

COTTON IN THE CLASSROOM

Cotton is a great educational resource. Cotton touches us in more ways than we can think of. The denim and shirts we wear come from cotton. Cotton is fun to teach to kids. Children can learn how the cotton plant grows, what a cotton boll looks like and many other things about this wonderful plant.

Lesson Plans for Schools

- Discuss the origins of cotton. Create a list of products that are derived from cotton.
- Read labels on clothing. How many of the clothes contain cotton?
- Discuss how cotton is grown and processed into fabric.
- Discuss the history of cotton in Britain and the key events.
- Write biographical essays on John Kay and James Hargreaves.
- Discuss the Lancashire Cotton Famine.
- Discuss which town in UK had the highest number of cotton factories and the reasons for that.
- Create a model of a universal density bale, whose dimensions are 55" x 21" x 26". Determine its volume and density if a standard bale is 500 lb (227 kg).

Educational Activities for Years 1 to 8

1. Give each group of students a cotton boll. Have them examine the cotton fibre under a magnifying lens. They will notice that these short fibres have almost a silky appearance.
2. Have students grow 3 to 5 cotton seeds in a pot and watch it germinate in 7 to 10 days. Discuss different parts of the plant and the life cycle of cotton plant.
3. Share the background information about cotton picking and cotton ginning. Have students actually remove cotton from the boll and separate seeds from the cotton boll.
4. Have your students weigh the fibres from one boll, and then compare it to the weight of a pair of jeans. Ask students to consider how many cotton bolls are needed to produce a pair of jeans.
5. Discuss the invention of the Flying Shuttle and Spinning Jenny and their significance in the history of garment production in United Kingdom.

For more lesson plan ideas, visit www.cottonacres.co.uk

Cotton Store

Cotton Acres products are a wonderful resource for teachers, students, spinners, scientists, gardeners and just about everyone else. Products from Cotton Acres also make wonderful gift items.

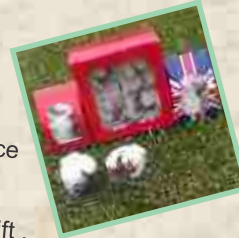


Cotton Seeds Packet

Growing cotton is educational and fun. Non-GMO and untreated cotton seeds. Wonderful 2nd wedding anniversary gift.

Cotton Bolls

Ideal for School Lesson Plans, Science Fair Projects, Arts & Crafts. Excellent educational resource for teachers. Lovely second wedding anniversary gift.



Mini Cotton Bale

Miniature Cotton Bales are a lovely gift item and cotton souvenir. These little bales are handmade, 100% cotton, and wrapped in burlap with copper ties.



Naturally Coloured Cotton

Naturally coloured Brown Cotton. Useful for making socks and other garments without bleaching or dyeing.



Ornamental Foliage Cotton

Black-leaved and red-leaved ornamental cotton plants that bring colour and contrast to garden. Great for containers, beds & borders.



Certified Organic Socks

Made from certified organic cotton. These socks are special because they are non-dyed, non-toxic, unbleached made from naturally coloured cotton. Cream, Brown & Green colours available.

Print this leaflet from www.cottonacres.co.uk/leaflet
Visit us online or contact us for details

Cotton

Farm to Fabric

The plant that touches you everyday!

Learn and teach all about Cotton

Lesson Plans and Activities about the history and uses of cotton for Years 1 to 8



Grow Cotton at Home

Cotton is fun and educational to grow indoors or out



Gift Cotton this Season

Cotton makes a wonderful gift for any occasion



CottonAcres.co.uk
Lime Kiln House, Lime Kiln,
Royal Wootton Bassett
Wiltshire, UK, SN4 7HF
UK Sales: 0844 802 7282
Tel: +44 (0)1793 295075
Email: contact@cottonacres.co.uk

www.cottonacres.co.uk

THE STORY OF COTTON

Today, the world uses more cotton than any other fibre. It comes from cultivated plants of the genus *Gossypium*. Cotton is a part of our daily lives from the time we dry our faces with a soft cotton towel in the morning until we slide between fresh cotton sheets at night. It has hundreds of uses, from blue jeans to shoe strings.

What is the history of cotton?

The oldest cotton fibres and boll fragments, dated from around 5000 B.C., were discovered in Mexico. Cotton has been worn in Egypt and India for over 5,000 years. Native Americans grew cotton as early as 1500.

How does cotton grow?

Cotton grows best on fertile, well drained soils. It is planted in warm weather when temperatures are above 16 degrees Celcius. Seeds germinate in 7-10 days. The bud, also known as a "square," appears about 5-7 weeks after planting which forms flowers. The white blossoms become pollinated, turn pink and then wither producing green bolls. The green bolls mature into cotton bolls with the white fluffy fibres. Plants are irrigated, fertilised and weeded, as needed, during the growing cycle.

Where is cotton grown?

Cotton is grown commercially in USA, China, India, Pakistan, Brazil, Uzbekistan, Turkey, Greece, Australia and many other countries.

How is cotton made into cloth?

