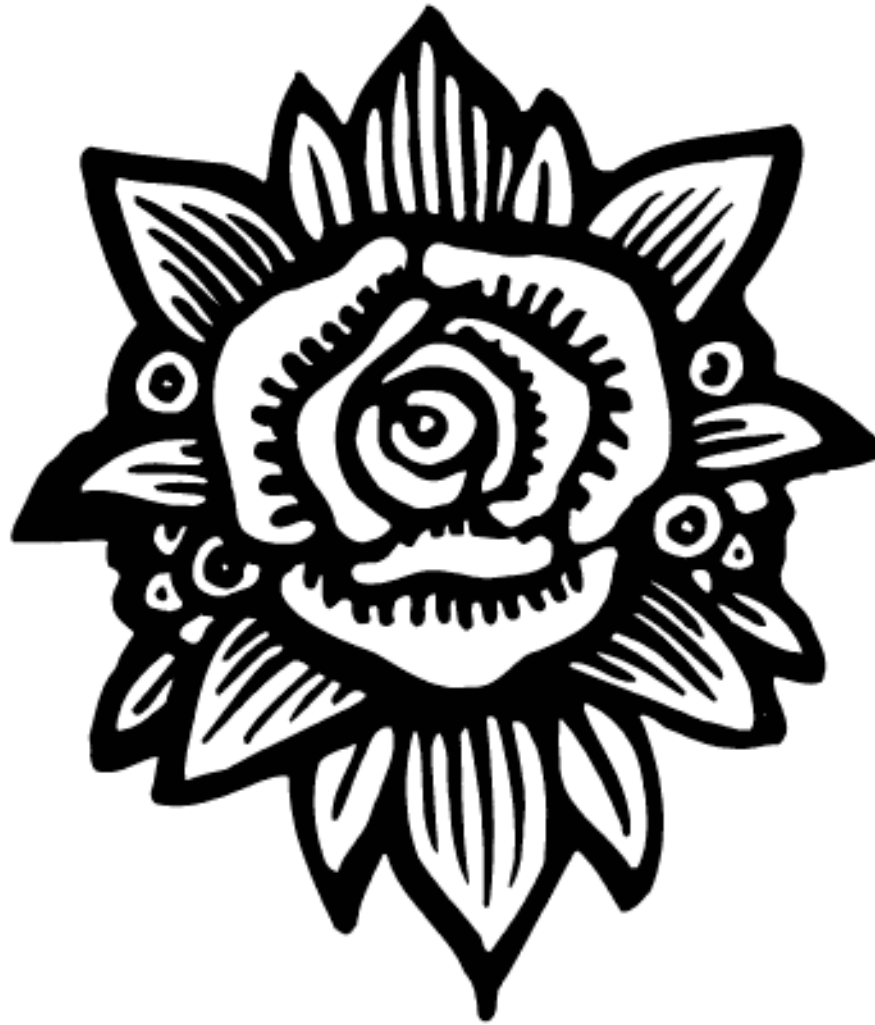


Birmingham Botanical Gardens History Pack



The Tudors

THE BIRMINGHAM
BOTANICAL
GARDENS
TURN OVER A NEW LEAF

Activities

Tudor Exploration

Pupils can look for plants in the Tropical House that were brought back to Britain by Tudor explorers and are still used today. They can record their findings on worksheet 1.

Herbal Medicines

Visit the Herb Garden to find some of the herbs that Tudors used for medicines. Information about the healing properties of each herb is given on worksheet 2. Pupils can tick off any plants that they find in the Herb Garden, then use their senses to complete worksheet 3.

The Doctrine of Signatures

It was thought that plants had been given clues as to how they could be used by humans. For example, the shape of ginger root was thought to look like intestines, so it was added to food in order to cure stomach ailments (and then found to actually taste good too!). Pupils can read the information on worksheet 4 and then come up with their own 'Doctrine of Signatures' on worksheet 5.

Tudor Garden

Visit the Tudor Garden near the Study Centre. This garden is a reflection of how people viewed the world around them at that time in history. Pupils can draw a plan of the garden on worksheet 6. The hedge in the middle is an example of a Tudor 'knot garden'. Pupils could copy our knot pattern on worksheet 7 or design their own knot garden. This is a good link to activities on symmetry.

