



WORLD POPULATION DAY TEACHER'S SECTION

World Population Day is being celebrated since 1987 to focus on the urgency and the importance of population issues and resolving them. Our students are a part of the future growing population, and it is of utmost importance to enlighten them about the ever-increasing population, and its good and bad effects. This year Desh Apnayen brings activities for schools to comprehend and combat the population crisis. There are four activities given each focusing on population explosion and how we could participate in curtailing its effects.

EXPECTED OUTCOMES

Students will be able to:

- Comprehend the reasons for population explosion.
- Analyse the need to control the population across the world.
- Compare the reasons of high population in the cities in India.

ACTIVITY:1 WHERE CAN WE LIVE?

AGE GROUP: GRADES 1-9

Students, through their growing years, learn that 70% of our planet is water, and 30% is land. It is 30% of the land on which we humans live. In this activity, the students will tabulate data on a sheet to visually comprehend the concept of the habitable area by humans.

Materials required:

Worksheet no.1 and colours.

STEPS FOR THE ACTIVITY:1

1. The teacher will read the instructions on the worksheet.
2. All the students will colour the squares according to the instructions.

This activity is done to make students aware that although 30% of the planet - land, only 3% is perfect for humans to live on. And it is on this 3% that -7,711,537,300 people are living!!!! The population continues to grow every second.

Integration: Geography, Math.



Worksheet-1 for activity no.1

Water	70%
Desert	6%
Too cold	6%
Mountains	5%
Forest	5%
Cannot grow food	5%
Perfect for people	3%
Total	100%

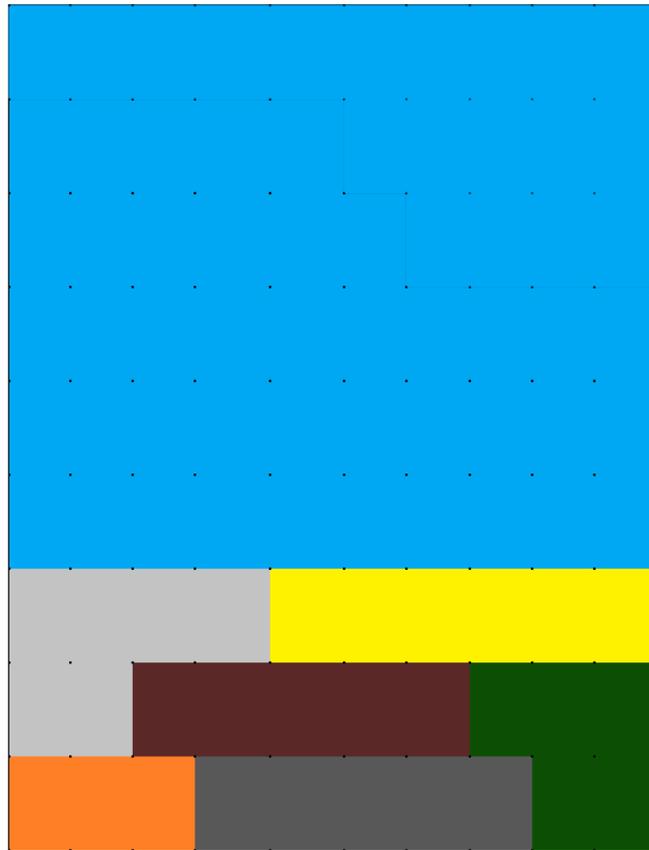
Your task:

Imagine the large square above is our Earth, and each little square represents 1% of the surface of the earth. Using the information given, colour the squares to indicate how much of the world is habitable.



Worksheet-1 for activity no.1(solution)

Water 70% -Blue
Desert 6%- Yellow
Too cold 6%- Light grey
Mountains 5%- dark brown
Forest 5%- Dark green
Cannot grow food 5% Dark grey
Perfect for people 3% Orange



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ACTIVITY 2: WE ARE ALL CONNECTED (CONCEPT MAPS)

AGE GROUP: GRADES 6-9

Moving from **Where can we live** activity, the students will now discover that everyone in the world is connected. In this activity, they are encouraged to consider the connections between the aspects of the natural environment and human society. With the world population growing every second, this activity helps students understand how an increase in population affects all living on Earth.

