Blue Pottery
Skill Development Manual
Class VII

Central Board of Secondary Education
Committed to Equity and Excellence in Education
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Acknowledgement

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Blue Pottery Manual Grade-VII

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FOREWORD

"The future belongs to those who learn more skills and combine them in creative ways."

- Robert Greene

The new National Curriculum Framework (NCF) in line with the National Education Policy 2020 (NEP) focuses on making learning a joyful experience and remove stress from students, to develop a sense of self-reliance and dignity of the individual which would form the basis of social relationship and would develop a sense of nonviolence and oneness across the society. A child centered approach is the need of the hour to promote universal enrolment and retention as there is an emergence of new avenues and an entirely new set of demands are required.

It is the time to reform our pedagogies by effecting a shift from learning by rote to improving knowledge retention by advocating practical application as stated in NEP 2020. We must endeavour to effect a decisive shift from education for all to quality education for all.

The "Blue Pottery" Manual is one such effort to make learning fun-filled and enable students know about our traditions. The students will strive to gain sufficient knowledge of concepts, language and have the will to innovate! Constructive learning has to be part of the curriculum. Situations and opportunities have to be created for students to provide students with challenges, encourage creativity and encourage their active participation.

I congratulate the Management, Principal, teachers and students of St. Edmund's School, Sec.-5, Jawahar Nagar, Jaipur who successfully shouldered this responsibility and came up with this brilliant work which will give the student fraternity an opportunity to have fun-filled learning. I am also grateful to Princess Diya Kumari Foundation who mentored the facilitators for producing this phenomenal and outstanding work. I would like to advise the students to continue to study and learn new skills and be persistent in their pursuit for expansion.

CONTENT

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UNIT – 1

The Saga of Blue Pottery and its various forms

Topics	Learning Objectives	Learning Outcomes
(A) Where, when and how	To illustrate the evolution and history of blue pottery in an interesting and meaningful way. To study and appreciate the evolution of blue pottery as a craft with major inventions. To develop the knowledge about the different era of blue pottery in India.	Students will be able to- Know about the art, artisan and major inventions in this art. Understand and appreciate the significance of this craft in our culture. Understand the role of blue pottery in construction and decor etc.

(B) Indus valley civilization and Mughal art, Painting and music.	To describe and appreciate the foundation and introduction of artistic development in ancient India. To develop the aesthetic, creative and critical thinking in a child. To recognize, observe and appreciate the uniqueness in the architecture, painting and music during ancient period.	Correlate art during Indus valley civilization and Mughal art with the blue pottery craft. Identify the different trends of painting on base/ surface used. Appreciate the progress and transformation in different time periods.

(A) Where, When and How

Sawai Ram Singh II

Photo Credit by : Museum of art and photography

Blue Pottery took an interesting route in finding its home in Jaipur. Ram Singh II attended a kite flying session and watched his kite masters were engaged in battle with two brothers name Churaman and Kaluram from Achnera (Agra). When the ruler saw that the brothers managed to bring down the royal kites every time, he was curious. He asked the brothers their secret. They told him that they were potters by profession and had coated their strings with the same blue-green glass powder that they used for their pots.

The history of blue pottery is very long. It was first developed by Mongol artisans. This magnificent art traveled East to India in the 14th century. From there, the technique traveled to the plains of Delhi and in the seventeenth century came into Jaipur. In the early seventeenth century Sawai Ram Singh ll brought blue pottery into the glimpse of Jaipur but after 1886 there was no evidence of blue pottery, but it was reintroduced in 1970 by the painter Kripal Singh Shekhawat, with the support of Kamladevi Chattopadhyay and Rajmata Gayatri Devi. The name comes from the eye-catching blue dye used to color the pottery.

Photo Credit by : Dreamstime.com

Photo Credit by : Dreamstime.com

Photo Credit by : Lakeside Pottery

(B) Indus Valley civilization and Mughal architecture

Photo Credit by : Ancient Ceramics

Photo Credit by : Ancient Ceramics

Photo Credit by : Wikiwand

Photo Credit by : Britannica

Art During Indus Valley Civilization

During the early Harappan (5500 – 2600 BC) craft technologies had developed to high degree, they started baking the objects like earthenware, tiles, bowls etc. and after coming of Mughals, the Pottery was combined with the beautiful motifs (birds, animals, flowers, leaves etc.) Persian drew upon materials, modes and skilled craftsmen from all corners, thereby synthesizing a new cultural style. In this present era the decorative arts industry contributing greatly to Jaipur importance and continues to do so today.

Photo Credit by : Ancient Ceramics

Photo Credit by : Ancient Ceramics

Art During Mughal Period

LET'S RECALL

I Fill in the blanks.

1. The history of blue pottery is very long it was first developed by _____artisans.
2. Blue pottery was reintroduced in 1970 by the painter Kripal Singh Shekhawat, with the support of _____ and _____.

II Answer in one word.

Q1. In which year blue pottery was reintroduced in Jaipur?

Q2. Which paste was used by the potters to glaze the string during thekite festival?

Activity

Aim- To observe different motifs prevailing during Indus Valley Civilization and Mughal Period and to draw your own creative motifs.

Materials Required- pencil, sheet, eraser, scale, compass, etc.

Pre-requisite Knowledge- Basic knowledge of the motifs used during Indus Valley Civilization and Mughal period.

Type of Activity- Individual

Process-

1. Gather the information regarding the motifs used in ancient and medieval period.
2. Take A-4 size sheet.
3. By using pencil, scale and compass draw different motifs on the sheet.
4. After completing the above three steps, compare your motifs with the motifs used during ancient and medieval period.

Observation and Conclusion

Each student will be able to create their own motifs by using their observation, imaginative and creative skills.

Unit – 2
BUILDING BLOCKS OF BLUE POTTERY ARTICLES

Topics	Learning Objectives	Learning Outcomes
(A) The availability of raw materials	To study the different Geographical areas where the raw materials of blue pottery are found. To identify and show the states of India on a map, where the raw materials Of blue pottery Are available.	Compare and contrast the properties and qualities of raw material found. Identify and mark the different geographical areas on a map.

Use of raw materials in making blue pottery craft. (B) Sources of raw materials	Procure and understand the quantitative and proportionate of different materials in making a blue pottery craft. To understand the process and Techniques and use of proportions in making dough,aster, glazing etc. To describe the different sources of materials. To apply this knowledge in the effective usage of materials. To enhance their scientific thinking in finding out the alternate solution.	To initiate creative process for innovative/ alternate practices. Give some alternative ideas or suggestions in the making of dough, glaze,etc. Differentiate thesources of raw materials used in blue pottery Identify the combination and proportion of different materials required for the preparation of base material. Apply their knowledge andscientific thinking in the preparation of different raw materials such as body mix, aster, etc.

USE OF RAW MATERIALS IN MAKING BLUE POTTERY CRAFT
SOURCES OF RAW MATERIAL
THE AVAILABILITY OF RAW MATERIAL

The raw material required in the making of Blue Pottery products, their source and their availability in making a variety of articles are:

Photo Credit by : Neerja Blue Pottery

GROUND QUARTZ STONE

Quartz is produced from nearby places like Ajmer, Beawar, Udaipur and Neem ka Thana. Powered quartz is snow white in color and is the main raw material for which it is brought in bulk. It is a mineral that is found in the form of crystals from the earth.

