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| <b>Class:8</b> | <b>Subject: SST - Geography</b> | <b>Topic: Industries</b> |
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| <b>SUMMARY SHEET</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <b>Pedagogical Approach: Student – led</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Learner Previous Knowledge</b>          | N.A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Target Knowledge for this Topic</b>     | <p>Usage of resources; What are industries, their role; Evolution of industries in the Industrial Revolution; Stages of production in Industry;</p> <p>Classification of Industries</p> <p>Size: Cottage, Small-scale, Large-scale and their features, products made;</p> <p>Raw Materials: Agro; Mineral; Pastoral; Marine; Forest-based and their features, products made;</p> <p>End-Products: Basic, Intermediate, Consumer Goods and their features, products made;</p> <p>Ownership: Private, Public, Joint, Cooperative and their features, products made;</p> <p>Project: Types of industries found in Assam, the good they produce and its influence on the economy of the state</p> <p>Factors influencing Location</p> <p>Availability of raw materials, power supply, labour, transport, market, capital, water supply, land, climate, government policy and how it influences the location of industries;</p> <p>Industrial Regions: Four Industrial Regions in the World: Eastern part of North America; Western and Central Europe; Eastern Europe; Eastern Asia; Indian Industrial Regions;</p> <p>Industries</p> <p>Iron and Steel Industry: Features; Raw materials used; Locations in the world and India;</p> <p>Textile Industry: Features; Raw materials used; Locations in the world and India; India- cotton, woollen, jute, silk, synthetic;</p> <p>Optional Case Studies - Iron and Steel: Case Study of Jamshedpur in India versus Detroit in USA (Any other industry in the world can also be picked for comparison) (Project-based evaluation only); Cotton Textile: Case Study of Ahmedabad in India versus Osaka in Japan (Any other industry in the world can also be picked for comparison) (Project-based evaluation only);</p> <p>Information Technology Industry: Case study of Silicon Valley in USA versus Bengaluru in India (Any other industry in the world can also be picked for comparison) (Project-based evaluation only)</p> |
| <b>Learning Goals</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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*More Complex Learning Goal- Students will be able to compare and contrast different industries across the world*

*Target Learning Goal- Students will be able to explain the key features of different industries across the world*

*Simpler Learning Goal- Students will be able to describe different types of industries across the world*

| Period No. | Lesson Objectives                                                                                                                                                                                            | Teaching Learning Materials Required                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1          | <ul style="list-style-type: none"> <li>Arrive at secondary sectors in industries</li> <li>Record different kinds of industries</li> </ul>                                                                    | <ul style="list-style-type: none"> <li>Entry Card (for each student): (Annexure 1A)</li> <li>Case studies (one for each group): (Annexure 1B)</li> <li>Record Sheet (for each student): (Annexure 1C)</li> </ul>                                                                                                                                                                                                                                           |
| 2          | <ul style="list-style-type: none"> <li>Categorize industries</li> </ul>                                                                                                                                      | <ul style="list-style-type: none"> <li>Home Work Assignment (for each student): (Annexure 2A)</li> </ul>                                                                                                                                                                                                                                                                                                                                                   |
| 3          | <ul style="list-style-type: none"> <li>Trace the evolution and changing trends in development of industries in India</li> <li>Explain how industrial development affects the economy of a country</li> </ul> | <ul style="list-style-type: none"> <li>Worksheet (for each student): (Annexure 3A)</li> </ul>                                                                                                                                                                                                                                                                                                                                                              |
| 4          | <ul style="list-style-type: none"> <li>Identify and explain the factors that affect industrial growth</li> </ul>                                                                                             | <ul style="list-style-type: none"> <li>Set your own industry sheet (one for each student): (Annexure 4A)</li> </ul>                                                                                                                                                                                                                                                                                                                                        |
| 5          | <ul style="list-style-type: none"> <li>Identify and describe the location and features of textile industries</li> </ul>                                                                                      | <ul style="list-style-type: none"> <li>Research Sheet 1 (for each student in Group 1): (Annexure 5A)</li> <li>Research Sheet 2 (for each student in Group 2): (Annexure 5B)</li> <li>Research Sheet 3 (for each student in Group 3): (Annexure 5C)</li> <li>Research Sheet 4 (for each student in Group 4): (Annexure 5D)</li> <li>Research Sheet 5 (for each student in Group 5): (Annexure 5E)</li> <li>Research Sheet 6 (for each student in</li> </ul> |

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|         |                                                                                                                            | Group 6): (Annexure 5F)                                                                                                                                                                                                                                                                                                                                                                                   |
| 6       | <ul style="list-style-type: none"> <li>Identify and describe the industrial regions in the world</li> </ul>                | <ul style="list-style-type: none"> <li>Research sheet 1 (for each student in 2 groups): (Annexure 6A)</li> <li>Research Sheet 2 (for each student in 2 groups): (Annexure 6B)</li> <li>Research Sheet 3 (for each student in 2 groups): (Annexure 6C)</li> <li>Research Sheet 4 (for each student in 2 groups): (Annexure 6D)</li> <li>Handout: Annexure 6E</li> <li>Reference Book in Library</li> </ul> |
| 7       | <ul style="list-style-type: none"> <li>Identify, describe and present on industrial regions in the world</li> </ul>        | <ul style="list-style-type: none"> <li>N.A.</li> </ul>                                                                                                                                                                                                                                                                                                                                                    |
| 8 and 9 | <ul style="list-style-type: none"> <li>Compare different industrial belts across the world through case studies</li> </ul> | <ul style="list-style-type: none"> <li>Research sheet (one for each student): (Annexure 8A for students of group 1, Annexure 8B for students of group 2, Annexure 8C for students of group 3))</li> </ul> <p><i>Please note that lessons 8 and 9 need to be combined</i></p>                                                                                                                              |

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## Lesson Plan 1

### Lesson Objectives

**At the end of this lesson students will be able to:**

- Arrive at secondary sectors in industries
- Record different kinds of industries

### Teaching Learning Materials required

- Entry Card (for each student): (Annexure 1A)
- Case studies (one for each group): (Annexure 1B)
- Record Sheet (for each student): (Annexure 1C)

### Details of Teaching Learning Experience

**Seating Arrangement:** In 8 groups

|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                         |
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| <b>Lesson Beginning</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Introduce topic               | <u>Entry Card</u> <ul style="list-style-type: none"> <li>• Distribute entry cards to individual students. (Reference: Annexure 1A)</li> <li>• Let students study the entry cards and come up with answers individually.</li> <li>• Based on their response, arrive at secondary sectors in industries.</li> <li>• Let students exemplify the secondary sectors on their own.</li> </ul> |
| <b>Lesson Middle</b><br><u>Time:</u> 20 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Case Studies</u> <ul style="list-style-type: none"> <li>• Distribute 8 different case studies to 8 groups. (Reference: Annexure 1B)</li> <li>• Provide with Record sheets (Reference: Annexure 1C) to each student.</li> <li>• Let the students in each group fill their record sheets based on the case studies.</li> </ul>                                                         |
| <b>Lesson End</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Finish up                           | <u>Home Assignment</u> <ul style="list-style-type: none"> <li>• Ask students to read the lesson nicely before completing the record sheet.</li> <li>• Ask students to bring and present their record sheets in the next class.</li> </ul>                                                                                                                                               |

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**Annexure 1A- Entry Card**

**Think Think!**

Every page that you use for writing has come to you after a long process of manufacturing. Discuss in your groups what this process could be.