EXPECTED OUTCOMES

Students will be able to:

- Form global connections on issues related to population.
- Compare and contrast the impact of population explosion on the environment, economic and social life of man.
- Evaluate the effects of the population explosion on humans

Materials required:

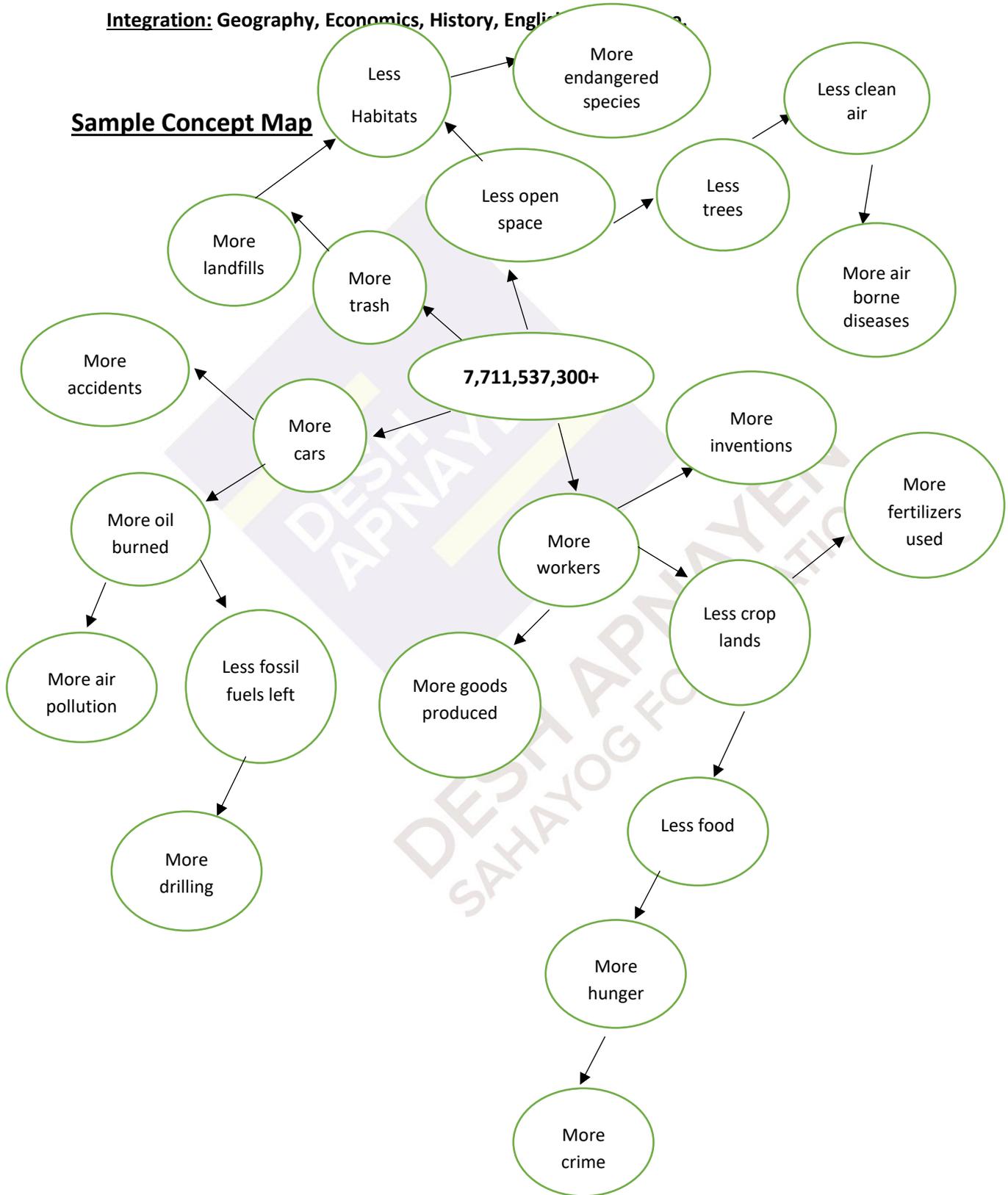
4-5 charts, papers, and colours.

STEPS FOR THE ACTIVITY:2

1. Divide the class into 4-5 groups, depending on the class size and give the chart paper and give them coloured pens, markers, or crayons.
2. Tell each group to write the number **7,711,537,300+** and circle it. Ask the students to brainstorm in their groups and write about the environmental, economic, or social impact of the growing population. There are no right or wrong answers, but the students must clarify and explain their proposed connections. The connections could be positive, negative, or neutral.
3. Give the students 20 minutes to get ready for their presentations.
4. Each group makes their presentations.
5. **Discussion questions:**
 - a. Do you all agree with the connections being made?
 - b. Was there a common connection made on the concept maps? Were there some concepts that were unusual?
 - c. Is it possible for us to connect all the webs and make one big concept map?

