# Scientific Process

# There are important steps to the scientific method: observation [question, research, and organization], hypothesis [based on accurate observation], experiment [control, data analysis, conclusion], theory [repeatability, reliability, and explanation] and communication [collaboration].

**Observation** – Must be based on accurate use of the senses, reliable and broad-based research, and proper organization. Usually leads one towards solving a problem, beginning with asking a question.

* The Lord Jesus asked over 150 questions in the gospels.

**Hypothesis** – A working possible solution to a problem based on accurate observation and sufficient research. It is not about being right or wrong, but leads to testing and experimentation.

**Experimentation** – Repeatable and “controlled” process that reduces the number of variables tested to allow valid conclusions.

* In terms of spiritual reality, there is a big difference between doctrine/teaching and experience. The Greek word for truth, *alitheia*, may be translated “reality” in the Bible, implying learning by experience. John 4:24.

**Theory** – Reasonable explanations that properly encapsulate the results of experimentation that can be shared.

* The Lord often explained to His disciples His operation, mission, viewpoint. John 15:15; Matthew 13:13-17

**Communication** – Open, unbiased collaboration that seeks truth based on facts, not fiction.

* 1 John 1:1-4 is about fellowship / communication.
* 2 Timothy 3:16 The purpose of scripture is for all to understand God’s operation.

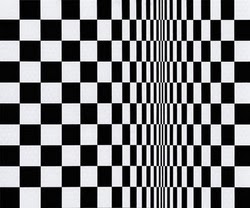
# The Science of Observation

[](https://i0.wp.com/nasco-education-blog.com/wp-content/uploads/2018/01/download.jpeg?ssl=1)

Theres an artcle going around the intrnet that pointz outthat wrds don’t have two be speled correctly n order too be understd. With txting and instant messagng, much ov the world becoms en illusion.

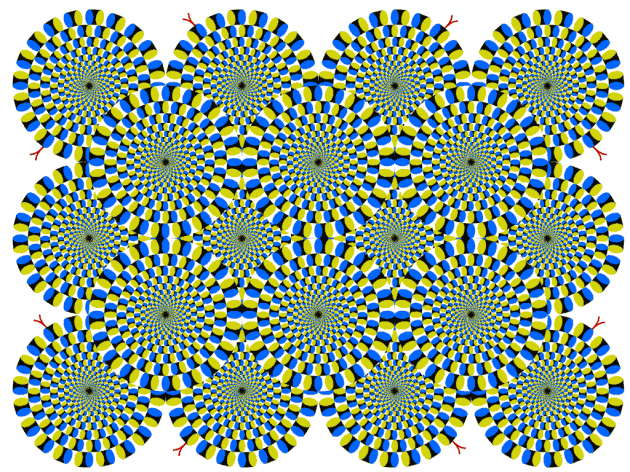
Bad grammar and sloppy typing aside, there is something to be said about illusions. They make us think; they make us wonder. They’re important tools in visual research to help us understand how visual processing works in both the normal and the diseased brain. Illusions can offer scientists new insights on how vision and the brain work, and are more than intriguing parlor tricks. Best of all, illusions get the synapses in our brains firing.

Some illusions have been known since antiquity. The scientific study of illusions dates back to the beginning of the nineteenth century when scientists became interested in perception. By carefully altering the stimuli and testing the changes in what a person sees, psychologists try to gain insight into the principles of perception.

[](https://i0.wp.com/nasco-education-blog.com/wp-content/uploads/2018/01/converging-checkers-physiological-optical-illusion.jpg?ssl=1)

An optical illusion is the difference between reality and what the brain thinks it’s seeing. The information gathered by the eye is processed in the brain to give an image that does not agree with a physical measurement of the source. There are three main types: **Literal optical illusions** create images that are different from the objects that make them. **Physiological illusions** are the effects on the eyes and brain of excessive stimulation of a specific type (brightness, tilt, color, movement). And **cognitive illusions** are where the eye and brain make unconscious inferences.

Optical illusions can use color, light and patterns to create images that can be deceptive or misleading to our brain. The information gathered by the eye is processed by the brain, which creates a perception that in reality does not match the true image. Perception refers to the interpretation of what we take in through our eyes. Optical illusions occur because our brain is trying to interpret what we see and make sense of the world around us. Optical illusions simply trick our brains into seeing things that may or may not be real.