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### Annexure 1B- Case study 1



Amul is India's one of the largest dairy cooperatives based at Anand in the state of Gujarat. It was formed in 1946. It provides employment to around 3 million people. The Amul Model is a three-tier structure. This structure consists of a dairy cooperative society at the village level affiliated to a milk union at the district level which in turn is federated into a milk federation at the state level. Milk collection is done at the village dairy society, milk procurement and processing at the District Milk Union and milk products marketing at the state milk federation. Amul's product range includes milk powders, milk, butter, ghee, cheese, Masti Dahi, Yoghurt, Buttermilk, chocolate, ice cream, cream, shrikhand, paneer, gulab jamuns, flavoured milk, basundi, Amul Pro brand and others.

### Case Study 2



Raymond is India's one of the leading and world's third manufacturers of soft, fine, smooth yarn of the world. The company was established in 1925 as a public company in Thane, Maharashtra.

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This public sector company apart from making suiting also makes readymade garments, designer apparels, cosmetics & toiletries, engineering files and tools etc. The headquarters is in Mumbai, India. The company mainly uses raw materials like wool, silk, cotton to create such fine fabrics.

### Case Study 3



Tata Steel Limited or TISCO is India's largest steel plant in India. Jamsetji Nusserwanji Tata established this steel and Iron plant in August 25<sup>th</sup>, 1907. It is the first private iron steel plant that was built in India. It is 11th largest steel producing company in world in 2013. It is located in Jamshedpur (Jharkhand), on the Subernarekha River. It is a public industry which gives employment to around 80, 391 people. Company mainly uses iron ore, coal, limestone, manganese as it raw material to produce steel, flat steel product, long steel product, wires, plates.

### Case Study 4



Steel Authority of India Limited (SAIL) is one of the largest state-owned steel making companies based in Delhi, India. It is one of the top steel makers of the world. It is owned and operated by the Government of India. SAIL traces its origin from Hindustan Steel limited which was setup in 19<sup>th</sup> January 1954. SAIL operates and owns 5 integrated steel plants at Rourkela, Bhilai, Durgapur, Bokaro and Burnpur. Around 97,897 people work as a part of SAIL. The head quarter is at New Delhi, India. The company uses raw materials such as iron ore, coal, limestone,

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manganese etc. to produce Steel, flat steel products, long steel products, wire products and plates.

### Case Study 5



Ballarpur Industries Limited (BILT) is India's largest manufacturer of writing and printing (W&P) paper. The company was founded by Lala Karamchand Thapar in 1945 as Ballarpur Paper and Straw Board Mills Limited. Later in 1975, it was renamed as Ballarpur Industries Limited. It has Gurgaon, Haryana as its headquarters. It is a public domain company. It has three nurseries from where it gets its raw material i.e. wood. In India, the company has six manufacturing units. The company has a dominant share of the high-end coated paper segment in India. In 2005, BILT entered into the tissue and hygiene business with two brands: Etiquette and Spruce-up.

### Case Study 6



Himalaya Drug Company was founded by M. Manal. Starting off operations in Dehradun way back in the 1930s, the company later spread its wings to Mumbai and then across the country. In 1975, the company set up an advanced manufacturing facility in Makali, Bangalore, India. The main idea to establish this company was to treat illness with the help of natural herbs under the guidance of ayurvedic ideology. The company has more than 70 researchers that utilize ayurvedic herbs and minerals to produce medicines which are manufactured in the form of medicinal drugs. They produce various products ranging from herbal medicines to personal care products. *Liv.52*, was the first hepatic cure product manufactured by this company.

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### Case Study 7



Marine Products Export Development Authority (MPEDA) was constituted in 1972. It functions under the Ministry of Commerce, Government of India and acts as a coordinating agency with different Central and State Government establishments engaged in fishery production and allied activities. The role of MPEDA is to cover all kinds of fisheries, increasing exports, specifying standards, processing etc. The main states where this association works are Kerala, Maharashtra, Tamil Nadu, Gujarat, Pondicherry, West Bengal, Karnataka, Orissa, Goa, Andhra Pradesh, Andaman & Nicobar island, Lakshadweep. Till the end of 1960, export of Indian marine products mainly consisted of dried items like dried fish and dried shrimp. Only since 1961 the export of dried marine products was overtaken by export of frozen items leading to a steady progress in export earnings.

### Case Study 8



The Seafood Export Industry in India is over 50 years old and was initiated when the first shipment of frozen shrimp was sent from the port of Cochin in 1953 by Mr. Madhavan Nair owner of Cochin Company. Initially they exported only shrimps. Later they started to export other varieties of Fish, Squid, Cuttlefish, Octopus, Crabs, Clams and Mussels.

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**Name:** \_\_\_\_\_

**Skill – Critical thinking**

**Annexure 1C – Record Sheet**

**Directions:** Read the case study given to you and discuss the answer of question given below:

**1. Name of the industry.**

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**2. What are the raw materials used in this industry?**

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**3. Where is this industry located?**

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**4. Name some products that are produced by this industry?**

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**5. What type of ownership these companies have?**

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**6. What is the size of the industry?**

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## Lesson Plan 2

### Lesson Objectives

**At the end of this lesson students will be able to:**

- Categorize industries

### Teaching Learning Materials required

- Home Work Assignment (for each student): (Annexure 2A)

### Details of Teaching Learning Experience

**Seating Arrangement:** In 10 groups

|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Lesson Beginning</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Activate prior knowledge      | <u>Group Presentation</u> <ul style="list-style-type: none"> <li>• Let students assemble in 8 different groups. (from previous class)</li> <li>• Ask each group to select a representative who will present their record sheets.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Lesson Middle</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Continue with Presentation</u> <ul style="list-style-type: none"> <li>• Let the groups present their record sheets.</li> <li>• Let other groups ask questions and brainstorm.</li> <li>• Based on students' response, arrive at the different categories of industries in India.</li> </ul>                                                                                                                                                                                                                                                                                                                                                         |
| <b>Lesson End</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Finish up                           | <u>Finish Up</u> <ul style="list-style-type: none"> <li>• Give students some pointers such as:           <ul style="list-style-type: none"> <li>○ Is there any connection between all these categories? For example: Is there any connection between agro-based and pastoral industries?</li> <li>○ How will you categorize dairy or cattle rearing and processing of dairy products?</li> <li>○ What is the difference between joint industry and co-operative industry?</li> </ul> </li> <li>• Finish up.</li> <li>• Distribute homework assignments among students. (Reference: Annexure 2A) and ask them to bring it in the next class.</li> </ul> |



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### Lesson Plan 3

#### Lesson Objectives

**At the end of this lesson students will be able to:**

- Trace the evolution and changing trends in development of industries in India
- Explain how industrial development affects the economy of a country

#### Teaching Learning Materials required

- Worksheet (for each student): (Annexure 3A)