Cotton is harvested and sent to the cotton gin where seeds are separated from the raw cotton. The lint is packed into bales and sent out to textile mills to make yarn. The cotton is carded or combed, making all of the fibres run parallel, and then spun into thread which in turn is used to make cloth.

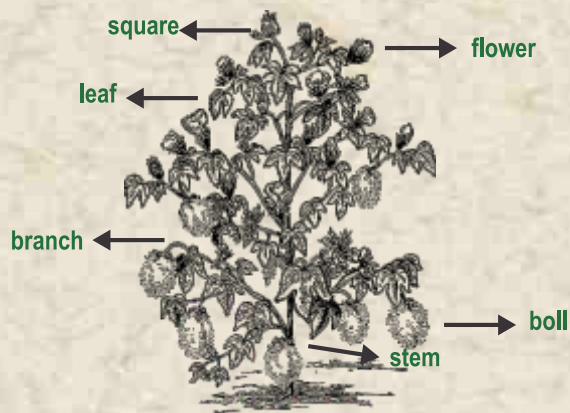
What is cotton used for?

Like lumber, cotton comes in many varieties and qualities, each suitable for different purposes. The long lint fibres are used commonly for clothing and bedding items. The smaller cotton fibres, known as linters, are removed from the seed and are used as stuffing for furniture and components of linoleum, plastics and insulation. Cotton seed oil is used in foods and cosmetics. Cotton seed hulls are eaten by cattle.

What can one bale (500 lbs or 227kg) of cotton make?

215 Jeans	1,256 Pillowcases
249 Bed Sheets	3,085 Diapers
690 Bath Towels	4,321 Socks
1,217 T-Shirts	21,960 Handkerchiefs

Cotton plant showing bolls, squares, leaves, stem, flowers, branches



COTTON INDUSTRY IN BRITAIN

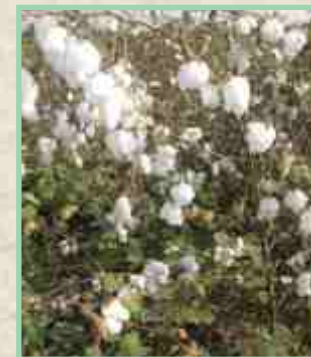
Cotton was first imported to England in the 16th century mainly from the West Indies and the American Colonies. The Cotton Industry developed in three main districts: North West England, centred on Manchester; the Midlands, centred on Nottingham; and the Clyde Valley in Scotland, between Lanark and Paisley. By the 1780s the industry was becoming more concentrated in Lancashire, with a considerable number of mills within the Oldham, Bolton, Manchester triangle. By the end of the 18th century a large proportion of the population of Lancashire was dependent on the cotton industry. By 1802 the industry accounted for between 4 and 5 per cent of the national income of Britain. By 1812 there were 100,000 spinners and 250,000 weavers working in the industry. Production had grown to 8 percent and had now overtaken the woollen industry. By 1830 more than half the value of British home-produced exports consisted of cotton textiles. By 1840, 60% of the world's cotton cloth was made in Lancashire. Although the British cotton industry continued in the 19th century, it was seriously affected by the First World War. The economic depression of the 1930s, and the Second World War, the loss of former colonies and the increasing industrialisation of other European countries all played a part in the subsequent collapse of the British cotton industry.

Inventions in the Cotton Industry from Britain

- Sir Richard Arkwright at Cromford, Derbyshire, UK built the world's first true factory to produce cotton.
- In 1733, John Kay invented the 'Flying Shuttle' which allowed wider cloth to be weaved and at a faster speed than before.
- In 1764, James Hargreaves, a British weaver invented the 'Spinning Jenny', which reduced the amount of work needed to produce yarn, with a worker able to work eight or more spools at once.

GROWING COTTON AT HOME

Cotton is a tropical plant which can be grown indoors or in a greenhouse in the UK and elsewhere in Europe. It can be started indoors in a pot and placed near a sun-facing window or a conservatory and then moved outdoors when it is warmer in the summer. Growing cotton is fun and educational for children and adults alike. To grow cotton, you need a well-prepared soil with plenty of compost or manure. Keep the soil moist but not wet. The cotton will be ready to harvest when all of the cotton bolls have opened, and the cotton fibre inside has been allowed to dry so it is fluffy in texture.



Grow cotton at home today!

COTTON IS A WONDERFUL GIFT

Celebrate your second wedding anniversary with gifts inspired by cotton, the traditional second-anniversary gift material. It is customary to give a gift made from cotton to your partner on the 2nd wedding anniversary. As a material, cotton is both durable and versatile, both of which are important qualities in a successful marriage. Cotton has also been known as a symbol of great prosperity. Its long-lasting aspect is hoped to be reciprocal in a marriage. By the time a couple celebrates their second anniversary, they are comfortable with one another, making cotton the appropriate anniversary gift for this wedding anniversary celebration.



Gift cotton to your loved ones - Cotton seeds packet, raw cotton bolls or certified organic cotton socks!