KAANCH (GLASS POWDER)

Scrap or broken pieces of glass is used in the process. The glass once brought from the market goes through washing and then it is grounded into pieces. These small pieces are then grinded into fine powder using grinding machine.It is mixture of Boric oxide and Silica which helps in baking the Quartz. This raw material is available in the local market and is actually a reuse of used glass articles and it can also be purchased newly.

KATIRA GOND (EDIBLE GUM)

Katira Gond acts as an adhesive and is readily available in the market. The gond is obtained in big pieces which then hand-grinded using a grinding stone on a stone base. The grounded Gond is then turned into fine powder in the grinding machine and finally sieved in an iron jaali.

Photo Credit by : D'source-www.dsource.in

MULTANI MITTI (FULLERS EARTH)

Multani Mitti is very fine in nature and is available in form of solid lumps. It is easily available in the local market. Lumps of Multani mitti is grinded into fine powder for further use.

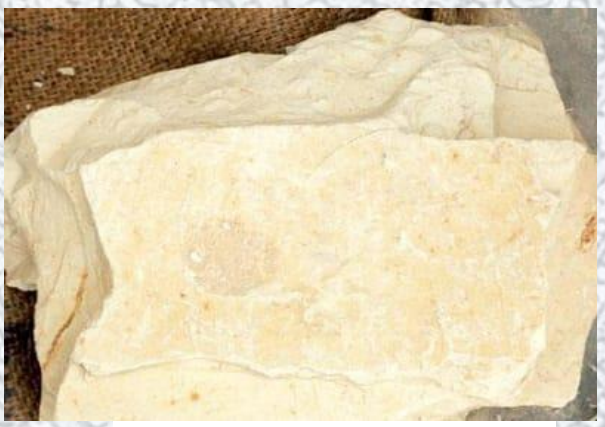


Photo Credit by : D'source-www.dsource.in

Saaji (Soda Bicarbonate)

It is an edible salt used as binder and additive in blue pottery craft. It is easily available in the local market in the form of small pieces which is then grinded into fine powder and after sieving used in batch making.

MAIDA (FLOUR)

Maida is used for coating the products and is also sometimes used as a substitute in place of Multani Mitti. It is used as an adhesive in the process of making blue pottery.

Photo Credit by : D'source-www.dsource.in

Burnt wood dust

It is used to give shape to the articles when the dough is turned into chapati and given shape into the moulds. We use dry ash as it is non sticky and can be easily removed once the article is dried. It is easily available everywhere.

Photo Credit by : D'source-www.dsource.in

LET'S RECALL

I Unscramble the given word –

1. It is the edible salt used as binder (AAJSI)
2. It is used as adhesive in making of blue pottery (OGND HAKTIRA)

II Answer the following questions.

Q1. What is the use of Multani Mitti in making of blue pottery products?
Q2. Name the sources from where the quartz stone is obtained.

Activity

Aim- To collect the raw materials used in the process of creating blue pottery.

Materials Required- quartz stone powder, glass powder, fullers earth, edible gum, burnt wood dust, maida, sheet, small poly bags, tape, stapler etc.

Pre-requisite Knowledge- Basic knowledge of the raw materials used in creating the blue pottery products.

Type of Activity- Individual

Process-

1. Collect and gather the raw materials used in blue pottery.
2. Take A-4 size sheet.
3. Put the raw materials in separate poly bags.
4. Paste the gathered material on the sheet.
5. Write the name of the raw materials collected.

Observation and Conclusion-

Students will be able to know the building blocks of the blue pottery articles and their availability. Through this their knowledge, understanding and observation skills will be developed.

UNIT – 3
DIFFERENT TYPES OF CERAMICS

Learning Objectives	Learning Outcomes
To explore the different types of ceramics.	Discuss variety of ceramic forms and methods.
To understand and learn the basic proportion of creating ceramics.	List the types of ceramics used and proportions in which they are used.
To define the terminologies including in thisprocess like clay,consistency, shaping, impressing, scratching, etc.	Apply this knowledge in creating the different combinations of ceramics.

EARTHENWARE

Earthenware are considered the longest established form of pottery, way back in the Stone Age. Even if the composition of this pottery can differ significantly, a usual composition of this is 25% ball clay, 32% quartz, 28% kaolin as well as 15% feldspar. Earthenware is considered the softest form of pottery, being fired at the lowest heat. It absorbs water, porous as well as scratched easily.

Photo Credit by : Shuttercock

The classification of this kind of pottery takes account of all ancient pottery, terracotta objects, sixteenth century and later Chinese and Japanese pottery, and also pottery from Europe made up to the seventeenth century. In particular, it takes account of delft or faience in a tin-glazed type of earthenware. The best examples of fine art earthenware are Chinese clay warriors, also called the Terracotta Army.

STONEWARE

This type of pottery is dense and has a character that resembles stone after being heated; this is why it called stoneware. This pottery is impermeable or waterproof and normally opaque. In the natural condition, it is grey; however, it turns brown due to the firing process, and different colors might be then used in the type of glazes.

Photo Credit by : 123 RF

PORCELIAN

The disparity between stoneware and porcelain is vague. Ceramists from china define porcelain as a pottery item that provides a ringing tone once tapped. On the other hand, in the west, porcelain is set apart from stoneware by its translucent feature once held to the light. Stoneware varies from porcelain as it opaque and usually just partially vitrified. It is fired at high temperatures.

Photo Credit by : Britannica

BONE CHINA

This replaces true porcelain in today's time. It is considered the toughest type of porcelain. It is also very resistant to chip damage. It has remarkable physical strength and normally generates a white and translucent result. It has bone ash, kaolin, phosphates as well as feldspar.

Later, ceramicists such as Josiah Spode tweaked the usual formula by putting in powdered bone ash to create bone china- a typical form of porcelain that is less prone to damage like chipping. What is more, it comes with an ivory-white appearance.

Photo Credit by : Trade India

KHURJA POTTERY

It is said that in the 14th century when Timurlane's army was turning back, some potters stayed back at Khurja, which was then a potter's village. The potters who were from Timurlane's army were originally from Egypt, Turkey, Syria and Persia. They started making blue pottery and also glazed pottery of different colours such as brown and green.

Photo Credit by : Exclusive lane

Difference between Khurja Pottery, Bone China and Blue Pottery –

Khurja Pottery	Bone China	Blue Pottery
• Clay is used in the making of khurja pottery.	• Powdered bone ash is used to create bone China	• Quartz stone, Kaanch, Multani mitti, Khatira Gond, Maida is used to make blue pottery.
• It is relatively cheap as compared to blue pottery. • Orange, brown and light red glaze is used for coloring the pottery. • It is famous in Uttar Pradesh.	• It is expensive as compared to khurja pottery • As it is made up of the powdered bone ashes the color of ceramic is white. • It came via China to India	• It is expensive as compared to khurja pottery and Bone China. • It is particularly blue in color but nowadays it can be seen in various colors from lime green to red. • It is famous in Rajasthan.