#### Details of Teaching Learning Experience

**Seating Arrangement:** Groups of 4

|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <b>Lesson Beginning</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Activate prior knowledge      | <u>Home Work Assignment</u> <ul style="list-style-type: none"> <li>• Ask students to share their homework assignments.</li> <li>• Based on students' response, arrive at the evolution and changing trends in industrial development in India.</li> </ul>                                                                                                                                                                                                                                               |
| <b>Lesson Middle</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Thought-provoking discussion</u> <ul style="list-style-type: none"> <li>• Pose a question to the class: Does industrial development affect the economy of a country in any way. If so, then how?</li> <li>• Let the students discuss in groups and come up with answers.</li> <li>• Hold a discourse in class.</li> <li>• Collate students' response on the board.</li> <li>• Arrive at the fact that industrial development leads to a boom in economy of a country. Give some examples.</li> </ul> |
| <b>Lesson End</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Recap student learning              | <u>Worksheet</u> <ul style="list-style-type: none"> <li>• Distribute worksheets to students. (Reference: Annexure 3A)</li> <li>• Collect worksheets.</li> </ul>                                                                                                                                                                                                                                                                                                                                         |

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**Name:** \_\_\_\_\_

**Skill – Analytical thinking**

### **Annexure 3A**

**Classify the industries given below into categories based on any one parameter**

#### **Ultra Tech Cement Limited**

Ultra Tech cement Limited is India's largest cement manufacturing company. The company belongs to public sector and was founded in the year 1983. The company is the part of Aditya Birla Group. As the largest cement company in India, Ultra-Tech provides a range of products that cater to the needs of various aspects of construction, ranging from foundation to finish. This includes Ordinary Portland Cement, Portland Blast Furnace Slag Cement, Portland cement, White Cement, Ready Mix Concrete, Building Products and a host of other building solutions.

#### **Bharat Heavy Electricals Limited**

Bharat Heavy Electricals Limited (BHEL), owned by Government of India, is a power plant. The company was established in 1964. It is an electrical manufacturing industry. The company is a public sector company which gives employment to around 47, 525 people. It is a worldwide famous company. It has a network of 17 manufacturing units. Along with electrical equipment it also provides services like thermal power plant, nuclear power plant, and hydro power plant.

#### **Green ply Industries Limited**

Green ply Industries Limited (GIL) is the largest interior infrastructure company of India. The company was established as "Mittal Laminates Private Limited" on 28 November 1990 then gradually as Green ply Industries Limited in 1996. Its first manufacturing plant was established in 1993 at Behror, Rajasthan. The company mainly uses wood as its raw material to manufacturers such as various interior infrastructure products such as plywood, block board, decorative laminates, decorative veneers Fiber board, laminate flooring.

#### **Maruti Suzuki India Limited**

Maruti Suzuki India Limited is an automobile manufacturing company in India. The industry is basically a joint sector industry. Maruti manufacture a wide range of automobiles ranging from Alto, Ritz, Celerio, Swift, Wagon R, Zen and sedans etc. The company was founded in 1981. It gives employment to around 7000 people. Mainly heavy metal is the raw material that is being used by the company.

#### **Oil and Natural Gas Corporation Limited**

Oil and Natural Gas Corporation Limited (ONGC) is a Public Sector Undertaking (PSU) of the Government of India. It is India's largest oil and gas exploration and production company.

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ONGC was founded on 14 August 1956 by Government of India. Around 32, 923 people in ONGC. ONGC supplies crude oil, natural gas, and value-added products to major Indian oil and gas refining and marketing companies. Its primary products crude oil and natural gas are for Indian market.

#### **Lesson Plan 4**

#### **Lesson Objectives**

**At the end of this lesson students will be able to:**

- Identify and explain the factors that affect industrial growth

#### **Teaching Learning Materials required**

- Set your own industry sheet (one for each student): (Annexure 4A)

#### **Details of Teaching Learning Experience**

**Seating Arrangement:** Groups of 4

|                                                                                                     |                                                                                                                                                   |
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| <b>Lesson Beginning</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Introduce the topic           | <u>Set your own Industrial Project</u> <ul style="list-style-type: none"> <li>• Distribute Annexure 4A to each student in groups of 4.</li> </ul> |
| <b>Lesson Middle</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Project</u> <ul style="list-style-type: none"> <li>• Let each group do their project.</li> <li>• Let the groups share their ideas.</li> </ul>  |
| <b>Lesson End</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Finish up                           | <u>Finish up</u> <ul style="list-style-type: none"> <li>• Finish up.</li> </ul>                                                                   |

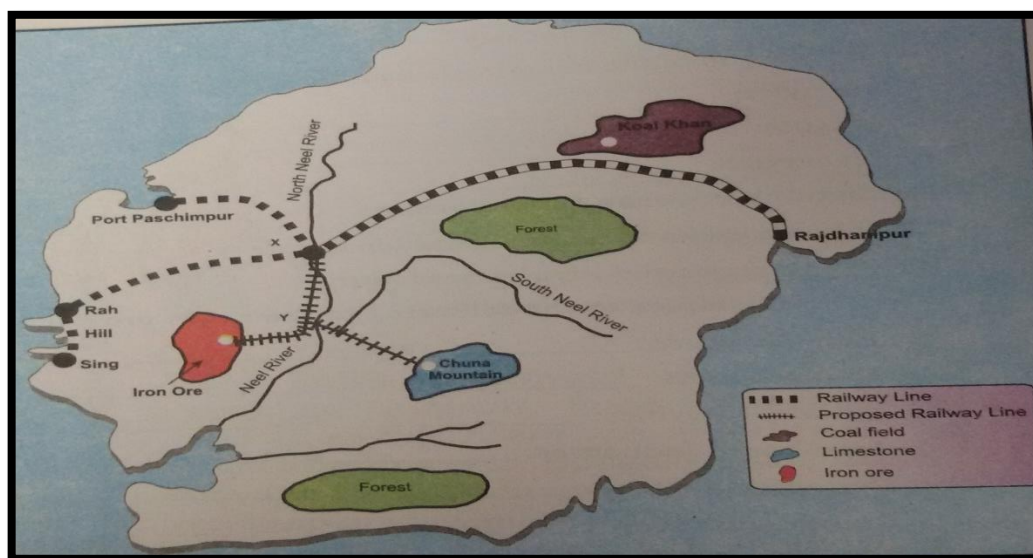
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### Annexure 4A- Set your own industry!

#### Directions:

Suppose that you are members of the Board of Directors who are facing a problem of choosing a suitable site for an iron and steel plant of Progressive Island. A team of technical experts has submitted a report with notes and a map. The team considered access to iron ore, coal, water and limestone, as well as the main market, sources of labour and port facilities. The team has suggested two sites X and Y. The board of directors has to take the final decision about where to locate the steel plant.

- Study the map given below to find out the distances of the resources from each site.
- Each resource a 'weight' from 1 to 10, according to its importance.
- The greater the 'pull' of the factor on the industry the higher is the weight from 1 to 10.
- Then complete the table given below.
- The site with the lowest total should be the most satisfactory site.



#### Factors affecting the location of a proposed Industry:

- **Iron ore:** large deposit of low grade iron ore. Long distance transportation of the ore could be uneconomic.
- **Coal:** Coalfield contains rich deposits of high grade coal. Transportation is by railway, which is relatively cheap.
- **Limestone:** Widely available over the island, but the purest deposits are in the Chuna Mountains.

