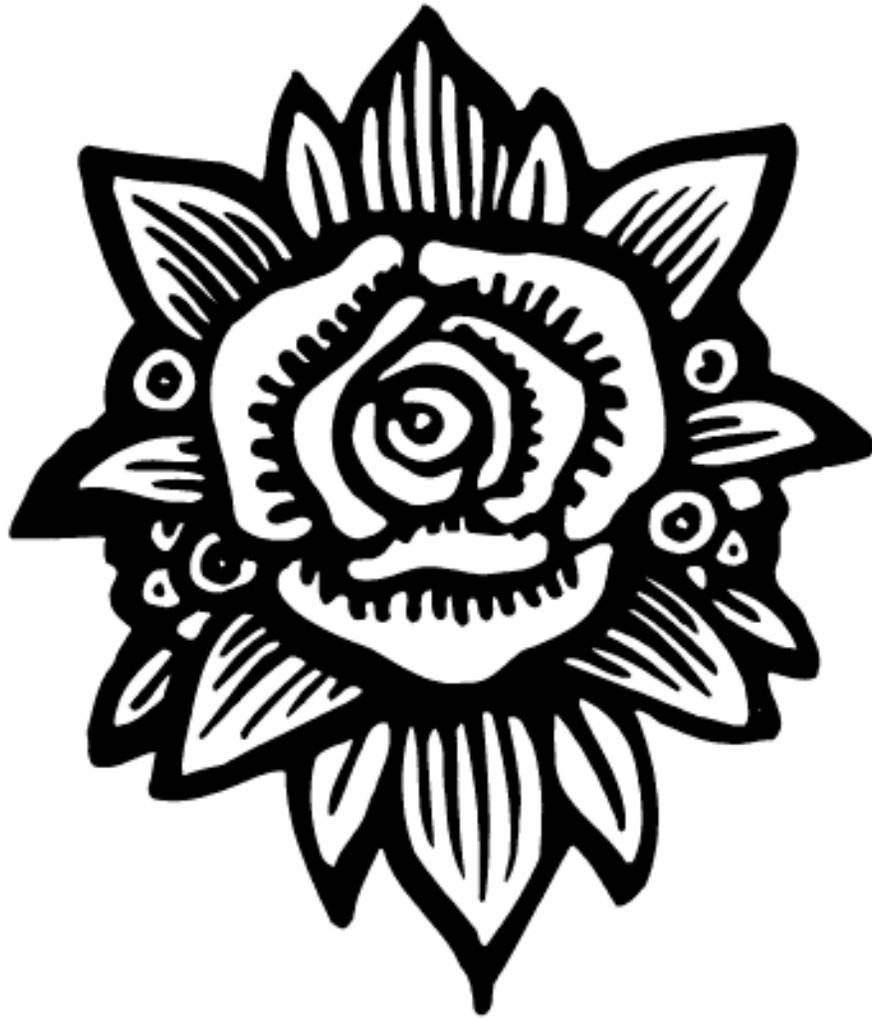




The Birmingham Botanical Gardens & Glasshouses



The Tudors



Introduction

The purpose of this booklet is to highlight the opportunities for pupils at Key Stage 2 to study history at the Botanical Gardens.

Examples of activity sheets and background information are also included which have been designed to be easily adapted to suit the needs of pupils working at a range of levels.

Much of the work at the Botanical Gardens is cross curricular in nature and the activities can easily form the basis of tasks which incorporate other subject areas.

Activities:

Herbal Medicines

An opportunity to make a sensory exploration of plants in the Herb Garden used for medicines. Recipes for various cures are available.

Doctrine of Signatures

It was thought that plants had been given clues as to how they could be used by humans. Pupils are given some examples and then make up their own.

Tudor Exploration

The Tropical House contains many plants such as cocoa which were discovered by early explorers/traders from Europe. Pupils can imagine they are explorers and are looking for new plants to bring back with them. The pupils can also consider the technology of transporting the plants back to Europe in good condition.

Tudor Garden

1. The garden is a reflection of how people viewed the world around them at that time in history. Think of some words which describe the key elements. For example: enclosed, confident, showy.
2. What uses do you think the garden was put to? For example: posing, football, relaxation, growing food.
3. Draw a plan of the garden, you may wish to measure the paths, flower beds etc. Why not sketch some of the interesting features?

4. This was a time of European expansion into the rest of the world. Many plants such as bulbs were brought from the Middle East by explorers. Can you find examples in the garden? Why are they spaced so far apart? Why were bulbs chosen rather than other plants the explorers may have fancied bringing back?