Please note: plants can change due to seasons etc., so you may not find all the plants mentioned on the worksheets on the day of your visit.

Tropical Tudor Plants

The Tropical and Subtropical Houses contain many plants that were discovered by Tudor explorers. Can you find any of these plants?

Arrowroot:	Brought from the West Indies as part of the spice trade. The ground root produces a fine starch for thickening.
Cardamom:	Brought from Guatemala as part of the spice trade. Seed pods are used for flavouring in rice dishes or for a hot drink.
Cassava:	Staple food of native Indians, such as the Arawak. Used as a dry bread or pudding.
Cocoa:	Used by native Indians as a food but also medicine. Cocoa beans and cocoa butter are used in chocolate manufacture.
Cotton:	Cultivated by native Indians. The dried flowers, called 'bolls' are spun to make clothing, bandages etc.
Ginger:	Brought from the West Indies as part of the spice trade. The underground stem is used for food and medicine.
Vanilla:	A climbing orchid brought from Mexico. The seeds and oil in the long pods are used for food and medicine.

Choose two of these plants to draw and describe here:

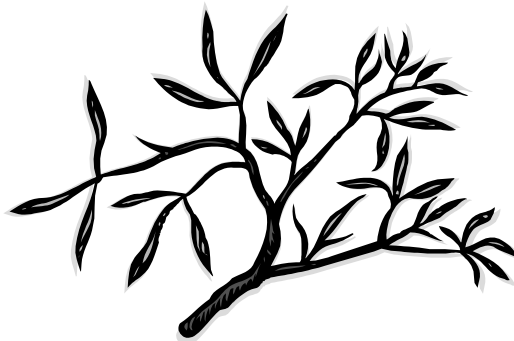
Name of plant:	Name of plant:
Description:	Description:

Healing the Sick in Tudor Times

Here are some herbs that were used in Tudor medicine. Can you find any of them in our Herb Garden? Tick off the ones you find.

Herb	Healing properties	Tick if found
Chamomile	For hysterical and nervous afflictions. Makes a good poultice for easing pains.	
Fennel	To break up kidney stones, quiet hiccups, prevent nausea, aid digestion. Relieves colic in babies.	
Lavender	To help people sleep. Can also be used to get rid of worms in the intestines (but rarely used).	
Marjoram	Helps treat asthma/coughs. Stimulates perspiration (sweating) to get rid of toxins.	
Peppermint	Treats nausea, flatulence, sickness and colds. Peppermint tea can aid digestion.	
Rosemary	For stomach pains and headaches.	
Thyme	Used in an infusion to treat whooping cough, catarrh, sore throats.	

Choose four herbs from the list above that you found in the Herb Garden. On the next page (worksheet 3), make a sketch of each one and then give words to describe how it smells and how it feels.



Herbs used by the Tudors

Choose four herbs that you found in the Herb Garden which were used by the Tudors (choose from fennel, lavender, marjoram, peppermint, rosemary or thyme). For each one, make a sketch and then write words to describe how it smells and how it feels.

Herb		Herb	
Smell	Touch	Smell	Touch
Herb		Herb	
Smell	Touch	Smell	Touch

The Doctrine of Signatures

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 on 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 they were 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. A man called Culpepper wrote a handbook of herbal remedies which became an essential reference book and his name is still well known today.

The following list below gives 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:	Rupturewort:
Bruisewort:	Scurvy grass:
Feverfew:	Self heal:
Fleawort:	Sneezewort:
Liverwort:	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 ginger root was thought to look like the intestines, so was used to treat digestive disorders. Find some plants in the Botanical Gardens to create your **own** 'Doctrine of Signatures'.