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- *Water*: Both the tributaries of River Neel carry sufficient water to supply a large iron and steel plant in all seasons. The sea water because of its high salt content is unsuitable.
- *Market*: It is expected that the chief market for the Plant's products will be the engineering works of Rajdhanipur. Transport costs for the products- mainly small steel bars and light steel plates would be relatively low.
- *Labour supply*: This will have to be recruited mainly from the unskilled workers in the 3 fishing villages of Hil, Rah and Sing. It is expected that most workers will commute daily from their present homes.
- *Port facilities*: These are at present minimal. There is a good, deep natural harbour at port Paschimpur developed to import metal alloys.

| Resource      | Distance from X | Distance | Weightage*<br>1-10 | Distance X<br>weight for<br>site X | Distance X<br>weight for<br>site Y |
|---------------|-----------------|----------|--------------------|------------------------------------|------------------------------------|
| Iron ore      |                 |          |                    |                                    |                                    |
| Coal          |                 |          |                    |                                    |                                    |
| Limestone     |                 |          |                    |                                    |                                    |
| Water         |                 |          |                    |                                    |                                    |
| Chief market  |                 |          |                    |                                    |                                    |
| Labour supply |                 |          |                    |                                    |                                    |
|               |                 |          | Total =            |                                    |                                    |
|               |                 |          |                    |                                    |                                    |

\* The larger the pull, the higher the weightage

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## Lesson Plan 5

### Lesson Objectives

**At the end of this lesson students will be able to:**

- Identify and describe the location and features of textile industries

### Teaching Learning Materials required

- Research Sheet 1 (for each student in Group 1): (Annexure 5A)
- Research Sheet 2 (for each student in Group 2): (Annexure 5B)
- Research Sheet 3 (for each student in Group 3): (Annexure 5C)
- Research Sheet 4 (for each student in Group 4): (Annexure 5D)
- Research Sheet 5 (for each student in Group 5): (Annexure 5E)

*Pre-class preparation: Please arrange for cloth samples of cotton, jute, silk, wool, acrylic and synthetic fabrics. Each group will get a different fabric to research on*

### Details of Teaching Learning Experience

**Seating Arrangement:** In 5 groups

|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lesson Beginning</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Introduce the topic           | <u>Preparation for research</u> <ul style="list-style-type: none"> <li>Distribute 5 cloth samples to 5 groups. Each group will research on a different cloth sample.<br/>           Group 1 – Cotton<br/>           Group 2 – Jute<br/>           Group 3 – Silk<br/>           Group 4 – Acrylic<br/>           Group 5 – Wool</li> <li>Provide Research Sheets to each student in a group. (Reference: Annexure 5A to Group 1, Annexure 5B to Group 2, Annexure 5C to Group 3, Annexure 5D to Group 4, Annexure 5E to Group 5)</li> </ul> |
| <b>Lesson Middle</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Research in groups</u> <ul style="list-style-type: none"> <li>Let the groups research on their assigned fabric.</li> <li>Take students to library and let them research in books based on fabric and clothes or magazines.</li> <li>Teacher should in advance arrange few books on different fabrics for students to research.</li> </ul>                                                                                                                                                                                                |
| <b>Lesson End</b><br><u>Time:</u> 15 minutes                                                        | <u>Presentation</u> <ul style="list-style-type: none"> <li>Let the groups present their research sheets.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                         |

|                |                                     |                          |
|----------------|-------------------------------------|--------------------------|
| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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|                           |                                                                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Purpose:</u> Finish up | <ul style="list-style-type: none"> <li>Based on students' response, arrive at the location and features of textile industries.</li> <li>Finish up.</li> </ul> |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Name:** \_\_\_\_\_

**Skill – Research and evidence**

### **Annexure 5A**

#### **Directions:**

- Based on the parameters mentioned below, conduct a research on the cloth samples provided to you.

#### **Research Parameters**

- Name of the cloth sample
- Raw materials
- Source of the raw material
- End-Products
- By products, if any
- Process of turning the raw material into a finished product
- Name at least three industries that produce this raw material

|                |                                     |                          |
|----------------|-------------------------------------|--------------------------|
| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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**Name:** \_\_\_\_\_

**Skill – Research and evidence**

### **Annexure 5B**

#### **Directions:**

1. Based on the parameters mentioned below, conduct a research on the cloth samples provided to you.

#### **Research Parameters**

- Name of the cloth sample
- Raw materials
- Source of the raw material
- End-Products
- By products, if any
- Process of turning the raw material into a finished product
- Name at least three industries that produce this raw material

|                |                                     |                          |
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| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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**Name:** \_\_\_\_\_

**Skill – Research and evidence**

### **Annexure 5C**

#### **Directions:**

1. Based on the parameters mentioned below, conduct a research on the cloth samples provided to you.

#### **Research Parameters**

- Name of the cloth sample
- Raw materials
- Source of the raw material
- End-Products
- By products, if any
- Process of turning the raw material into a finished product
- Name at least three industries that produce this raw material

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| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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**Name:** \_\_\_\_\_

**Skill – Research and evidence**

**Annexure 5D**

**Directions:**

1. Based on the parameters mentioned below, conduct a research on the cloth samples provided to you.

**Research Parameters**

- Name of the cloth sample
- Raw materials
- Source of the raw material
- End-Products
- By products, if any
- Process of turning the raw material into a finished product
- Name at least three industries that produce this raw material

**Name:** \_\_\_\_\_

**Skill – Research and evidence**

**Annexure 5E**

|                |                                     |                          |
|----------------|-------------------------------------|--------------------------|
| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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**Directions:**

1. Based on the parameters mentioned below, conduct a research on the cloth samples provided to you.

**Research Parameters**

- Name of the cloth sample
- Raw materials
- Source of the raw material
- End-Products
- By products, if any
- Process of turning the raw material into a finished product
- Name at least three industries that produce this raw material

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| <b>Class:8</b> | <b>Subject: SST - Geography</b> | <b>Topic: Industries</b> |
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## Lesson Plan 6

### Lesson Objectives

**At the end of this lesson students will be able to:**

- Identify and describe four industrial regions in the world

### Teaching Learning Materials required

- Research sheet 1 (for each student in 2 groups): (Annexure 6A)
- Research Sheet 2 (for each student in 2 groups): (Annexure 6B)
- Research Sheet 3 (for each student in 2 groups): (Annexure 6C)
- Research Sheet 4 (for each student in 2 groups): (Annexure 6D)
- Handout for reference: (Annexure 6E)

### Details of Teaching Learning Experience

**Seating Arrangement:** In 8 groups, in computer lab

|                                                                                                     |                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lesson Beginning</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Introduce the topic           | <u>Research Instructions</u> <ul style="list-style-type: none"> <li>Ask students to form 8 groups.</li> <li>Distribute Research Sheets to individual students in each of the groups such that 2 groups get the same research sheets. (Reference: Annexure 6A, 6B, 6C and 6D)</li> </ul> |
| <b>Lesson Middle</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Group Research</u> <ul style="list-style-type: none"> <li>Inform students that they will have to research based on the research sheets.</li> <li>Let the groups research on their allotted industrial region.</li> </ul>                                                             |
| <b>Lesson End</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Finish up                           | <u>Finish up</u> <ul style="list-style-type: none"> <li>Finish up.</li> <li>Ask the groups to bring their research sheets for presentation in the next class.</li> </ul>                                                                                                                |

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| <b>Class:8</b> | <b>Subject: SST - Geography</b> | <b>Topic: Industries</b> |
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Name: \_\_\_\_\_

Skill – Research and evidence

### Annexure 6A-Research Sheet 1

**Directions:**

1. Notice the world industrial regions in the map.
2. Conduct research on the industrial regions across the world based on the given parameters.
3. Use the given web links to conduct research.
4. Prepare for a presentation on your research in the next class.



Name of the industrial region: Eastern part of North America.