[](https://i0.wp.com/nasco-education-blog.com/wp-content/uploads/2018/01/rotatingsnakes-630x472.png?ssl=1)

Optical illusions appeal to the unknown in us. We cannot accept that what we are viewing is real, yet the experience makes it so. When we experience an illusion, the perceptual error remains compelling even when we are fully aware of its nature. We know the object is not moving, even though our eyes and brain tell us it is. Or we see both two faces and a vase. Which is it supposed to be?

[](https://i0.wp.com/nasco-education-blog.com/wp-content/uploads/2018/01/514_400x400_nopeel1.jpg?ssl=1)

Most optical illusions are not harmful. They are proven to not harm your vision. However, if you stare at one for too long, it may cause eyestrain, sore/tired/itchy eyes, dry or watery eyes, headaches, and more. There also are those who might have adverse reactions to these visual puzzles. To the sensitive, some optical illusions can be dangerous. **In a few rare cases,**optical illusions may cause epileptic seizures, so be aware of the parameters before staring at illusions.

Auditory Illusions (of the Ear)

Watch the video: <http://somup.com/c06Q3sBvA4> (3:10)

# The Science of Hypothesis

Jumping to conclusions and establishing deficient or erroneous hypotheses is a characteristic of fallen mankind. Peter, more than any other person, was called-out for multiple failures in offering solutions to problems at hand.

* Luke 5:8 – Shortly after the Lord called Simon (Peter) from his fishing career, he told the Lord to depart from him because he was a sinful man. Peter needed the Lord to stay with him, not depart.
* Matthew 16:13-25 – Peter was called “Satan” by the Lord for his improper assessment of the Lord’s words and life after the Lord spoke of His upcoming death.
* Matthew 17:24-27 – Peter wrongly told officials that Jesus pays taxes to Caesar. In God’s kingdom, the Son does not pay taxes.
* John 13 – The Lord washed His disciple’s feet. When he came to Peter, Peter advised the Lord on what to do.
* Denying the Lord many times at His trial (Matthew 26:69; Mark 14:66; Luke 22:56; John 18:17; Luke 22:58) after telling the Lord that he would die with Him.
* John 21 – After Jesus’ death and resurrection, Peter still went fishing and took several others with him.
* Galatians 2 – Peter refused to eat with the Gentiles after the Lord clearly revealed to him that all men are received by the Father (Acts 10).

# The Science of Experimentation

How many times did Peter deny the Lord?

# [*http://www.voiceinwilderness.info/peterdenials.htm*](http://www.voiceinwilderness.info/peterdenials.htm)

[**The denials in the order they appear in each gospel**](http://www.voiceinwilderness.info/peterdenials_l.htm#3den)****

