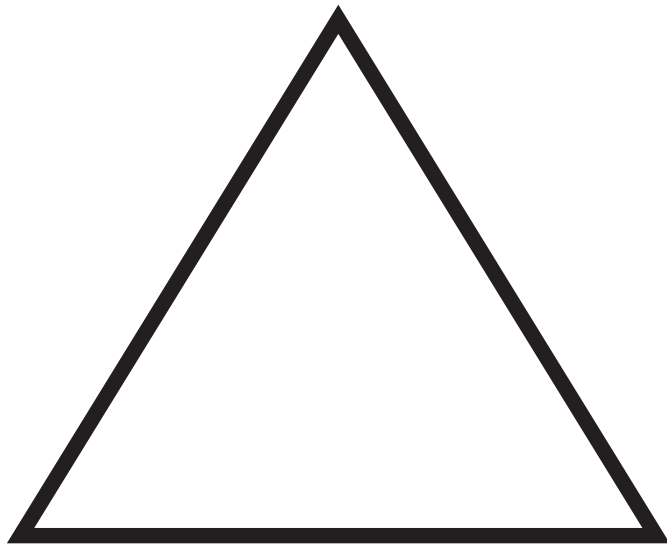
The organ of sight, in vertebrates, typically one of a pair of spherical bodies contained in an orbit of the skull and appearing externally as a dense, white, curved membrane, or sclera, surrounding a circular, coloured portion, or iris. This is in turn covered by a clear, curved membrane, or cornea, in the centre of which is an opening, or pupil, through which light passes to the retina.





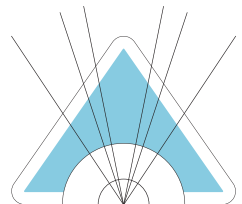
This illustration developed from the icon of the eye, is placed to look at the object and its transition through the visual mechanics of the organ. The idea of the object landing in water and then flowing through the pipe format represents the electrochemical process of information from the eye to the brain.



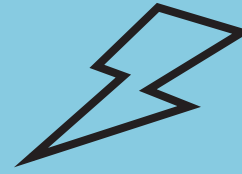


This triangle and the triangle within the text on the next page represent a simple graphic diagram of how the eye functions

The icon for the eye is based on the notion of simplifying this information into a more accessible form in order that the audience might understand this process. Also the word "eye" integrated into the illustration indicates that this is a physical process compared to a chemical processes like information transfer and memory.



# Brain



## Definition

### Br•ain

The part of the central nervous system enclosed in the cranium of humans and other vertebrates, consisting of a soft, convoluted mass of grey and white matter and serving to control and coordinate the mental and physical actions.





The lightning bolt settles in the visual lobe of the neocortex. Part of the brain, prior to making its transition to the cerebellum



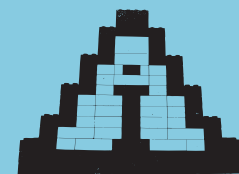
# Info-

# mation

## Definition

In•for•ma•tion

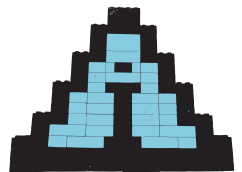
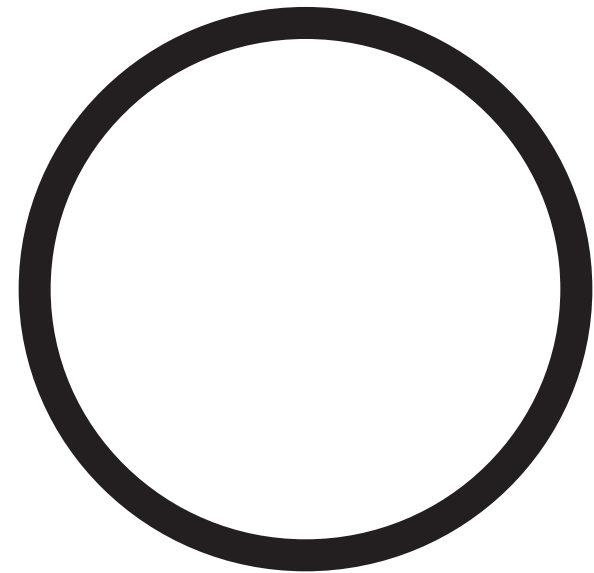
Knowledge  
communicated or  
received concerning  
a particular fact or  
circumstance.