Integration: Geography, Economics, History, English

Sample Concept Map



ACTIVITY 3: POPULATION BINGO

AGE GROUP: GRADES 5-9

The activity **We all are connected** made the students aware of the different reasons which lead to population explosion and ways to combat it across the world. In this activity, they will play Bingo and learn about the cities in India and their population. The geographical, social factors which lead to an increase in density of population. They will suggest ways to reduce the ill effects of population explosion in the most polluted city.

Grades 5-6

EXPECTED OUTCOMES

Students will be able to:

- Identify the top 20 cities with high population across India.
- Comprehend the reason for the high population in the top 20 cities.

Materials required:

Copies of worksheet 2, teacher handout 1

STEPS FOR THE ACTIVITY:3

1. Distribute the map of India to every student.
2. The teacher will call out random names. For e.g., at no.5 is Chennai. It is the 5th most populated city of India.
3. The teacher will write the population on the board, and the student/s find the city and write the population number.
4. The teacher goes on until she calls out 5 numbers.
5. The students/s who get the first 5 right win/s the first round.
6. They cannot participate in the next round.
7. The game continues till all the 20 names are called out.

The teacher at the end of the game explains the reasons the cities which have the highest population and the 20th city with the highest population. For e.g., Mumbai is highly populated as it is the financial capital of India, and a lot of people have migrated for better job opportunities. It is also located next to the Arabian sea, thereby opening many business avenues leading to urbanisation.