LET'S RECALL

I Fill in the blanks.

1. This type of pottery is dense and has a character that resembles stone after being heated; this is why it is called_____.
2. _____is expensive as compared to khurja pottery and bone china.

II Match the following.

A	B
1. Porcelain	a. Clay
2. Earthenware	b. Powered Bone
3. Khurja pottery	c. Opaque
4. Bone China	d. Stone Age

Photo Credit by : Apptopia.com

Activity

Aim- To make different type of beads with the help of clay.

Materials Required- clay, water, needle, moulds etc.

Pre-requisite Knowledge- Basic knowledge of different shapes.

Types of activity- Group\Individual

Process-

1. Take some clay and by using water make proper dough according to your need.
2. Give different shapes to the clay for making beads.
3. Make holes in the beads with the help of needle.
4. Leave the beads for drying.

Observation and conclusion- Students will able to create different shape of beads and through this they will develop creative-thinking and observation skills.

UNIT -4
Tools, Techniques and Processes

Topics	Learning Objectives	Learning Outcomes
(A) Tools ,colors, texture etc., used in blue pottery	To acquire the knowledge and understanding of blue pottery tools, colors, textures and the terminologies related to it.	Discover the various tools,colors and texture used
	To arrange, organize and make use of different colors.	Choose and mix different colors according to the requirement.
	To identify the different tools and equipments used in making blue pottery craft like potter's wheel, mould, etc.	Identify the types of colors used in blue pottery i.e. oxide and Ferro colors.
(B) Art of joining the pieces	Analyze and evaluate their knowledge to prevent or resolve somecommon technical problems.	Understand the different types of motions in the process of grinding, moulding, use of Potter's wheel,etc.

(A) Tools, colors, etc. used in Blue Pottery

A variety of tools are required in making Blue Pottery craft. The basictools required are listed below:

Grinder (Chakki)	It is used to grind the raw materials into fine powder.
Sieve	It is used to sieve the grinded raw materials.
Weighing machine	To make the body batch (in fixed proportion), used by blue pottery artisans, weighing machine is used to weigh them.
Moulds	These are made up of plaster of Paris to give desired shape to the different articles.
Thaapi	It is used to make neck or base of a vase or different parts of articles with desired shape..
Sand paper	Sand papers of different numbers (36,80,etc.) are used to give finishing (smoothening) to the articles made by artisans.
Potter's wheel	It is used to make neck or base of a vase or different parts of articles with desired shape.
Brushes	These are used by the painters to give beautiful shapes and motifs on the surface of different blue pottery articles
Heating Kiln	Different articles of blue pottery are then heated in a closed kiln made up of bricks. The temperature of kiln goes up to 800 to 850 degree Celsius. Products will be taken out from the kiln in 2, 3 days.

Colors used in blue pottery craft :

The colors used in blue pottery are mainly Oxides and Ferro metals. Ferrous oxide, Cobalt oxide and copper oxide are generally used to give different colors to the blue pottery products. These colors are mixed with the edible gum (Katira) that act as binding agent and make the colors strong. The main colors used are:

1. Dark blue from cobalt oxide
2. Light blue from copper oxide
3. Green from chromium oxide
4. Bright yellow from cadmium oxide
5. Brown from Ferro colors

Photo Credit by : D'source

(B) Art of joining the pieces

Except for wall hangings and tiles, the big articles like vessels, vases, etc. are made in two or more parts, which are joined together through Potter's wheel. The wheel is set in motion and the vessel is fixed at the centre of the wheel. A little amount of dough is taken and the base of vessel is joined to the rounded part with the help of this dough on the Potter's wheel. Sometimes, neck of the vessel is also joined with this method. In this way, the art of making the large articles by joining 3 or 4 parts together, is a great technique used by the artisans.

Photo Credit by : Neerja Blue Pottery

Photo Credit by : Neerja Blue Pottery

The process of making blue pottery

The process of making blue pottery includes multiple important steps which are as follows

1) Preparing the dough
2) Forming the mold
3) Casting the product
4) Smoothening the product
5) Painting
6) Coloring
7) Glazing
8) Firing

Let us study all the given steps in brief for the fabrication of blue pottery:

1) Preparing the dough

At the first place with the help of raw materials the dough is prepared (disponible in Jaipur in powdered form), cullet(the small pieces of glasses) are firstly washed and are grinded later to make glass powder. It is refined to avoid bigger particles, Saji, Katira gond and mulatni mitti are mixed equally to a non-sticky dough and kept for few hours before using.

Photo Credit by : D'source

Photo Credit by : D'source

2) Forming the mold

In order to form a mold Plaster of Paris is used. After that the molds are made of desired shapes and sizes and then dried. While making the mold, one has to take care of breaking and due to limitations of the use of dough, it is coated in mold. For a product like Vase – one or two mold s are employed, the casting is attached to each other with little dough and water. If the molds are preserved properly can be used for several times.

Photo Credit by : Neerja Blue Pottery

3) Casting the product

This third step involves productcasting. A good amount of dough is flattened like a round roti, containing a thickness of approximately one cm with a flattening tool. Then the flattened dough is placed on mold and wrapped gently to get a shape.

The mold including dough in it, then filled with burnt wood dust and pressed slowly so that the dough takes the exact shape of the mold. After this, the supplementary edge of dough is carved out using the knife.

The mold is turned upside down and is slowly removed. Then, the product is remained for drying for 1 – 2 days along with the burned wood dust in itself. After drying of the product, the burnt wood is removed as well as excess dust is also brushed off from the product.

Products like Vases are provided with the bases in order to give them the stability.

The base is attached to a product with some amount of dough and sprinkled with water to make it leather hard. Once the product is completely done it is left for drying for 1 – 2 days.

Photo Credit by : D'source

4) Smoothening

In this step, the rough surface of the product is smoothened by rubbing stone on it gently. After the sandpaper is rubbed to remove the grains and to make the surface of the product smoother. Now, the finished product has to be painted before undergoing another smoothening process.

Photo Credit by : Neerja Blue Pottery

The smoothening process contains following steps:

a) Coating of product
b) Mixing dough with water to fill the pores
c) Drying of product
d) Rubbing of sand paper again

The above same steps are to be followed for the one more coat, then in the second round of smoothening, the products are dipped in mixture of quartz powder, powdered glass, edible flour (Maida) and water. Again, it is coated and kept for drying. Once the product is dried, it is rubbed with sandpaper evenly and made ready for painting.

5) Painting

After the smoothing of products, the products are ready to get painted. The talented artisans sometimes give their own designs. All products are painted by hand, then the outlines are made with the fine brush but if the products are of round shape, it is easy to draw the outline while putting them on the potter's wheel and by touching the tip of the brush to the product a neat line could be drawn. After that, the colors are filled to give to designs.