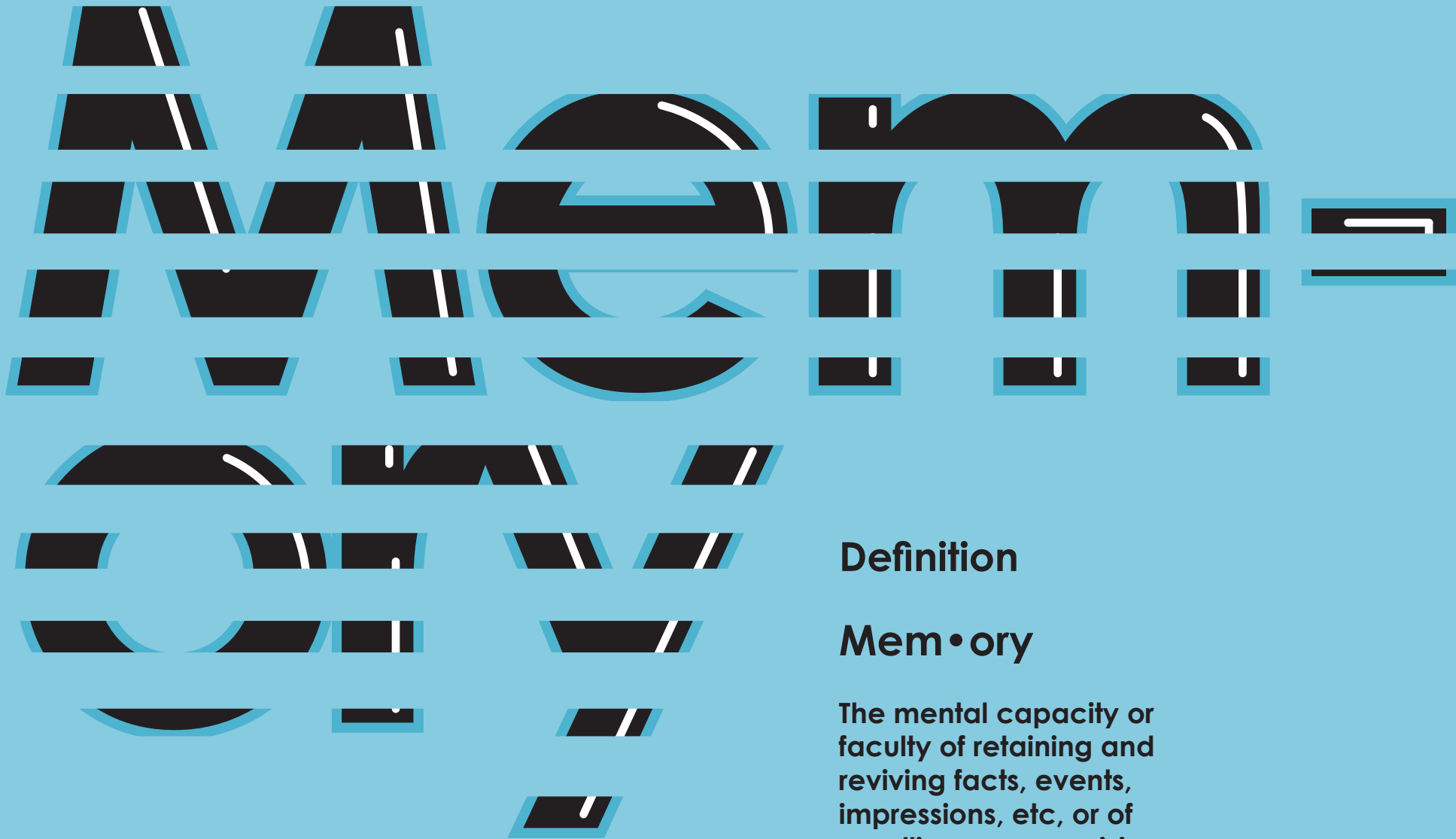


This illustration represents the transfer of information from the visual lobe to the cerebellum 'the memory function of the brain'. The design attempts to convey a functional quality reflecting the process involved in this transfer of information. Each pipe that connects the elements are stylistically different. Which differentiates the two processes, the 'brain' and 'memory'.

The use of a common symbol 'I' also attempts to increase the viewers understanding by creating a sense of familiarity due to previous experiences of this symbol and its connection with the word information. Furthermore the depiction of the water reflects the transfer of information between the two pipes which represent the transfer between the visual lobe and cerebellum. The representation of a tank on the previous page within the 'I' shows this transfer between two different pipes. This has realistic element that viewer can connect with.