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Matthew 26 | Mark 14 | Luke 22 | John 18 |
| [1st denial](http://www.voiceinwilderness.info/peterdenials_l.htm#3den1)   At the door of Annas' palace  To the female doorkeeper (John)  In the courtyard  sitting by the fire  to one of the maids of the high priest (Matt, Mark, Luke) | 58  But Peter followed him afar off unto the high priest’s palace, and went in, and sat with the servants, to see the end.  ...  69 Now Peter sat without in the palace: and a damsel came unto him, saying, Thou also wast with Jesus of Galilee.  70  But he denied before them all, saying, I know not what thou sayest. | 54  And Peter followed him afar off, even into the palace of the high priest: and he sat with the servants, and warmed himself at the fire.  ...  66 And as Peter was beneath in the palace, there cometh one of the maids of the high priest:  67  And when she saw Peter warming himself, she looked upon him, and said, And thou also wast with Jesus of Nazareth.  68 But he denied, saying, I know not, neither understand I what thou sayest. | 55  And when they had kindled a fire in the midst of the hall, and were set down together, Peter sat down among them.  56  But a certain maid beheld him as he sat by the fire, and earnestly looked upon him, and said, This man was also with him.  57  And he denied him, saying, Woman, I know him not. | 15  And Simon Peter followed Jesus, and so did another disciple: that disciple was known unto the high priest, and went in with Jesus into the palace of the high priest.  16  But Peter stood at the door without. Then went out that other disciple, which was known unto the high priest, and spake unto her that kept the door, and brought in Peter.  17  Then saith the damsel that kept the door unto Peter, Art not thou also one of this man’s disciples? He saith, I am not. |
| [2nd denial](http://www.voiceinwilderness.info/peterdenials_l.htm#3den2)   In Annas' palace  To the servants and officers  standing & warming themselves (John)  On the porch to manservant shortly after the previous denial  (Lk)  On the porch to women almost 1 hr after previous denial (Mat & Mk) | 71  And when he was gone out into the porch, another maid saw him, and said unto them that were there, This fellow was also with Jesus of Nazareth.  72  And again he denied with an oath, I do not know the man. | And he went out into the porch; and the cock crew.  Mr 14:69  And the maid saw him again, and began to say to them that stood by, This is one of them.  Mr 14:70  And he denied it again | 58  And after a little while another [male] saw him, and said, Thou art also of them. And Peter said, Man, I am not. | 18  And the servants and officers stood there, who had made a fire of coals; for it was cold: and they warmed themselves: and Peter stood with them, and warmed himself.  ...  25  And Simon Peter stood and warmed himself. They said therefore unto him, Art not thou also one of his disciples? He denied it, and said, I am not. |
| [3rd denial](http://www.voiceinwilderness.info/peterdenials_l.htm#3den3)   To a relative of the servant whose ear Peter cut off, followed immediately by a rooster crow (John).  Exposed by his Galilean accent  followed immediately by a rooster crowing and Peter's repentance (Matt, Mk, Lk). | 73  And after a little while came unto him they that stood by, and said to Peter, Surely thou also art one of them; for thy speech betrays thee.  74  Then began he to curse and to swear, saying, I know not the man. And immediately the cock crew.  75  And Peter remembered the word of Jesus, which said unto him, Before the cock crow, thou shalt deny me thrice. And he went out, and wept bitterly. | And a little after, they that stood by said again to Peter, Surely thou art one of them: for thou art a Galilean, and thy speech agreeth thereto.  71  But he began to curse and to swear, saying, I know not this man of whom ye speak.  72  And the second time the cock crew. And Peter called to mind the word that Jesus said unto him, Before the cock crow twice, thou shalt deny me thrice. And when he thought thereon, he wept. | 59  And about the space of one hour after another confidently affirmed, saying, Of a truth this fellow also was with him: for he is a Galilean.  60  And Peter said, Man, I know not what thou sayest. And immediately, while he yet spake, the cock crew.  61  And the Lord turned, and looked upon Peter. And Peter remembered the word of the Lord, how he had said unto him, Before the cock crow, thou shalt deny me thrice.  62  And Peter went out, and wept bitterly. | 26  One of the servants of the high priest, being his kinsman whose ear Peter cut off, saith, Did not I see thee in the garden with him?  27  Peter then denied again: and immediately the cock crew. |



[**The denials in chronological order**](http://www.voiceinwilderness.info/peterdenials_l.htm#d)****