### Research Parameters

- Countries

|                |                                     |                          |
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| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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- Names of industries
- Raw materials used
- Areas where the products are exported
- Effect on world economy

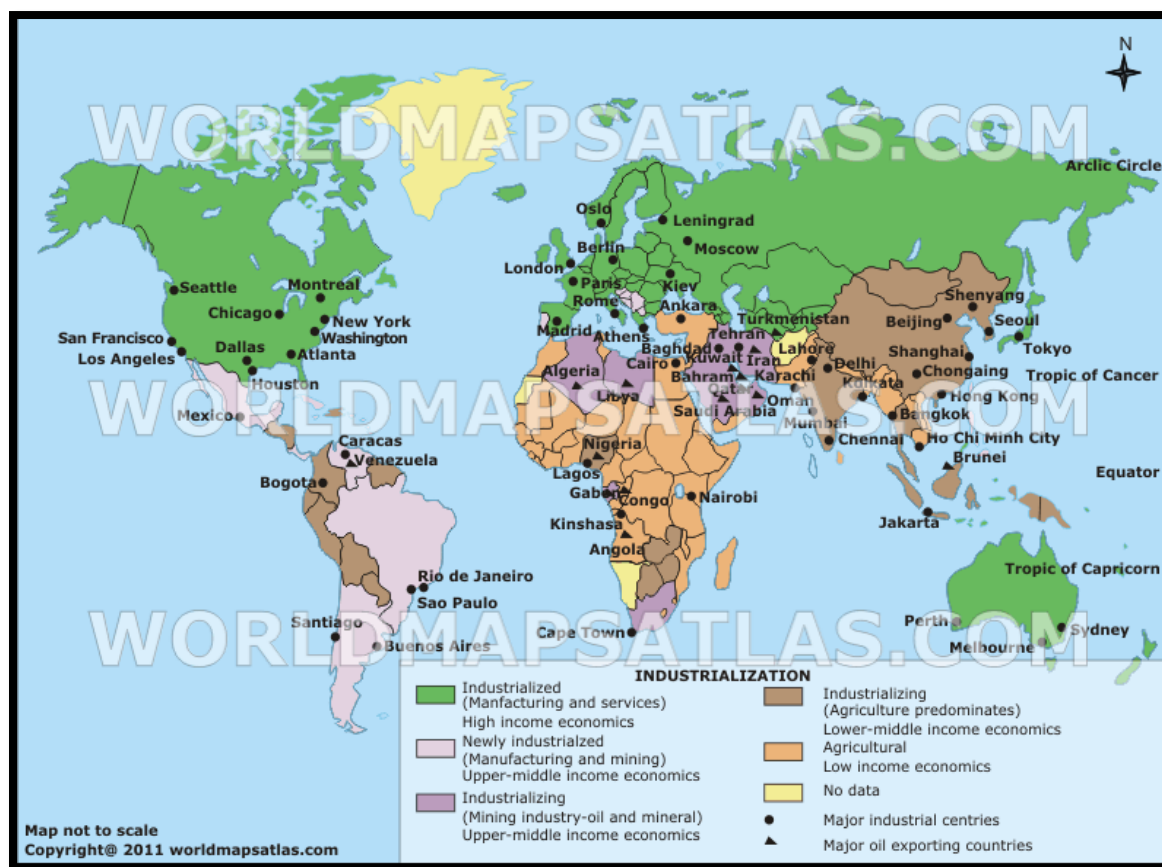
Name: \_\_\_\_\_

Skill – Research and evidence

## Annexure 6B-Research Sheet 2

Directions:

1. Notice the world industrial regions in the map.
2. Conduct research on the industrial regions across the world based on the given parameters.
3. Use the given web links to conduct research.
4. Prepare for a presentation on your research in the next class.



Name of the industrial region: Western and Central Europe

## Research Parameters

|                |                                 |                          |
|----------------|---------------------------------|--------------------------|
| <b>Class:8</b> | <b>Subject: SST - Geography</b> | <b>Topic: Industries</b> |
|----------------|---------------------------------|--------------------------|

- Countries
- Names of industries
- Raw materials used
- Areas where the products are exported
- Effect on world economy

Name: \_\_\_\_\_

Skill – Research and evidence

### Annexure 6C-Research Sheet 3

#### Directions:

1. Notice the world industrial regions in the map.
2. Conduct research on the industrial regions across the world based on the given parameters.
3. Use the given web links to conduct research.
4. Prepare for a presentation on your research in the next class.



Name of the industrial region: Eastern Europe

#### Research Parameters

|                |                                 |                          |
|----------------|---------------------------------|--------------------------|
| <b>Class:8</b> | <b>Subject: SST - Geography</b> | <b>Topic: Industries</b> |
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- Countries
- Names of industries
- Raw materials used
- Areas where the products are exported
- Effect on world economy

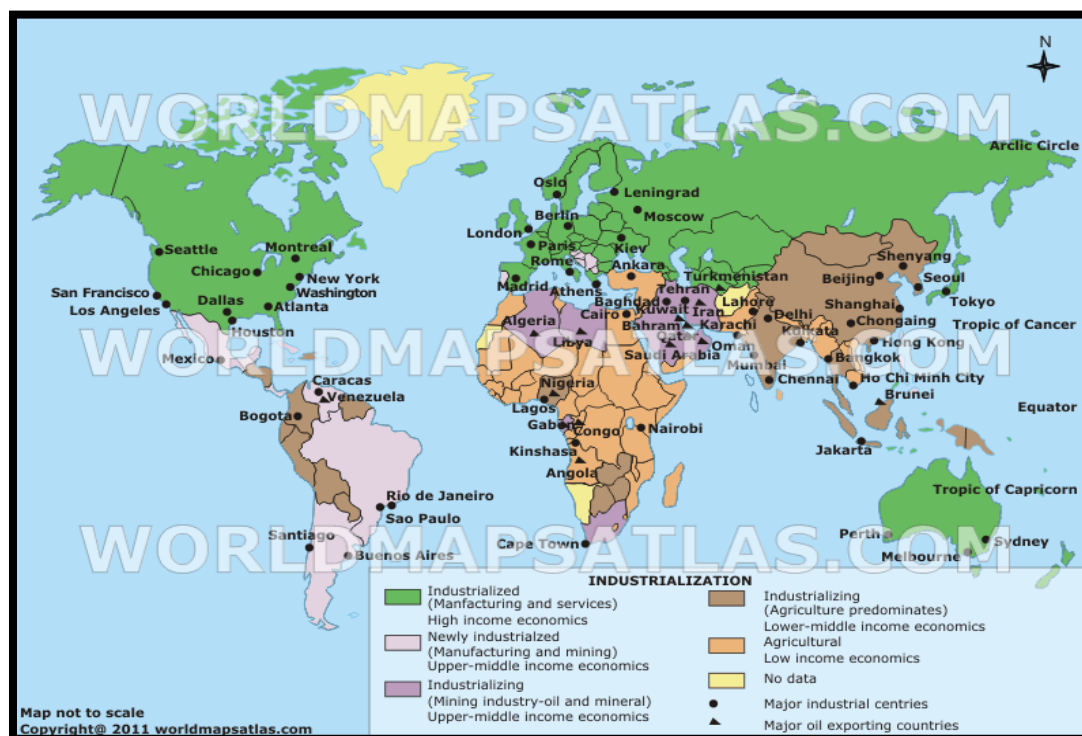
Name: \_\_\_\_\_

Skill – Research and evidence

### Annexure 6D-Research Sheet 4

#### Directions:

1. Notice the world industrial regions in the map.
2. Conduct research on the industrial regions across the world based on the given parameters.
3. Use the given web links to conduct research.
4. Prepare for a presentation on your research in the next class.