Name of plant:

Drawing:

Special features:

Illness it might cure (give your reason):

Name of plant:

Drawing:

Special features:

Illness it might cure (give your reason):

Name of plant:

Drawing:

Special features:

Illness it might cure (give your reason):

The Tudor Garden

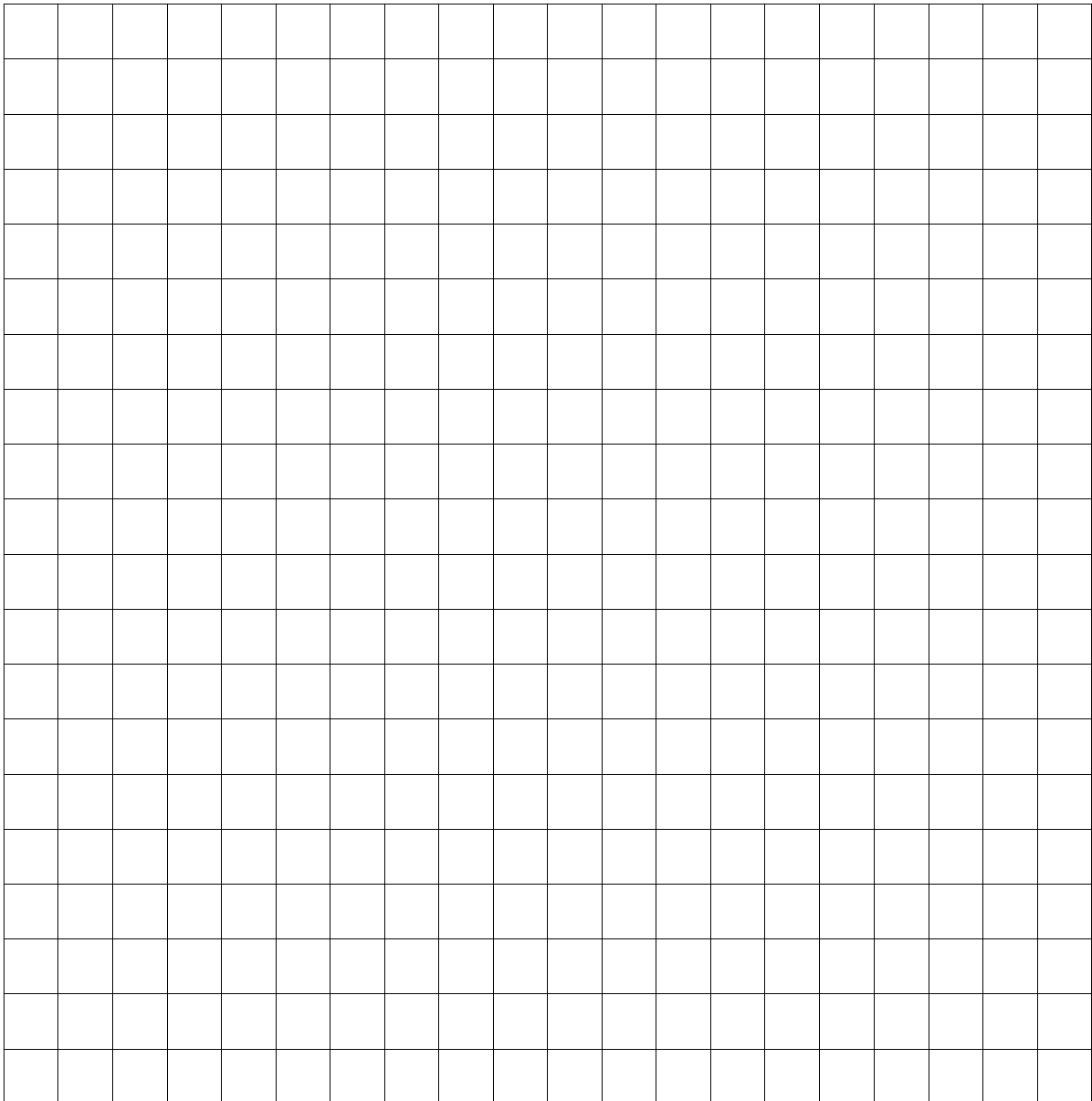
Draw a plan of the Tudor Garden. To make it accurate you can measure the paths, flower beds etc. Label some of the interesting features, such as the 'knot' hedge pattern in the middle.



The Knot Garden

In Tudor times, it was popular for hedges to be grown in a 'knot' pattern. You will see an example in the middle of our Tudor Garden. These patterns often showed lots of symmetry.

On the grid below, either copy the knot pattern you can see in our Tudor Garden or design your own.



Can you make a human knot pattern by linking arms with your classmates?