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Matthew 26 | Mark 14 | Luke 22 | John 18 |
| [1st denial](http://www.voiceinwilderness.info/peterdenials_l.htm#d1)   At the door of Annas' palace  To the female doorkeeper |  |  |  | 15  And Simon Peter followed Jesus, and so did another disciple: that disciple was known unto the high priest, and went in with Jesus into the palace of the high priest.  16  But Peter stood at the door without. Then went out that other disciple, which was known unto the high priest, and spake unto her that kept the door, and brought in Peter.  17  Then saith the damsel that kept the door unto Peter, Art not thou also one of this man’s disciples? He saith, I am not. |
| [2nd denial](http://www.voiceinwilderness.info/peterdenials_l.htm#d2)   In Annas' palace  To the servants and officers  standing & warming themselves |  |  |  | 18  And the servants and officers stood there, who had made a fire of coals; for it was cold: and they warmed themselves: and Peter stood with them, and warmed himself.  ...  25  And Simon Peter stood and warmed himself. They said therefore unto him, Art not thou also one of his disciples? He denied it, and said, I am not. |
| [3rd denial](http://www.voiceinwilderness.info/peterdenials_l.htm#3d_1)   In the courtyard  sitting by the fire  to one of the maids of the high priest | 58  But Peter followed him afar off unto the high priest’s palace, and went in, and sat with the servants, to see the end.  ...  69 Now Peter sat without in the palace: and a damsel came unto him, saying, Thou also wast with Jesus of Galilee.  70  But he denied before them all, saying, I know not what thou sayest. | 54  And Peter followed him afar off, even into the palace of the high priest: and he sat with the servants, and warmed himself at the fire.  ...  66 And as Peter was beneath in the palace, there cometh one of the maids of the high priest:  67  And when she saw Peter warming himself, she looked upon him, and said, And thou also wast with Jesus of Nazareth.  68 But he denied, saying, I know not, neither understand I what thou sayest. | 55  And when they had kindled a fire in the midst of the hall, and were set down together, Peter sat down among them.  56  But a certain maid beheld him as he sat by the fire, and earnestly looked upon him, and said, This man was also with him.  57  And he denied him, saying, Woman, I know him not. |  |
| [4th denial](http://www.voiceinwilderness.info/peterdenials_l.htm#4d)   On the porch  to a male servant of the high priest  followed immediately by a cock crow | 71  And when he was gone out into the porch, | And he went out into the porch;    and the cock crew. | 58  And after a little while another [male] saw him, and said, Thou art also of them. And Peter said, Man, I am not. | 26  One of the servants of the high priest, being his kinsman whose ear Peter cut off, saith, Did not I see thee in the garden with him?  27  Peter then denied again: and immediately the cock crew. |
| [5th (or 5th & 6th) denial](http://www.voiceinwilderness.info/peterdenials_l.htm" \l "5d" \o "Peters Denials of Jesus" \t "TRLX_Left)  Standing on the porch accused by the same maid as in the 3rd denial | another maid saw him, and said unto them that were there, This fellow was also with Jesus of Nazareth.  72  And again he denied with an oath, I do not know the man. | Mr 14:69  And the maid saw him again, and began to say to them that stood by, This is one of them.  Mr 14:70  And he denied it again. |  |  |
| 6[th (or 7th) denial](http://www.voiceinwilderness.info/peterdenials_l.htm#7d)  Standing on the porch  exposed by his Galilean accent  followed immediately by a rooster crowing and Peter's repentance | 73  And after a little while came unto him they that stood by, and said to Peter, Surely thou also art one of them; for thy speech betrays thee.  74  Then began he to curse and to swear, saying, I know not the man. And immediately the cock crew.  75  And Peter remembered the word of Jesus, which said unto him, Before the cock crow, thou shalt deny me thrice. And he went out, and wept bitterly. | And a little after, they that stood by said again to Peter, Surely thou art one of them: for thou art a Galilean, and thy speech agreeth thereto.  71  But he began to curse and to swear, saying, I know not this man of whom ye speak.  72  And the second time the cock crew. And Peter called to mind the word that Jesus said unto him, Before the cock crow twice, thou shalt deny me thrice. And when he thought thereon, he wept. | 59  And about the space of one hour after another confidently affirmed, saying, Of a truth this fellow also was with him: for he is a Galilean.  60  And Peter said, Man, I know not what thou sayest. And immediately, while he yet spake, the cock crew.  61  And the Lord turned, and looked upon Peter. And Peter remembered the word of the Lord, how he had said unto him, Before the cock crow, thou shalt deny me thrice.  62  And Peter went out, and wept bitterly. |  |

# The Science of Theory

Theory is based on repeated experimentation that has shown patterns that are recognizable. Unfortunately, politics and opinion replace the useful application of theory in many cases. Some vivid examples are macroevolution and flat earth so-called theories. Neither are based on experimentation, but on biased opinion and poor scientific process with little valid evidence to support their claims especially when there is substantial evidence to indicate otherwise.

# The Science of Communication

Communication in modern times has the greatest potential in history, yet is not necessarily more advanced than in ancient times. People only communicate superficially and partially. Science usually takes a long time to be accepted by the masses and is often rejected for significant periods of time. History is often rewritten according to a person’s bias rather than historical facts and context. Probably the most reliable source of communication on earth is the Holy Bible.