Name of the industrial region: Eastern Asia

#### Research Parameters

- Countries
- Names of industries

|                |                                     |                          |
|----------------|-------------------------------------|--------------------------|
| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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- **Raw materials used**
- **Areas where the products are exported**
- **Effect on world economy**

## **Annexure 6E**

### **1. North American Region:**

About four-fifth of the industrial output in this region is contributed from United States of America. Another major producing country is Canada.

#### **(i) United States of America:**

USA is the most dominant industrial super-power in the world. The total contribution of industry in the national Gross Domestic Product (GDP) in 1995 was 31 per cent of the total i.e. \$ 6,952,020 million. The value of Merchandise import and export in 1996 was \$ 814,888 and \$ 575,477, respectively. At least 26% of the population are directly or indirectly involved in manufacturing activities.

The manufacturing activities are available almost in all states, though some regions have wider concentration of industries, particularly in the north-eastern states. It is, however, very difficult to delineate the boundaries of different industrial regions, because most of the regions are geographically inseparable.

The industrial units in USA may broadly fall into following regions:

1. The New England Regions.
2. The New York-Mid-Atlantic Region.
3. Mid-Western Region.
4. North-Eastern Region.
5. The Southern Region.
6. Western Region.
7. The Pacific Region.

#### **1. The New England Region:**

The vast New England industrial region comprises six states, namely Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire and Maine. This is the largest single industrial region

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on earth. The nucleus of the region is Boston Metropolitan region. The major industries in this region are electrical machinery, textiles, machinery, leather, fabricated metals and other industries.

In fact, industrial structure here is very diversified. This is one of the oldest industrial regions in USA, contributing 15 per cent of the yearly output of the nation. The major centres in this region are Connecticut, Massachusetts, and Rhode Island. This industrial region enjoys advantages of huge capital, good communication, export facilities, cheap and skilled labour and vast market.

The entire industrial region is broadly divided into eastern and western part. In the eastern part, the major industrial areas are Providence, Brookston, New Bedford and Merrimac valley. In the western part, the major centres are Hartford, New Heaven and Springfield. Most of the traditional industries are located in the eastern region, while western region possesses the industries of high growth rate.

## 2. The New York and Mid-Atlantic Region:

This region extends from New York to Baltimore. In Middle Atlantic States, industrial centres are scattered over New Jersey, Pennsylvania, Maryland, Delaware, Philadelphia and Baltimore. Other smaller centres are Sparrows Point, Bethlehem etc. In New York region, the centres are Rochester, Syracuse, Buffalo, Utice etc. This industrial region contributes variety of manufacturing items but steel production in the region is quite spectacular.

## 3. The Mid-Lake Region:

This is the region having greatest concentration of ferrous industries. This region accounts about 1/4th of ferrous and Ferro-alloy products of the country. The famous Youngstown-Pittsburg-Johnstown iron and steel triangle is located in the region. The other steel producing areas are Wheeling, Cleveland, Louisville, Rook-ford, Flint, Steubenville and Detroit.

The other manufacturing centres engaged in diversified manufacturing activities are Chicago, Anderson, Midland, Iowa, St. Louis, Minneapolis etc. In cities like Detroit, several industries have developed including motor vehicles, machinery, fabricated metals, machine tools and electronics.

The Lake Superior iron ore and Appalachian coal provide major raw materials and extensive hinterland for marketing facilities mostly helped for the massive development of this region.

## 4. North-Eastern Region:

This region covers the industrial regions of the Ohio, Michigan, and Wisconsin etc. The combined output of the manufacturing goods in this region is very high.

## 5. The Southern Industrial Region:

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The southern industrial region extends from North Carolina in the east to the Texas in the south central region of the country. The major industrial states in this region are Texas and North Carolina. The other states having considerable industries are Mississippi, Tennessee, Georgia, Florida, Alabama, Oklahoma and Texas.

Basically, this industrial region produces more agro-based items rather than the basic industrial goods. The major industrial product includes textiles, food and beverages, tobacco and furniture. Apart from these industries, Texas region is having industries like petro-chemicals, aircraft and heavy chemicals.

The industrial development in south is the recent phenomenon. Only after Second World War this region became the leading industrial region. The major industrial cities are Jackson, Baton Rouge, Houston, Oklahoma, Montgomery etc.

#### 6. The Western Region:

This is one of the less developed region in industry, comprises the states of Wyoming, Utah, Colorado, Nevada and Arizona. This sparsely populated region is backward in industrial activities. Very recently, industry started to grow within the region.

#### 7. The Pacific Coastal Region:

A narrow coastal strip running through Washington, Oregon and California is the great industrial agglomeration of the Pacific coast. The major industrial nucleus of the area are San Francisco and Los Angeles. The major products of this industrial region are food and beverages, automobiles, aircraft, metal fabrication, petro-chemical and heavy chemicals etc. The smaller industrial centres are Portland, Seattle, Eugene, Sacramento, San Diego etc.

#### (ii) Canada:

Canada is the second biggest industrial country in North America. Here, manufacturing activities are highly developed. In 1995, manufacturing activities earned 31 per cent and in 1997 nearly 23% people were directly or indirectly engaged in industries.

The country possesses huge amount of iron ore, petroleum and forest resources. Hydro-electric power is also abundant in Canada. Canada is moderately developed in petro-chemicals, paper, textiles, iron & steel and aluminium industry.

The major industrial region in Canada are:

1. Ontario and St. Lawrence Valley.
2. Prairie Region.
3. Pacific Coastal Region.

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### 1. Ontario and St. Lawrence Valley:

This is one of the most important manufacturing regions in Canada. The major products are paper, cheese, flour, agricultural machinery, copper and nickel smelting, iron & steel industry and chemical industry. The major industrial centres are Quebec, Ontario, Ottawa, Toronto, Hamilton etc.

### 2. Prairie Region:

As far as manufacturing industry is concerned, this region is not very developed. The major centres of production are Manitoba, Winnipeg, and Edmonton, Alberta etc. Besides agro-based industries, the other noted industries in the region are petroleum refinery and chemical industry.

### 3. Pacific Coast:

The leading centred are Vancouver and Prince Rupert. The major industries are paper and pulp, furniture, agricultural machinery and hydel power stations.

### Industrial Region # 2. European Region:

In Europe, particularly in Western Europe, most of the countries are highly industrialized. Some of the countries are leading manufacturing countries in the world. These are Germany, United Kingdom, Italy, France, Spain etc.

#### (i) United Kingdom:

United Kingdom is one of the most industrialized countries of the world. In fact, modern industrialization largely took its birth in British soil. In 1995, total industrial output in Britain was 32 per cent of the GDP. 29 per cent of the labour force is directly engaged in industry.

Great Britain is having almost all types of manufacturing industries. The major manufacturing items are engineering, ferrous, chemical, textile, ceramic, electrical, leather, food and beverages and even electronics.

The manufacturing region of Britain may be sub-divided into following groups:

1. Midland.
2. Lower Scotland.
3. North-East Coast.
4. South Wales.
5. Lancashire.

|                |                                     |                          |
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6. London Basin.