Grades 7-9

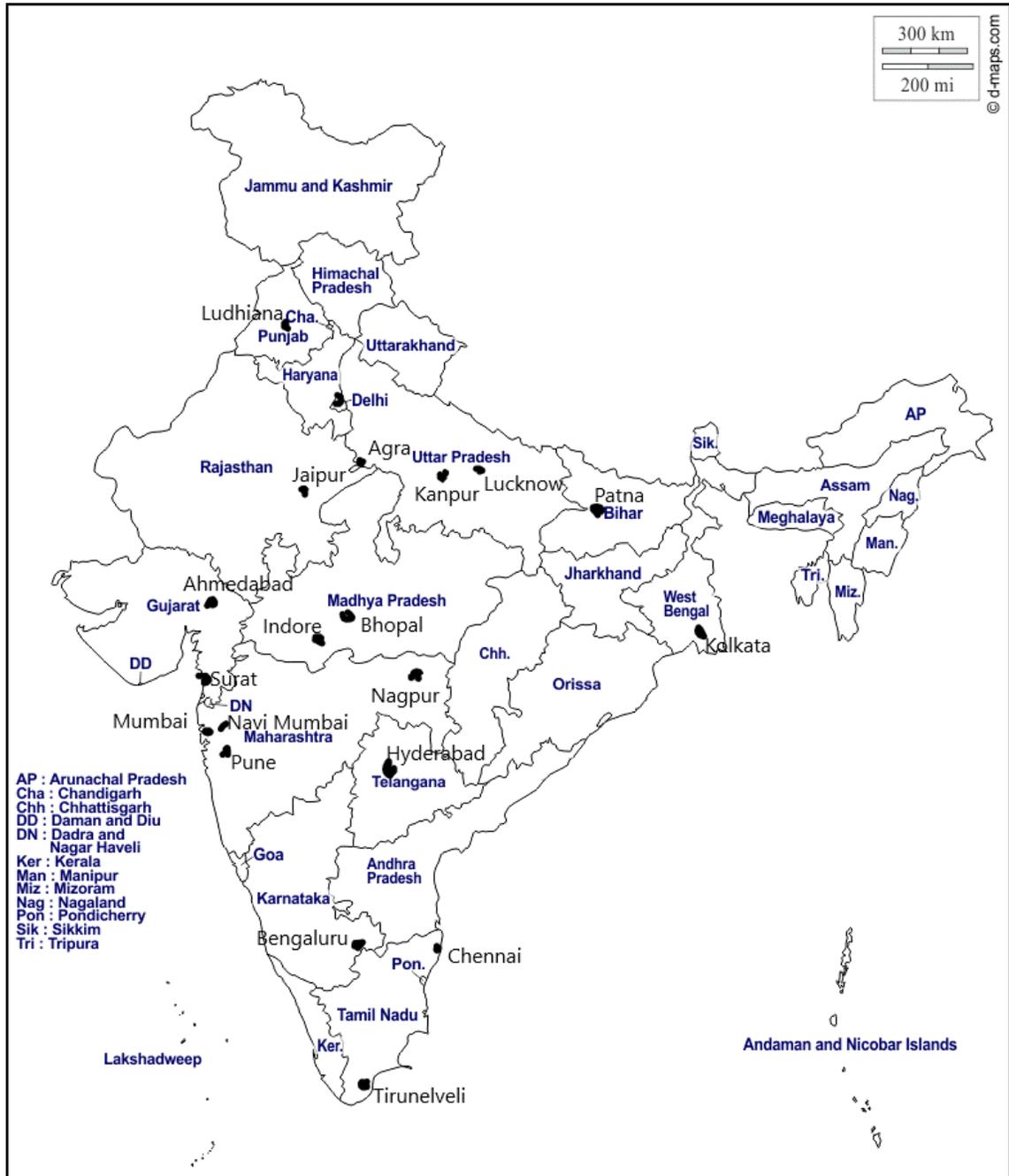
STEPS FOR THE ACTIVITY:3

1. Distribute the map of India to every student.
2. The teacher will call out random names. For e.g., at no.5 is Chennai. It is the 5th most populated city of India.
3. The teacher will call out the population number, and the student/s find the city and write the population number.
4. Then the ones who find it first must state a reason as to why the population is high. **For e.g., Chennai has witnessed incredible growth in its producing, retail, health care, and IT sector in the past decade. This has given way to people to migrate from nearby villages to look for better job opportunities and standard of living.**
5. The teacher goes on until she calls out 5 numbers with students giving reasons.
6. The students/s who get the first 5 right wins the first round. They cannot participate in the next round. The game continues till all the 20 names are called out.

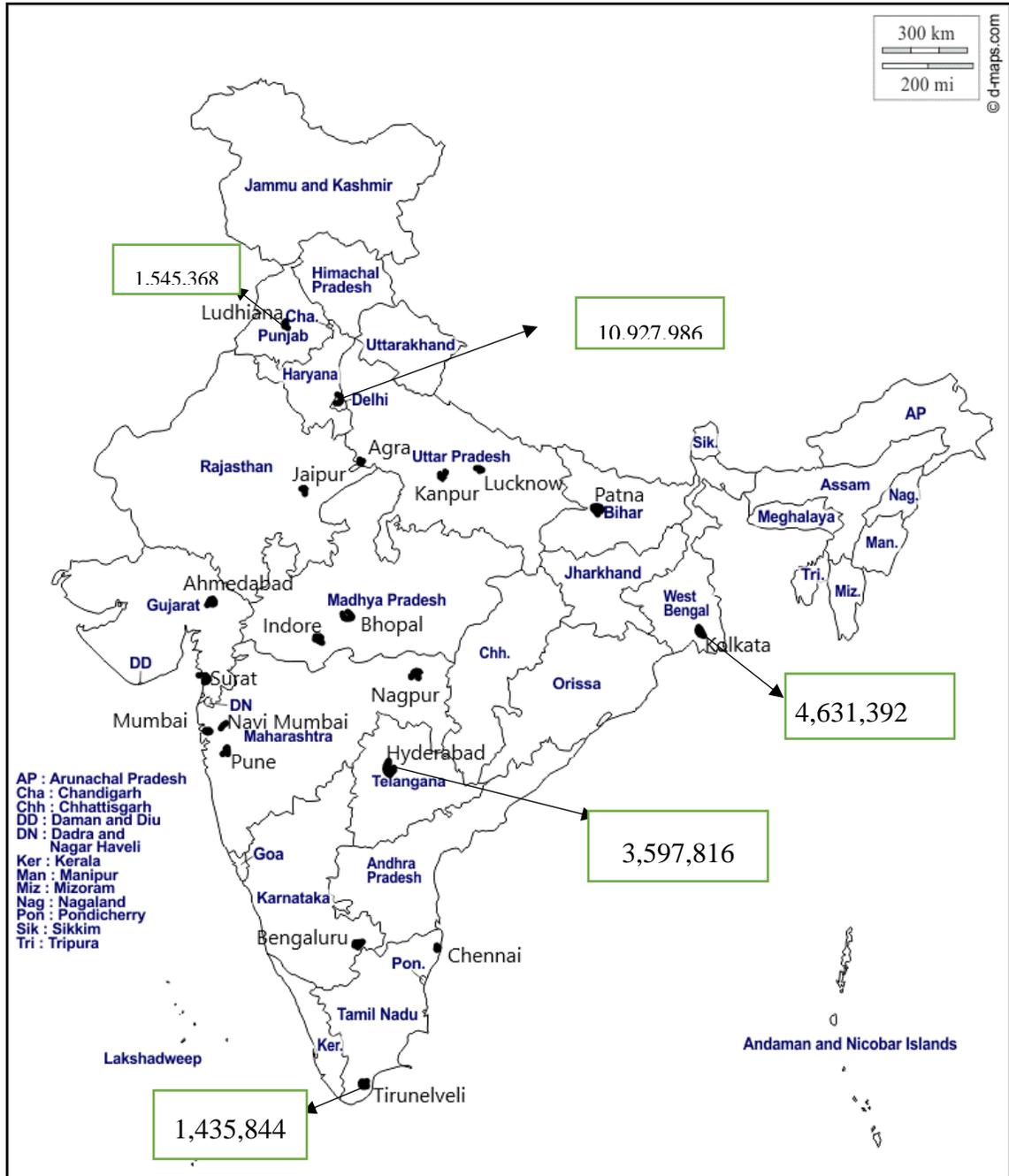
This activity is conducted for the students to comprehend why certain cities are overpopulated, the economic, political, social, and environmental factors which contribute to the growing population.