5. Some of the plants have names which give a clue as to where they came from? For example: *Prunus armeniaca*, *Rosa damascena* and *Hibiscus syriacus*. Can you find the countries where the plants came from on a map?

6. The Tudors loved intricate designs such as patterns made with plants called Knots. Copy out all or part of the pattern using the sheet with dots on it with coloured threads. This is a good starting point for activities on symmetry. Where are Knots best seen from? Why? Can you create your own designs?

Tudor Plants in the Tropical House

| | |
|-----------|-------------------------------------------------------------------------------------------------------------------------|
| ARROWROOT | Brought from the West Indies as part of the spice trade. Ground root produces a fine starch for thickening and glazing. |
| CARDAMOM | Used as a flavouring. Brought from Guatemala as part of the spice trade. |
| CASSAVA | Staple food of native Indians, such as the Arawak. Used as a dry bread or pudding. |
| COCOA | Used by native Indians. |
| GINGER | Brought from the West Indies as part of the spice trade. |
| VANILLA | A climbing orchid. Brought from Mexico as part of the spice trade. |

Healing the sick in Tudor times

Can you find these plants in our Herb Garden?

| PLANT | DESCRIPTION |
|--------------|------------------------------------------------------------------------------------------------------------------|
| CHAMOMILE | For hysterical and nervous affections. Makes a good poultice for easing pains. |
| LAVENDER | For worms, although seldom used. |
| LUNGWORT | Coughs, lung complaints and asthma, takes away inflammation. |
| MARJORAM | Asthma, coughs. A stimulant, makes perspiration. |
| PEPPERMINT | Nausea, flatulence, sickness, colds. |
| ROSE | Used as flavourings in pills. |
| ROSEMARY | For stomach, headaches. |
| RUE | Infection, hysteria. Used in exorcisms. Large doses produce nerve derangements. |
| SWEET CICELY | Coughs and flatulence. |
| TANSY | Expels worms in children. Hysteria, nausea. |
| THYME | In an infusion for whooping cough, catarrh, sore throat. |
| WORM WOOD | Eases digestion. An external remedy for swelling tonsils, also for the bites of the shrew mouse and sea dragons. |



Knot Patterns



A series of 20 horizontal dotted lines spanning the width of the page, providing a guide for writing or drawing.

The Doctrine of Signatures

*“Though Sin and Sathan have plunged mankind into an Ocean of Infirmities, yet the mercy of God which is over all his works, maketh Grass to grow **upon** the Mountains, and Herbs for use of man, and hath not only stamped upon them a distincte form, but also given particular Signatures, wherey man reade, even in legible characters, the use of them.” (William Coles, 1684)*

The Doctrine of Signatures was based on the idea that every plant (herb) had been placed here on earth by God for our benefit. It was thought that little clues had been left in the leaves, flowers, roots or juice. These signs or signatures were supposed to show the disease or part of the body which the plant could heal.

For example:

The spotted leaves of lungwort were thought to look like lungs, and so they were used to treat whooping cough and clear chest colds.



The yellow flower of marigold suggested its use for the treatment of jaundice.



The shape of walnuts looks like the brain and so it was recommended for headaches and madness.



Sometimes the sign was not so obvious. The adder's tongue was applied to the bite of an adder because the leaf looks like the bite!

The Doctrine of Signatures was a popular way of treating illness in the 16th and 17th centuries and special herbal gardens were set up. Culpepper wrote a handbook of herbal remedies which became an essential reference book and his name is still well known today. Many of the "practitioners of physic" at the time were clergymen who saw fit to look after both the souls and the bodies of their congregations.

Just how well did these remedies work? It seems that results were based on the 'kill or cure' principle. When a patient recovered from a "purge both upwards and downwards", this meant that the correct balance of their system had been restored. If he or she did not recover, then this was simply regarded as "God's will". However, some of the cures did work and these signature plants are still used today to treat illnesses.

The list below is the common names of plants, which according to the Doctrine of Signatures could cure various illnesses. Can you guess from their names what they might have been used for?

Bloodwort
Bruisewort
Feverfew
Fleawort
Liverwort
Rupturewort
Scurvy Grass
Self Heal
Sneezewort
Throatwort

The Doctrine of Signatures

It used to be thought that for every illness there was a plant to cure it. Each plant was thought to give hints about the cure by its shape, colour or taste. For example, the lung-like leaves of lungwort were thought to cure lung diseases; the yellow flowers of the marigold were thought to cure jaundice. Use the herb garden to make up some other examples of your own.

| | |
|---------------------------------------------------------------------------------------------------------------|-----------------|
| <p>Name of plant:</p> <p>Special features:</p> <p>Illness it might cure (give your reason):</p> | <p>Drawing:</p> |
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