

Historical Thinking – Student Activity

"It is the mark of an educated mind to be able to entertain a thought without accepting it" Aristotle

In medieval times (13th & 14th centuries) the *Doctrine of Signatures* was a very popular way to explain things. People believed that everything was created to be useful to mankind. Therefore each thing contained a clue or signature that would explain its use, if only you searched for it.

Example 1

The planet Mars appears red in the night sky. Red is the colour of blood therefore this planet is named after Mars the God of War. The metal copper is a red-gold colour. If you wear a copper bracelet to battle it will make you victorious like the god Mars.

Do you think the doctrine of signatures is a good explanation for wearing a copper bracelet to war?



Example 2

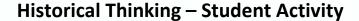
The herb or weed dandelion has a whitish sticky juice in its stem and juice that look a bit like urine. If you suck juice from the stem it will make you urinate more frequently. It is a diuretic, hence its common English name "piss weed".

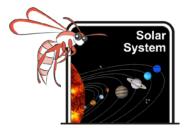
Do you think the doctrine of signatures is a good explanation for the use of dandelion as a medicine for correcting water retention? Explain your answer.

Example 3

The herb eyewort has flowers that look to some people like eyes. It was used to treat eye infections and other diseases of the eye. Do you think the doctrine of signatures is a good explanation for the use of eyewort as an eye medicine? It was made into a tea and applied externally. Explain your answer.







Example 4

The planet Venus can be clearly seen near the western horizon at dawn and at dusk. Its position was, and still is used as a navigation aid by sailors before compasses were commonly available. It became known as the sailor's planet in medieval times. A planet for sailors must also provide the hemp that was needed for sails and ropes for sailing ships at that time. It was believed that Venus must therefore have hemp growing on its surface. Do you think hemp grows on the surface of Venus? Explain your answer.





With the advent of the Renaissance in the 16th and 17th centuries, scientists, philosophers and free thinkers were challenging traditional ideas. Those seeking explanations started depending on data (information) that is observable, measurable and repeatable. Possible explanations were tested and retested. Hypotheses are scientific guesses or estimates that explain why changes occur.

Example 5

The philosopher Aristotle was born in Macedonia in 384BC. He believed that "like attracts like". Stones fall towards the ground because they are both made of similar materials. Smoke rises up into the air because they are again both similar substances.

Write an hypothesis to describe and explain what happens if you are holding a rock and let go of it. Explain why you think the change happened.

Example 6

Astronomers have noted that "rings" surround the planet Saturn. In 1610 Galileo Galilei noted them when he turned his telescope toward this bright planet. What do you think that someone who believed in the Doctrine of signatures would interpret these rings as?



What do you think modern astronomers interpret these rings as?