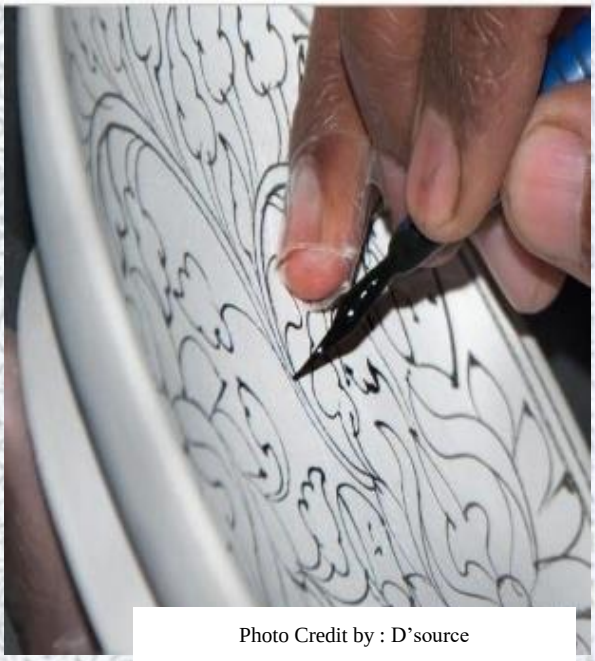


Photo Credit by : D'source

Coloring

For coloring the product, the oxides and ferrous metal are used, which is available in the market, it is mixed with the edible gum which is act as binding gum, after outlining, it is filled with colors.

Photo Credit by : Neerja Blue Pottery

6) Glazing

Glazing contains following steps:

a) A special glaze is prepared using different raw material like powdered glass, borax, zinc oxide, potassium nitrate, and boric acid.
b) heating of raw material at a high temperature.
c) When everything is done, mixture is put to cold water to cool and it splits to splinters. Splinters are collected and then grounded.
d) Mixing of grounded frit with water to form glaze,
e) Coating of product nicely.
f) The products are dipped in glaze and left for drying. Once it is dried its ready to get in furnace.

Photo Credit by : D'source

7) Firing

The products are kept inside a furnace to dry. The products are properly stacked inside so that it doesn't touch each other. The kiln is closed from top and heating is done from below using wood and charcoal, and an even circulation of heat within the kiln is maintained by leaving the centre core open for heat to move freely. The firing takes place for 4-5 hours and the firing has to be controlled to be gradual because changes in temperature might cause cracks in products. The kiln is left for cooling for 2-3 days and then products are taken out. The products are separated from the cracked ones, the final ones are cleansed and packed for the market.

Photo Credit by : Neerja Blue Pottery

LET'S RECALL

I Fill in the blanks.

1. _____is used to make the neck or base of a vase or different parts of articles with the desired shape.
2. _____is used to make the neck or base of a vase or different parts of articles with the desired shape.

II. Answer the following questions.

Q1. What is Sieve?

Q2. How many degrees of temperature is required to bake the pottery?

Photo Credit by : Pinterest

Activity

Aim- To design and color the beads to make beautiful and creative jewellery items.

Materials Required- beads, strings, brush, acrylic color, hooks, pencil, color palette, water, etc.

Pre-requisite knowledge- Basic knowledge of color combination and designing.

Type of activity- Group

Process-

1. Take different type of beads made by the students in activity 3.
2. With the help of pencil, draw different designs on the beads.
3. Start coloring the beads by using different color combinations of your choice.
4. Leave them for one day.
5. Now with the help of beads, strings and hooks, make different beautiful and creative jewellery items.

Observation and Conclusion.

Students will be able to create different jewellery items by using their creative, imaginative and collaborative skills.

UNIT -5
ROUNDS AND VARIOUS SHAPES

Topics	Learning Objectives	Learning Outcomes
A) Beads B)Knobs C)Products with potter' s wheel Vases, Planters and more.	Learning of finework on Beads, Knobs and Vases. To Create their own unique designs on the beads, knobs and planters.	Knowledge of different shapes and it's uniqueness in blue pottery. Make the their own creative designs . Get the practical knowledge of making Blue Pottery articles.

Making Blue pottery products was not an easy task for the artisans they made it after spending their whole day inventing and innovating the new trends for pottery. Earlier, blue pottery products were restricted to traditional products such as a vase, plates, crockery, etc. but after that, a new trend starts emerging.

(A) BEADS

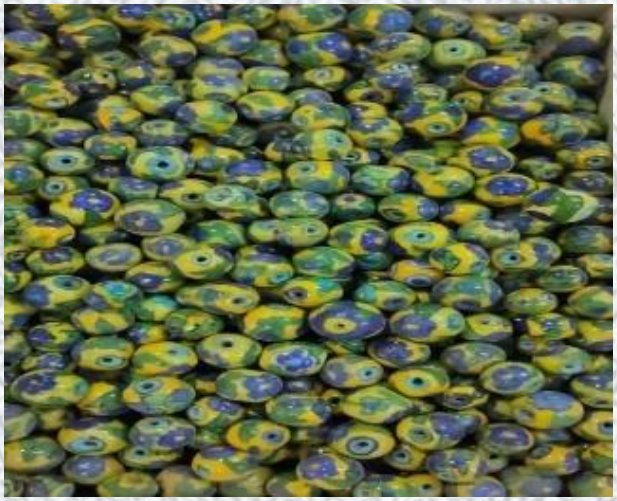



Photo Credit by : Neerja Blue Pottery

Production of beads was a difficult and innovative task as it is a saying “GOOD THINGS TAKES TIME”, in the same way, making of beads wasnot easy because it is made by joining two parts together to get in proper shape, and the toughest of all was the painting on it which required patience and concentration. Various products made from beads are necklaces, bracelets, keychains, etc.

(B) KNOBS

Photo Credit by : Neerja Blue Pottery

An experiment is important when you want to innovate or create things and when the creativity is combined with the experience, innovation occurs. The knob is also a successful innovation in blue pottery, it is also made by joining two or more parts together by the artisans. It is used as the door handles that make the house interior more creative.

(C) PLANTERS

Combing nature with human art is a modern trend that is now seen in the blue pottery market all over. Planters are made by joining two or more parts with the help of pottery's wheel which is then glazed with help of the glazing process done by the artisans themselves.

This innovation is seen in the blue pottery indicates that traditional when combined with modern ideas the fusion occurs.

Photo Credit by : Snapdeal.com

Photo Credit by : D'source

Photo Credit by : Snapdeal.com

LET'S RECALL

I Fill in the blanks.

1. Earlier blue pottery products were restricted to_____products.
2. _____things take time.
3. _____is used as the door handle that make the house interior more creative.
4. _____is important when you want to innovate or create things.
5. Products made by beads are_____,_____and _____.

Photo Credit by : Neerja Blue Pottery

Activity

Aim- To make blue pottery planters.

Materials Required- quartz stone, maida, fullers earth, glass powder, edible gum, saaji, burnt wood dust, moulds/potter's wheel, water, etc.

Pre-requisite Knowledge- Basic knowledge about the raw materials of blue pottery and use of potter's wheel.