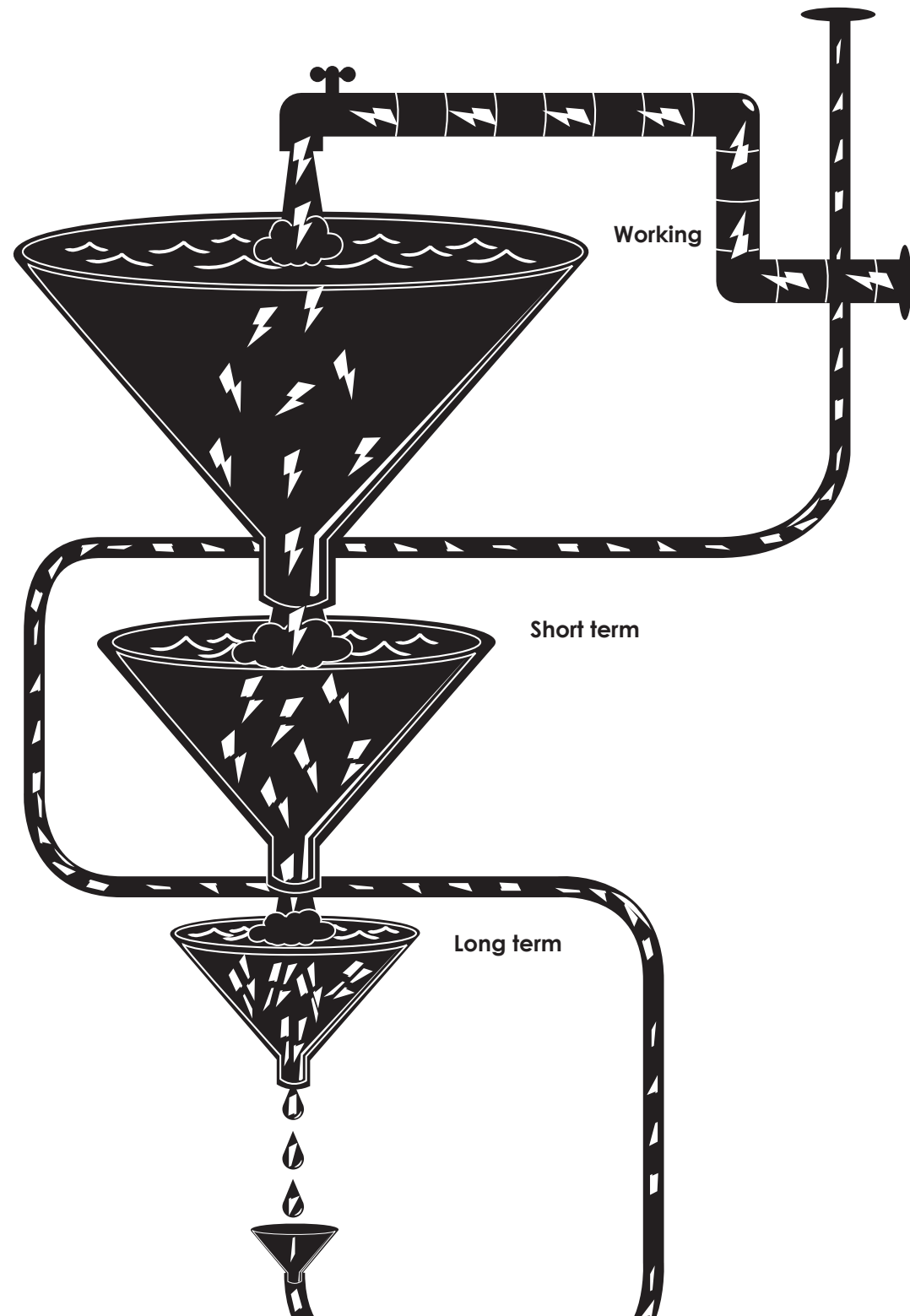
## Definition

## Mem•ory

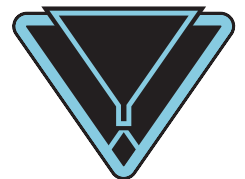
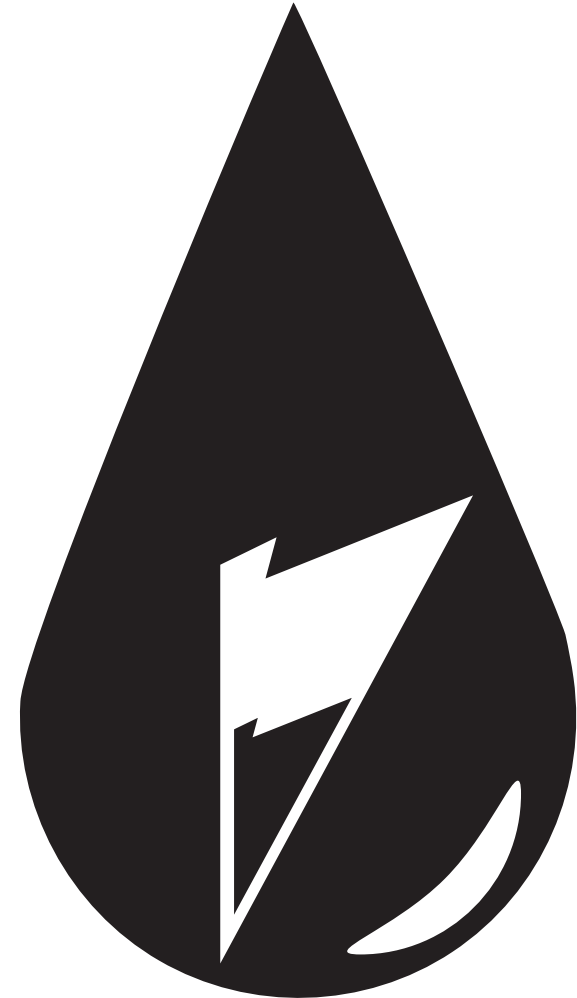
The mental capacity or faculty of retaining and reviving facts, events, impressions, etc, or of recalling or recognizing previous experiences.



This illustration portrays the different types of memory namely short and long term with each funnel representing the particular type. The idea is that the memory process filters important information, which is represented by respective funnels. We again follow the progression of the unfilled lightning bolt. The short term memory holds information for only a few seconds and then it's forgotten compared to long term memory that retains the information from what is remembered from short term memory.



Throughout  
the journey  
of the lightning  
bolt 'object' it has  
passed through liquid  
which represents the  
electrochemical process.  
The filtration which occurs in the  
Cerebellum results in a building  
of understanding, represented by  
the fragment of the lightning bolt  
which is shown on the next page. This  
process takes only a few seconds  
to make the journey.



# Understanding

## Definition

Un • der • stand • ing

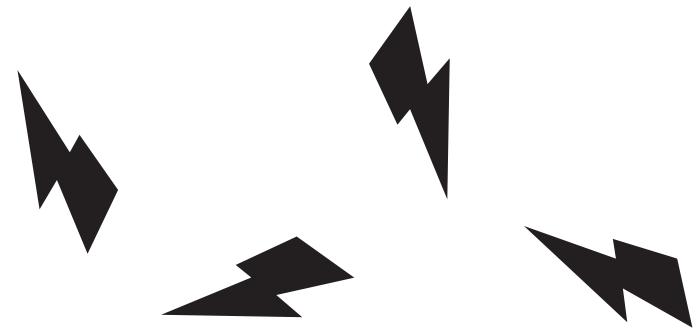