Integration: All subjects.

Worksheet-2 for activity no.3



Worksheet-2 for activity no.3(solution)



Teacher handout for activity no. 3

List of 20 most populated cities of India

Mumbai	12,691,836	Most populated
Delhi	10,927,986	No.2
Bengaluru	5,104,047	No.3
Kolkata	4,631,392	No.4
Chennai	4,328,063	No.5
Ahmedabad	3,719,710	No.6
Hyderabad	3,597,816	No.7
Pune	2,935,744	No.8
Surat	2,894,504	No.9
Kanpur	2,823,249	No.10
Jaipur	2,711,758	No.11
Navi Mumbai	2,600,000	No.12
Lucknow	2,472,011	No.13
Nagpur	2,228,018	No.14
Indore	1,837,041	No.15
Patna	1,599,920	No.16
Bhopal	1,599,914	No.17
Ludhiana	1,545,368	No.18
Tirunelveli	1,435,844	No.19
Agra	1,430,055	No.20

ACTIVITY 4: WHERE DO WE STAND?

AGE GROUP: GRADES 5-9

In the activity **Population Bingo**, the students learned the top 20 cities in India with high population and the reason for the same. In this activity, they will play – Where do we stand? a game in which the students will learn to voice out their opinions on factors contributing to the increase in population.

EXPECTED OUTCOMES

Students will be able to:

- Formulate solutions to reduce population explosion.
- Classify the problems relating to population.

Materials required:

5 Cut-outs to be stuck across the class reading- “Strongly agree,” “Agree,” “?”, “Disagree” and “Strongly Disagree.”

STEPS FOR THE ACTIVITY:4

In this activity, the students will take a position and articulate their views on population-related issues.

1. Tape the signs on the wall across the classroom.
2. Tell the students that a set of sentences will be read, and they must stand in front of the sign that most closely represents their reaction to the statement read.
3. After reading a sentence, the teacher will ask them to discuss their stance. **For E.g., To accommodate more people in India, the government should give free housing to unemployed people.**
4. Read out the following statements:
 - a. It will be impossible to solve all the other problems like clean water, more food in India if we do not control our population.
 - b. In order to feed the current Indian population, we must use fertilizers, pesticides to increase our farm yields.
 - c. With the rapid growth of our Indian population, it is crucial to drill for more oil as more people need cars to commute.



- d. We should have more laws to ensure that seafood is harvested sustainably.
- e. India can support any number of people in the country as we have a lot of lands.
- f. Science and technology advancement will ensure that the demands of the growing population in the country are met.
- g. There is nothing I can do as a citizen of India to ease the population pressures.
- h. The government in our country should make laws to limit the number of children the couples have.
- i. With such a vast population, it is pointless for the government to make efforts to reduce water pollution.
- j. Even though I am only one citizen amongst the many in the country, it is my responsibility to make India more hospitable to live in.
- k. Even though the cost of cars will increase, it should be made compulsory for the automobile industry to make cars more fuel efficient.

This activity will make the students more accountable for the current situation in our country.

Integration: All subjects.