Type of activity- Individual/Group

Process-

1. Collect the raw materials and make dough.
2. Flattened the dough like a round roti, place it on the moulds and wrap gently to get a shape
3. Fill it with burnt wood dust and cut the extra edges with the help of knife.
4. After removing it from the mould, leave it for 1-2 days to dry.
5. Smooth the rough surfaces by rubbing it with sand paper.
6. The smoothening process contains the following steps
   a. Coating of product.
   b. Mixing dough with water to fill the pores.
   c. Drying of product
   d. Rubbing of the sand paper again.
7. Make your own creative designs on the planters and paint them with the help of color and brush. Let it dry.
8. Glaze the dry planters and keep it inside a furnace to bake it at the temperature between 800-850 degree Celsius.
9. Take it out after 2-3 days, now your unique planter is ready.

Observation and Conclusion-

Students will be able to know the evolution of blue pottery and its importance in the ancient history.

Students will be able to know the procedure of making blue pottery articles.

Skills developed during this activity- scientific, creative, imaginative, observation and communication.

UNIT -6
MANUFACTURERS AND ARTISANS OF BLUE POTTERY

Learning Objectives	Learning Outcomes
To recognize and appreciate the creativity of artisans like sketching, coloring, glazing, etc. Empathies economical and working conditions of the artisans. Importance of education in this industry.	Remembering the names of artisans and their work. Knowing the difference between skilled artisans and unskilled labour. Role of education in expansion of blue pottery.

KRIPAL SINGH SHEKHWAT
A painter and scholar who trained young school of art graduates, kashigars and kumbhars in the basis of production.

GIRIRAJ SINGH
Master craftsman trained by Jamna Prasad and Sawan Singh, son of the famous potter Kalu Ram of U.P.

NATNI BAI
The only well-known craftswoman is Natni Bai of Jaipur who first apprenticed with Sawan Singh and Jamna Prasad. She later affiliated herself with potter Sawan Singh and began working for Satya Narya Nahta, a marble exporter who opened one of the earliest small-scale units of blue pottery in Jaipur.

Artisans of Blue pottery:

1. **Moulders** - Different shapes given to the articles are done by the artisans named as moulders. Molds of Plaster of Paris are used to castethe desired shape to the blue pottery articles.
2. **Artists (Art work and painting)** -Art work is done by the different artisans, they make designs on a variety of products by their imaginations.
   After this, all products are individually painted by the workers. They use different type of brush and colors (Ferro and oxide) to paint the products.
3. **Glazers** - A special glaze is prepared by using different raw materials in definite proportion. Then, glazers dip the different articles or products in this solution in a way that patches will not be formed on the products and then the product is dried in the sunlight.

Case Study

Mrs.Leela Bordia is a changemaker and truly embodies the words of Gandhiji in letter and spirit. Her journey is awe-inspiring and reiterates that self-belief, determination, persistence, and out-of-the-box thinking are integral to a successful venture.

Photo Credit by : Jaipur.city.post

Today, Mrs. Leela Bordia and her firm Neerja International are synonymous with the name of Blue Pottery articles. She has not only reinstated this intricate craft back to its lost glory of the yesteryears but also creatively created innumerable indigenous innovative Blue Pottery articles world over. Ms. Leela Bordia single-handedly brought prosperity and a sense of pride in craft of hundreds of villagers, made their craft famous over the world. Art must have utility. We started making beads for the first time with this thought of creating value in the customer's eyes. From then to now there are hundreds of craftsmen involved in making these. One bold step and out of the box thinking gave a new direction to the craft. Shehas always been inspired by Mother Teresa and her mother who was a compassionate volunteer of Mother Teresa‟s orphanages. It was her mother who created in her a deep sense of compassion for fellow human beingsand strong social consciousness. She grew up in Kolkataand after marriage, moved to Jaipur. Leela visited a couple of villages around Jaipur and was very impressedby the artwork and hard labour involved in the creation of pottery articles. She recognized this wonderful skill and couldn‟t let this ancient craft die before her eyes. Shegot involved with the artisans to save their dying craft. She understood their problems and suggested some newand modern designs to be introduced in this exquisite craft.

Initially she was met with opposition but one craftsman agreed to try making her design in ceramic hand painted beads. The design was a huge success and she was able to gain the confidence of other artisans as well. She set up her business and formed a company, „Neerja International‟. The unique and exquisite pottery made by the village craftsmen was sold under the name of „Jaipur Blue Pottery‟.

Blue pottery was brought to Jaipur by Sawai Ram Singh II, Maharaja of Jaipur in the 19th Century. It was later revived by Kamala Devi Chatopadya and Raj Mata Gayatri Devi. Then under the guidance of Leela Bordia, it received fresh lease of life. Today she provides a livelihood to thousands of people and runs a flourishing export business. Leela Bordia was able to revive this craft as well as increase the standard of living of the artisans who were associated with this tradition. Her work has been flawlessly accepted by one and all, and the awards and felicitations ornamenting her office over the years are proof enough of her excellence and recognition. Her vision of providing employment to these artisans has given them a means of earning a dignified livelihood while at the same time ensuring a healthy sized labour pool that will attract global industry. This helps them in securing sustenance for self and family.

LET'S RECALL

I Fill in the blanks.

1. _____was the painter and scholar who trained young school of art graduates, kashigars and kumbhars in the basis of production.
2. The only well-known craftswoman is_____of Jaipur who first apprenticed with Sawan Singh and Jamna Prasad.

II Answer the following questions.

Q1. Who are the moulders and what they do?

Q2. Who was Kripal Singh Shekhwat, what is his contribution in the history of blue pottery?

Kripal singh Shekhawat (1922-2008)

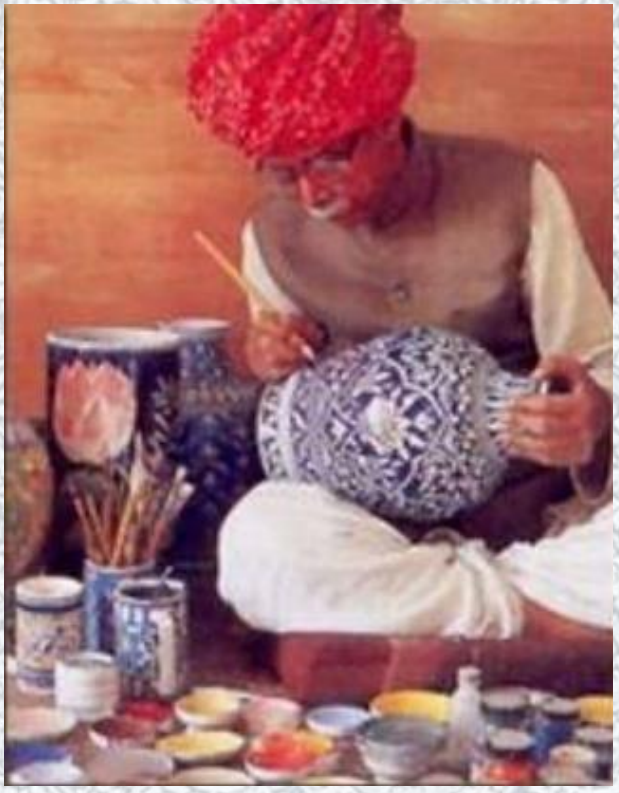


Photo Credit by : Moomal Drashna

Activity

Aim- To gather the information of different artisans and manufacturers and their contribution in the development of blue pottery.