Mental process of a person who comprehends; comprehension; personal interpretation.



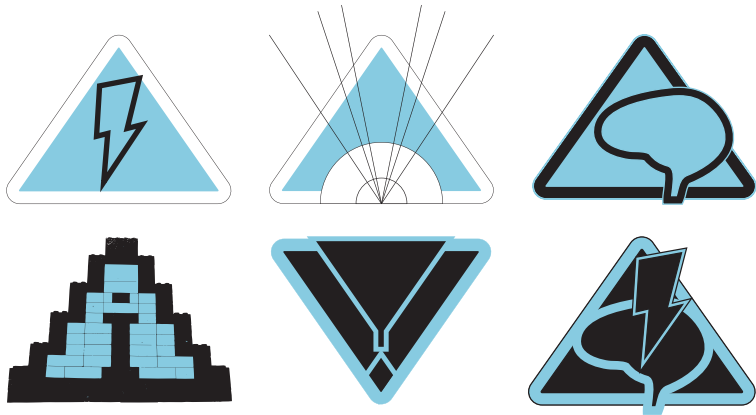
This illustration depicts the original object being driven by the liquid which has been apparent throughout the process. The fragments of the lightning bolts are being reformed in the cerebellum to establish understanding.



This design concludes, the visual process that is ever present in the viewers day - to - day life. The visual information that is processed and eventually understood can be accessed again through memory. This illustration represents the empty lightning bolts (not understood). becoming reformed and solid (understood) as meaning is made by the viewer.



The  
**Big**gger  
Picture



The work is to be produced on a large scale to show elements as one continuous piece of information design. This is so the audience can see the visual process as a continuous progression. The design has been produced with a non rigid structure, in an attempt to gain the audience's interest whilst conveying the information in an accessible

manner. Visual and textual information are combined to facilitate greater levels of understanding and retention. Semiotics assist the viewer in this process by linking each 'part' to each 'Function' outcome, with graphic 'thought bubbles' that help unpack information.