1. The Midland:

This is one of the oldest regions in Great Britain. The nucleus of this industrial region is Birmingham. The other industrial centres are Nottingham, Leicester. This region manufactures almost all types of metal products. The early coalfields of the region provided opportunity for the rapid growth of the industry.

2. The Lower Scotland:

This region had developed as a textile centre. After the discovery of coal and iron ore within the region, diverse type of manufacturing activities evolved throughout the region. The major centres of production are Glasgow, Edinburgh, Johnstone, Clyde Valley, Aberdeen, Dundee and Perth. Apart from cotton textile, iron-steel engineering factories, ship building, petro-chemical, heavy chemical industries also developed in the region.

3. The North-East Coast:

The north-east coast industrial region contributes heavy industrial output. The major centres of industrial production in the north-east coast are New Castle, Hartlepool, Stockton, Sunderland, Middlesborough etc. The area was once developed as a major iron and steel centre in Britain.

At present, iron and steel industry in this region has largely been reduced, heavy chemical industry is now thriving greatly. Originally, iron-steel and chemical plants were influenced by the presence of raw material within the region.

4. The South Wales:

The vast reserve of coal within South Wales region principally attracted iron and steel industries in the region. Non-ferrous industries were also developed near coal mines. The major industrial centres in South Wales are Newcort, Swansa, Cardiff, Cornwall etc. Petro-chemical, electrical and other consumer goods are now produced in this region.

5. The Lancashire:

The development of Lancashire as an industrial centre was directly related with the development of cotton textile industry. The major cotton textile centres in this region are Manchester and Liverpool. At present, due to the decline of mammoth textile plants, the area now produces high quality textile goods. The centres of production in this region are Rochdale, Bolton, Blackburn and Preston.

6. The London Basin:

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The London metropolitan region is the largest industrial centre in UK which houses various types of industries like engineering, refining, chemical, metallurgical, and electrical, electronics, paper and cement. The greater London region with all its suburbs produce vast amount of consumer goods.

(ii) Germany:

The United Germany is one of the most dominant industrial powers in Europe. Even before unification, West Germany was considered as a great industrial power. In 1996, industry contributed 38.2 per cent of the total GDP. About 38% people were engaged in manufacturing activities.

The major manufacturing regions in Germany are:

1. Rhine Industrial Region.
2. The Saar and Middle Rhine Industrial Region.
3. The Hamburg Industrial Region.
4. Berlin Industrial Region.
5. Leipzig Industrial Region.

1. The Rhine Industrial Region:

The Rhine industrial region, popularly known as Ruhr- Westphalia industrial region, is one of the largest industrial regions in Europe. The large reserve of Ruhr coal and Siegerland iron ore and transportation route through Rhine were the major factors for massive growth of industries. Almost every type of manufacturing industries were developed in this region which includes iron and steel, heavy chemicals, metallurgical, textiles and different consumer goods.

The early industry which developed in this region was iron and steel, centred around Essen and Dortmund, later on heavy chemicals were developed within Dusseldorf and Dortmund metallurgical at Duisburg, Essen, Dusseldorf and textiles at Wuppertal, Solingen etc. At present, almost all the good quality coal has been mined out.

2. The Saar and Middle Rhine Industrial Region:

The great urban centres of Frankfurt, Mannheim and Saar region is highly developed in some of the sophisticated industries. The major industries in this region are motor vehicles, petrochemicals, textiles, paper, machine tools, aircraft and precision industries.

3. The Hamburg Industrial Region:

|                |                                     |                          |
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In reality, Hamburg is not a region but a metropolitan city. Here also specialized industries developed to a great extent. Among the industries, notable are ship building, light chemicals, tobacco, non-ferrous industries, petro-chemical, petroleum refining and engineering industries.

#### 4. The Berlin Industrial Region:

West Berlin area was developed as a major industrial centre under West German occupation. It was the capital of undivided Germany and derived advantage as a seat of administration. Most of the industrial products contributed by this region are of non-conventional type, including electrical, electronics, cosmetics, light chemicals and precision engineering.

#### 5. Leipzig Industrial Region:

This was the principal industrial centre of erstwhile East Germany. This region produces optical instruments, leather products, engineering goods and machine tools.

#### (iii) France:

France is the other forerunner in manufacturing world. In 1995, industry contributed 27% of GDP. This is the third largest industrial power in Europe, next to UK and Germany.

The leading manufacturing regions of the country are:

##### 1. The Northern Industrial Region.

##### 2. The Lorraine Industrial Region.

##### 3. The Paris Industrial Region.

##### 1. The Northern Industrial Region:

This is the oldest and major industrial region in France. The coal deposit of Sambre Meuse and nearby Lorraine iron ore promoted large iron-steel industry in Valenciennes, Lens etc. The textile based industries were developed at places like Cambrai, Roubaix-Tourcoing etc.

##### 2. The Lorraine Industrial Region:

Greatest iron and steel centre in France. Lorraine iron ore deposits helped to the growth of several metallurgical industries. Other than steel, Lorraine also produces a good amount of chemical, textile, glass, ceramics, leather and electrical products.

##### 3. The Paris Industrial Region:

Large amount of consumer goods, scientific and precision instruments, automobiles and chemical industries were developed in this region.

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(iv) Italy:

During the early phase of industrialization throughout Europe, Italy was a non-starter. Only before Second World War real industrial development began in Italy. Since very early period, industrial growth had been concentrated in the northern part of the country. In 1985, manufacturing industry in Italy contributed 34 per cent of the GDP. 32 per cent of the labour force is engaged in manufacturing in Italy.

The industrial regions in Italy may be sub-divided into two broad regions:

1. The Northern Region.

2. The Southern Region.

1. The Northern Region:

About four-fifth of the industries is concentrated in Northern Italy. The major industrial regions are Lombardy, Piedmont, Liguria etc. Most of the manufacturing units are concentrated in urban centres, e.g., Venice, Trieste, Genoa, Savona and in Milan and Turin in great Po river valley.

Entire region is highly developed with several types of industries. Important among these are textiles, silk, iron and steel, paper, paper pulp, agricultural machinery, aircraft, machine tools, electrical and automobiles.

2. The Southern Region:

This region is far less developed in manufacturing than its northern counterpart. Naples is the only major industrial centre, having textiles, machinery and iron & steel plants.

Industrial Region # 3. Other European Regions:

Several other industrial regions are scattered in different other European countries. Important among these regions are Swiss Plateau in Switzerland, Stockholm region in Sweden, Rotterdam-Amsterdam region in Holland, Brussels-Antwerp industrial region in Belgium.

It is an uphill task to separate one European industrial zone from the other. In reality, all these regions are only sub-regions of a vast European industrial zone.

CIS:

The CIS is one of the mighty industrial powers of the world. In 1995, industry contributed nearly 40 per cent of the gross national product in Russian Federation. Nearly 47 per cent of work forces in 1991 were engaged in manufacturing industry.

Soviet industrial regions may be sub-divided into following regions:

|                |                                     |                          |
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1. The Moscow-Tula Industrial Region.
2. The Southern Industrial Region.
3. The Caucasus Industrial Region.
4. The Ural Industrial Region.
5. The Volga Industrial Region.
6. The Kuznetsk Industrial Region.
7. The Central Asia Industrial Region.