Materials Required- Glue, file, pictures of different artisans and manufacturers etc.

Pre-requisite knowledge- Basic knowledge about the different artisans and manufactures and their role in blue pottery.

Type of activity- Individual

Process-

1. Collect the picture of different artisans and the manufactures.
2. Paste it with the help of glue in the file.
3. Write the information regarding their role in blue pottery.

Observation and Conclusion-

Students will be able to recognize and appreciate the role of artisans and manufacturers in the development of blue pottery and through this they will develop their remembering, understanding and critical-thinking skills.

UNIT – 7
BLUE POTTERY INDUSTRY: CHALLENGES AND OBSTACLES

Learning Objectives	Learning Outcomes
To understand the working of Blue Pottery industriesand the impact of industries on economy.	Understanding the importanceof small scaleindustries.
To study thechallenges and obstacles faced by theblue pottery industry.	Creating knowledge of skilled work and finding out the innovative solutions for the problems

Blue pottery is widely recognized as a traditional craft of Jaipur and this beautiful craft of Jaipur is not only famous in all over the country, it has a great demand in other countries too but all good things have some challenges and exceptions so in the case of blue pottery. The following challenges and obstacles faced by this industry are:

1. Highly dependent on sunlight which can be a big problem in rainy and winter season.
2. It is very Fragile which means, it can only be used for decorative purposes.
3. Artists are getting older and the new generation does not want to continue with blue pottery as it does not generate money.
4. Complaints from artisans about the unavailability of proper tools and subsidy by the government.
5. There is no standard method for preparation of dye, few skilled artisans know the technique of making dyes and growing moulds. Dye making is a long and difficult process.
6. Most of the units use traditional method for preparation of paint and color on stone slab. It is time consuming and laborious process.
7. Blue pottery is reportedly facing unhealthy competition from ceramic products like Khurja Pottery which is similar to blue pottery and also cheap.
8. Artisans and craftsmen are leaving this profession due to no reasonable wages and laborious work.

मांझे से सामने आई थी कला

06 कारोबार

30-40 यूनिट हैं जयपुर में ब्लू पॉटरी की तकरीबन

300 लोग करते हैं एक यूनिट में काम

रिसर्च एंड डवलपमेंट यूनिट हो

यह प्रदेश के लिए गर्व की बात है कि ब्लू पॉटरी 'वन डिस्ट्रिक्ट-वन क्राफ्ट' में अपना स्थान बना पा... है। यहां ब्लू पॉटरी के लिए रिसर्च एंड डवलपमेंट यूनिट स्थापित की जानी चाहिए। इसमें एक सेरेमिक साइंटिस्ट स्थाई रूप से रखा जाए। वहीं एक टेस्ट फर्नेस की स्थापना की जाए।

लीला बोरड़िया, ब्लू पॉटरी एक्स...

हर कोई मुरीद...

बिल क्लिंटन तक कर चुके हैं ब्लू पॉटरी की तारीफ

सवाई रामसिंह द्वितीय ने 19वीं शताब्दी में ब्लू पॉटरी बनवाने की शुरुआत की थी। इसमें नीले रंग की डाई का इस्तेमाल होने से ही इसका नाम ब्लू पॉटरी पड़ा है।

सपने...

वन डिस्ट्रिक्ट वन क्राफ्ट

ब्लू पॉटरी को 'वन डिस्ट्रिक्ट, वन क्राफ्ट' की पहचान तो मिल गई है, लेकिन फिर भी इस क्षेत्र में बहुत काम किया जाना बाकी है। परंपरा से हट कर इसमें नए प्रयोग करने होंगे। अभी युवा इसमें रुचि नहीं ले रहे। भविष्य में यदि ब्लू पॉटरी को बढ़ावा देना है तो सरकार को भी इस दिशा में महत्वपूर्ण कदम बढ़ाने होंगे।।

प्रक्रिया...

सेरेमिक लुग्दी से बनता है आर्टिकल नया

ब्लू पॉटरी के उत्पाद बनाने के लिए सबसे पहले सेरेमिक से आटे की तरह लुग्दी बनाते हैं, फिर उसे सांचे में डालकर आकार दिया जाता है। बर्तन में कोबाल्ट ऑक्साइड देकर रंग भरा जाता है। फिर ग्लेज देने के बाद भट्टी में पकाते हैं।

इरादे...

निर्यात से अर्थव्यवस्था को मिलेगा बूम

ब्लू पॉटरी राजस्थान की इकोनॉमी को बूम दे सकती है, क्योंकि बाहर के देशों में इसे काफी पसंद किया जाता है। इसे बढ़ावा देने से वोकल फॉर लोकल कैम्पेन को भी बल मिलेगा।

भविष्य

सिरेमिक साइंटिस्ट का होना जरूरी

राजस्थान में ब्लू पॉटरी रिसर्च के लिए इसमें एक सेरेमिक साइंटिस्ट नियुक्त हो। यह इसलिए जरूरी है कि ब्लू पॉटरी को बनाने में लैड ऑक्साइड का इस्तेमाल होता है और साइंटिस्ट यह पता लगा सकते हैं कि लैड ऑक्साइड की मात्रा कितनी होनी चाहिए, जो स्वास्थ्य को नुकसान न पहुंचाए। ऐसा हो जाता है तो ब्लू पॉटरी को क्रॉकरी के रूप में भी इस्तेमाल किया जा सकता है और इसकी 50 गुना तक डिमांड बढ़ सकती है। इससे जहां राजस्थान में नए रोजगार के अवसर सर्जित होंगे। ब्लू पॉटरी की देश-विदेश में मांग बढ़ेगी। बोन चाइना की जगह भी लोग ब्लू पॉटरी का उपयोग करने को प्रेरित होंगे।

जिंदा रहे कला

कला को जीवित रखने के लिए कलाकार इसके माइक्रोवेव बाउल्स तक बना रहे हैं

बोन चाइना और ब्लू पॉटरी है अलग

ब्लू पॉटरी बोन चाइना से बेहद अलग है। अक्सर लोग दोनों को एक ही समझ लेते हैं, जबकि बोन चाइना बुरादे से बनती है और ब्लू पॉटरी सिरेमिक की लुग्दी से तैयार होती है। ब्लू पॉटरी को सिंगल फायरिंग में पकाया जाता है, जबकि बोन चाइना के उत्पाद को कई बार हीट किया जाता है।

बदलाव का सफर जारी, नए उत्पाद बने पसंद

पहले ब्लू पॉटरी के उत्पाद सजावट के तौर पर ज्यादा देखने को मिलते थे, अब सजावटी सामान के अलावा अन्य उपयोगी सामान भी ब्लू पॉटरी में शामिल हो गए हैं. खिलौने, फर्नीचर, ज्वैलरी और फैशन व बाथरूम एक्सेसरीज में भी ब्लू पॉटरी जादू बिखेर रही है।

LET'S RECALL

I Fill in the blanks.

1. It is very_____which means it can only be used for decorative purposes.
2. Complaints from_____about the unavailability of proper tools and_____by the government.

II. Answer the following question.

Q1. Write any three challenges that are faced by the blue pottery artisans.