1. The Moscow-Tula Industrial Region:

This is one of the oldest industrial conurbation in USSR. Even prior to Communist take-over, this region developed as industrial centre. Moscow, the capital city and several other urban centres like Tula, Gorky, Ivanovo and Yaroslav consist of numerous industrial establishments. In its early period of growth, iron ore of Tula and brown coal of Moscow proved advantageous. The mineral resources, however, declined later on. But the growth of this region remain unabated.

The largest concentration of industries occurs within Moscow-Tula region. Major industries are iron-steel, heavy chemical, metallurgy, machine tools, refineries, textile, electrical, automobile etc. This industrial agglomeration produces nearly one-fourth of the national industrial output.

Gorky and Lipetsk produce high quality steel and heavy engineering products. The cities of Yaroslav and Lipetsk produce agricultural machinery and electronics, respectively. Ivanovo and Yaroslav cities produce aluminium and other metallurgical products. Moscow-Tula-Vladimir triangle produces huge amount of textile goods. Ivanovo attained such a high fame in textile production that it became famous as ‘Manchester of CIS’.

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| <b>Class:8</b> | <b>Subject: SST - Geography</b> | <b>Topic: Industries</b> |
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## Lesson Plan 7

### Lesson Objectives

**At the end of this lesson students will be able to:**

- Identify, describe and present the industrial regions in the world

### Teaching Learning Materials required

- N.A.

### Details of Teaching Learning Experience

**Seating Arrangement:** In 8 groups

|                                                                                                     |                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lesson Beginning</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Activate prior knowledge      | <u>Preparation for Group presentation</u> <ul style="list-style-type: none"> <li>• Ask students from previous class to assemble in groups.</li> <li>• Ask the groups to select a representative who will present their research sheets.</li> </ul>       |
| <b>Lesson Middle</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Group Presentation</u> <ul style="list-style-type: none"> <li>• Let the groups present their research sheets.</li> <li>• Based on their presentation, as a class, arrive at a consensus on the four major industrial regions of the world.</li> </ul> |
| <b>Lesson End</b><br><u>Time:</u> 15 minutes<br><u>Purpose:</u> Finish up                           | <u>Finish up</u> <ul style="list-style-type: none"> <li>• Finish up.</li> </ul>                                                                                                                                                                          |

|                |                                 |                          |
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| <b>Class:8</b> | <b>Subject: SST - Geography</b> | <b>Topic: Industries</b> |
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## Lesson Plan 8 and 9

### Lesson Objectives

**At the end of this lesson students will be able to:**

- Compare different industrial belts across the world through case studies

### Teaching Learning Materials required

- Research sheet (one for each student): (Annexure 8A for students of group 1, Annexure 8B for students of group 2, Annexure 8C for students of group 3))

*Please note that lessons 8 and 9 need to be combined*

### Details of Teaching Learning Experience

**Seating Arrangement:** In 3 groups, in computer lab

|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lesson Beginning</b><br><u>Time:</u> 10 minutes<br><u>Purpose:</u> Introduce the topic           | <u>Instructions for research</u> <ul style="list-style-type: none"> <li>• Distribute research sheet to all students. Ask them to read the case studies given, discuss in their groups and do a comparative analysis of both industries based on the parameters provided.</li> <li>• Students can use, maps, newspaper articles, journals, articles, books or any other resource to present.</li> <li>• The 3 groups will choose 3 main corners to present.</li> </ul> |
| <b>Lesson Middle</b><br><u>Time:</u> 40 minutes<br><u>Purpose:</u> Develop conceptual understanding | <u>Research</u> <ul style="list-style-type: none"> <li>• Let the group research based on the parameters provided.</li> </ul>                                                                                                                                                                                                                                                                                                                                          |
| <b>Lesson End</b><br><u>Time:</u> 30 minutes<br><u>Purpose:</u> Finish up                           | <u>Presentation and discussion</u> <ul style="list-style-type: none"> <li>• Let the groups choose a representative who will present.</li> <li>• Let the 3 groups present one after the other</li> <li>• Finish up.</li> </ul>                                                                                                                                                                                                                                         |

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| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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### **Annexure 8A- Case Studies**

#### **Case Study 1 – Pittsburgh Steel Industry**

Pittsburg is an important steel city of USA. This steel industry enjoys location advantages. The growth of railroads after the Civil War spurred the growth of the steel industry because of easy mobility of raw material. Nearby coal mines and iron mines helped Pittsburgh's steel mills to thrive. Between these mines and Pittsburgh the world's best routes for shipping ore cheaply – the famous Great Lakes waterway is there which help in transport of goods. The boom in steel making brought jobs and prosperity to Pittsburgh. Many expanding businesses became corporations. A corporation is a business that is owned by investors. The finish steel is transported to market by both roads and railways.

#### **Case Study 2 – Jamshedpur Steel Industry**

TISCO is India largest steel industry. It flourish because of it ideal location. The place is well connected with railway line. Many mined field like iron ore mine, coal mine and manganese mine are closely located. Kharkai and Subarnarekha provide sufficient supply of water to the industry. Due to the development of iron and steel industry many small industry mushroom up along this industrial plant.

**Do a comparative study of both the industries based on the parameters given below**

- **Raw material**
- **Sources**
- **Quality of product**
- **Capacity of plant**

|                |                                     |                          |
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| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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### **Annexure 8B- Case Studies**

#### **Case Study 1 – Ahmadabad Cotton Textile Industry**

Ahmedabad is situated on the bank of river Sabarmati and gets water from the river which is used for dying thread. The place is near Black-Cotton soil fields from where it gets raw materials such as cotton. The main advantage is the availability of cheap skilled labour. The products have a wide market inside and outside India. Moreover the place is well-connected by means of roadways and railways with other important parts of the country. The temperate climate of this region is suitable for spinning fine thread.

#### **Case Study 2 – Osaka Cotton Textile Industry**

Osaka is an important textile centre of Japan. Textile industry develops here due to many reasons like warm humid climate to spurn the yarn well. Easily available labour. Near to the port facilitate the import of raw cotton balls. The end product is export to international as well as national market thus generating the capital to buy more raw materials.

**Do a comparative study of both the industries based on the parameters given below**

- **Raw material**
- **Sources**
- **Quality of product**
- **Capacity of plant**

|                |                                     |                          |
|----------------|-------------------------------------|--------------------------|
| <b>Class:8</b> | <b>Subject: SST -<br/>Geography</b> | <b>Topic: Industries</b> |
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### **Annexure 8C- Case Studies**

#### **Case Study 1 – Bangalore, India**

Bangalore turns out to be a major IT hub in India. IT industry has achieved a major breakthrough in 1990s. The IT sector developed here so fast because of ready availability of IT infrastructure and pleasant environment. Indian Institute of Information Technology was set up here to create a pool of technically literate individuals. The area and its industry have become famous because of progressive government policies and cosmopolitan environment.

#### **Case Study 2 – Silicon Valley, USA**

The region is home to many of the world's largest technology companies including Apple, Cisco, Oracle, HP Intel etc. Since the early twentieth century, Silicon Valley has been home to a vibrant, growing electronics industry. A powerful sense of regional solidarity accompanied the rise of Silicon Valley. From the 1890s, Stanford University's leaders saw its mission as service to the West and shaped the school accordingly. Geographical location is one of the main cause for the growth of IT in this area. Good infrastructure and availability of resources help the growth of industry.

**Do a comparative study of both the industries based on the parameters given below**

- **Raw material**
- **Sources**
- **Quality of product**
- **Capacity of plant**