Q2. What strategies can be used to overcome these obstacles?

Photo Credit by : Neerja Blue Pottery

Activity

Aim- To understand the challenges and obstacles faced by the artisans and manufacturers of small-scale industry and also find out the solutions.

Materials Required- Different creative products made by the students

Pre requisite knowledge- Basic knowledge of the challenges faced by the blue pottery industries and the various reform passed by the government in order to support these industries.

Type of Activity- Group

Process-

Arrange the setup for the exhibition and selling of the creative products made by the students. After the exhibition, calculate the profit and loss percent on each product.

Observation and Conclusion-

Students will be able to understand the challenges faced by the artisan and the manufacturers and they will be able to find out the innovative solution of the problems. Through this activity they will develop management, entrepreneurship, collaborative and creative skill.

UNIT – 8

AROUND THE WORLD WITH BLUE POTTERY: GEOGRAPHY AND GLOBAL PRESENCE

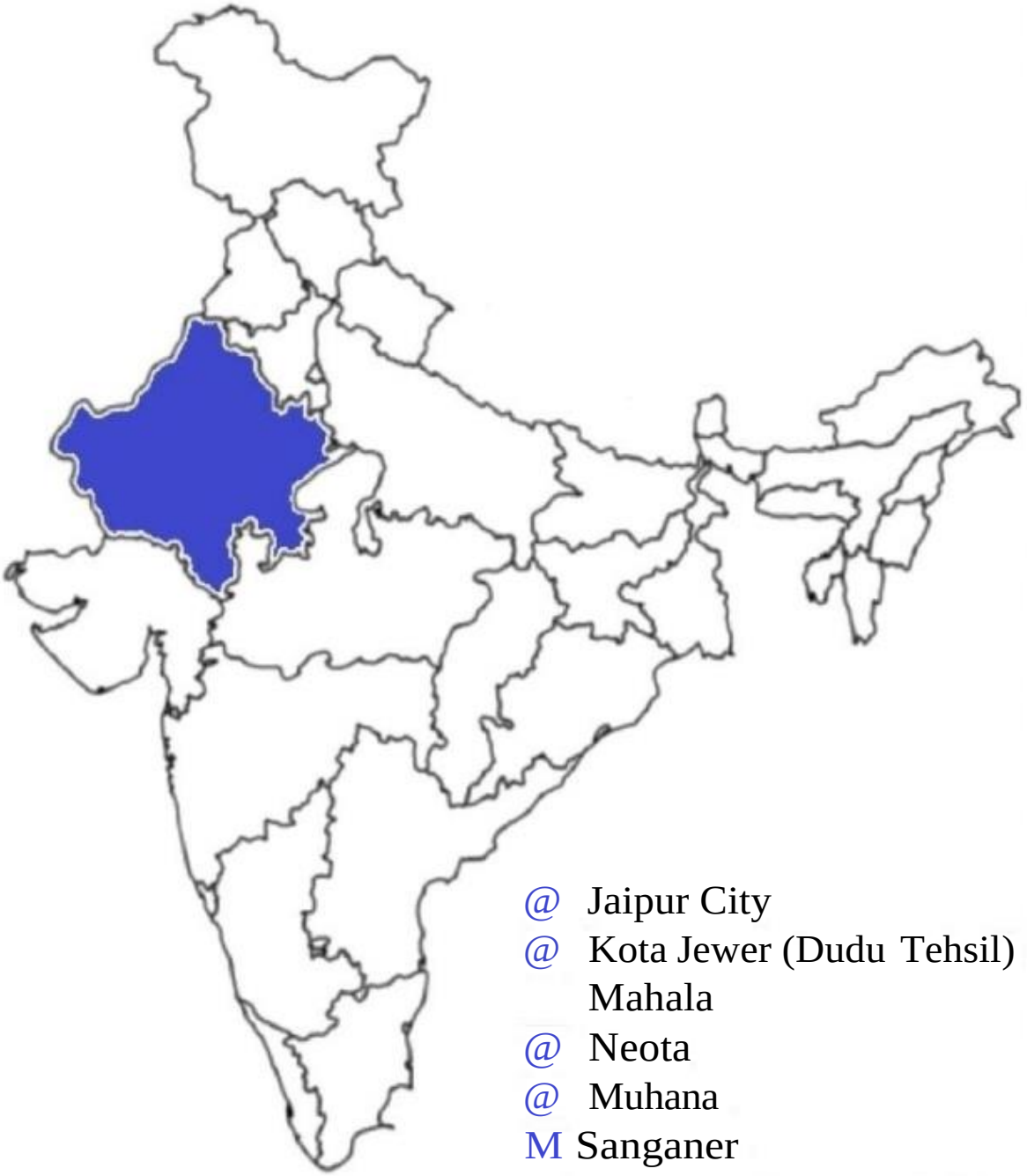
Learning Objectives	Learning Outcomes
To find out theglobal positionof blue pottery. Students will learn the importance of local handicrafts.	Knowledge of global condition of local industries. Preference of handicrafts goodsover branded goods.

The extremely beautiful and delicate articles of blue pottery attracts visitors from all around the world. In the countries like USA, Canada, France, Australia, etc. there is a great demand of blue pottery articles specially vases and products used in home décor. New York solely imports 36 shipments of blue pottery from India and holds the largest share of 20%.

The production units of blue pottery are concentrated in Jaipur and surrounding areas, they are as follows:

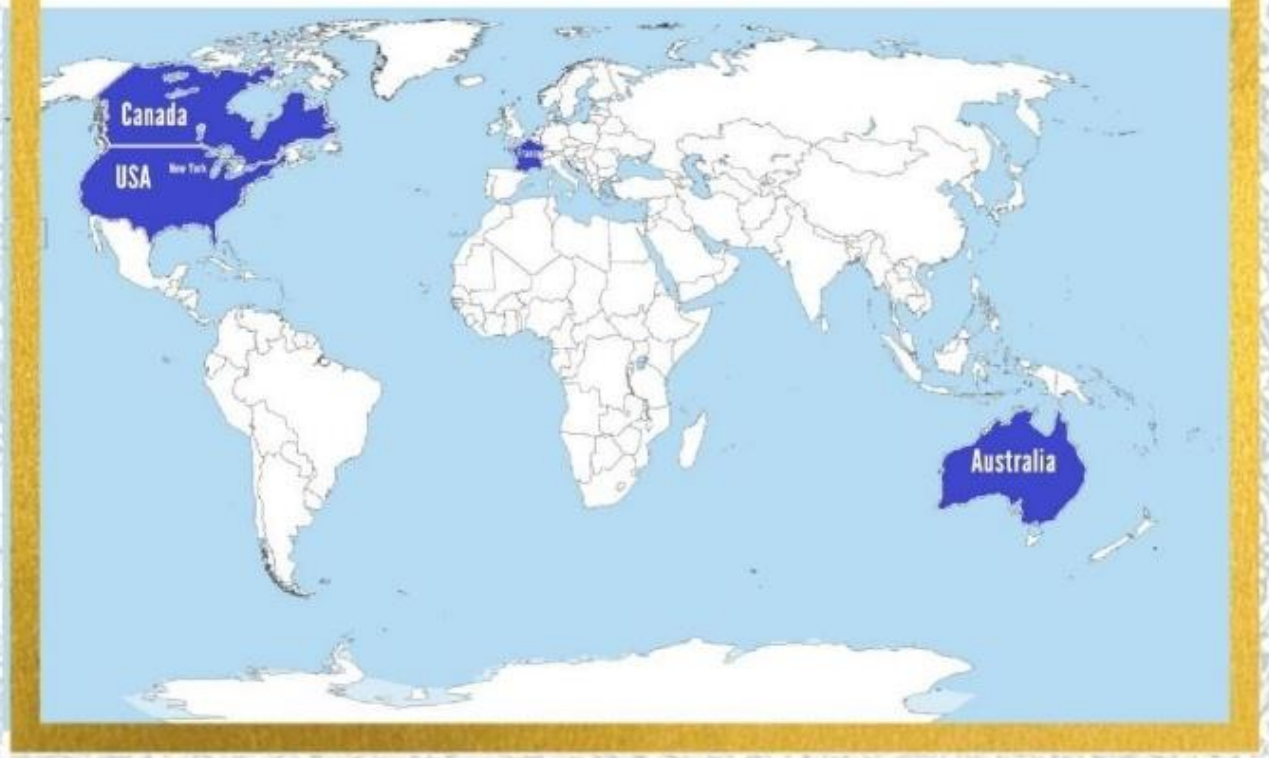
- **Jaipur City**
- **Kota Jewer (Dudu Tehsil)**
- **Mahala**
- **Neota**
- **Muhana**
- **Sanganer**
- **Ramgarh (Amer Tehsil)**
- **Jamdoli**

The Production units of Blue Pottery



@ Jaipur City
@ Kota Jewer (Dudu Tehsil)
Mahala
@ Neota
@ Muhana
M Sanganer
M Ramgarh (Amer Tehsil)
M Jamdoli

Around theworld with Blue Poaery



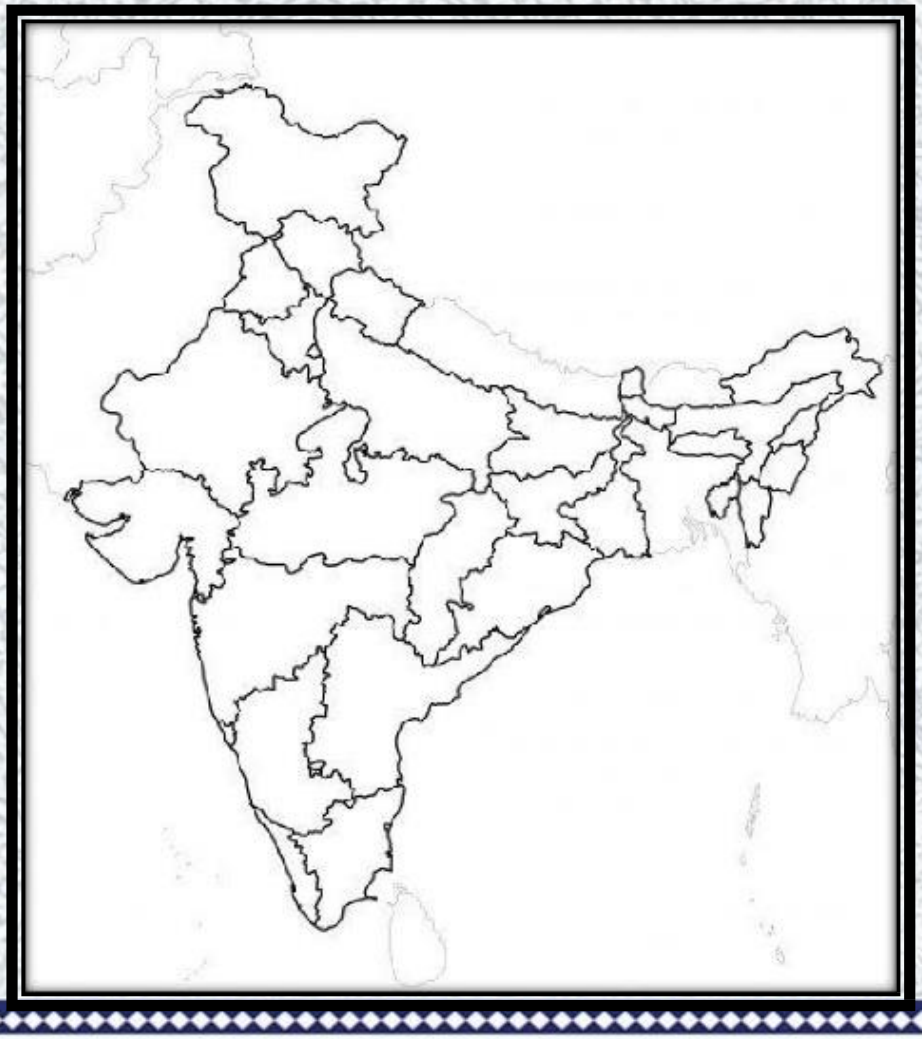
LET'S RECALL

I Fill in the blanks.

1. _____solely imports 36 shipments of blue pottery from Indiaand holds the largest share of 20%.
2. The production units of blue pottery are concentratedin_____.

II Answer the following question.

Q1. Write the names of countries where there is great demand of blue pottery.



Activity

Aim- To find out the different production units of blue pottery in India.

Materials Required- Physical Map of India, Sketch color, Pencil, sheet etc.

Pre-requisite Knowledge- Basic knowledge of the places famous for blue pottery products.

Type of Activity- Individual

Process-

1. Find out the different production units of blue pottery in India.
2. Locate these units on the physical map of India.
3. Color the different production units by using different colors.
4. Paste this map on a sheet.

Observation and Conclusion-

Students will able to know about the position of local industries in India.

Through this activity they will develop critical-thinking, remembering, knowledge and observation skills.

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Glossary

1. **Profession**-a job that needs a high level of training.
2. **Magnificent** -extremely impressive and attractive.
3. **Glimpse**-a short experience of something that helps you understand it.
4. **Synthesizing**-to produce a substance by artificial means.
5. **Scrap**-something that you do not want any more but that is made of material that can be used again.
6. **Lumps**-heap or mass
7. **Adhesive**-any substance that is capable of holding materials together, glue
8. **Composition**-the parts that form something; the way in which the parts of something are arranged.
9. **Fabienne**-finely glazed ceramic beads, figures and other small objects found in Egypt.
10. **Impermeable**-not allowing a liquid or gas to pass through.
11. **Opaque**-that you cannot see through.
12. **Disparity**- condition of being unequal.
13. **Vitrified**-conversion into glass like substance.
14. **Chipping**-to break a small piece off the edge or surface of something.
15. **Kiln**-a thermally insulated chamber, a type of oven, used for hardening or drying of substances.
16. **Caste**-a manufacturing process in which a liquid material is usually poured into a mold.
17. **Fragile**-not durable
18. **Laborious**-that need a lot of time and effort.
19. **Wages**-the regular amount of money that you earn for a day or week
20. **Clusters**-groups