

The Science Educator at Work

ACTIVITY SHEET I : WHO ARE THESE SCIENTISTS?

What to do:

The wall below has photos of six Indian scientists. Take a few minutes to look at them. How many of them can you identify?



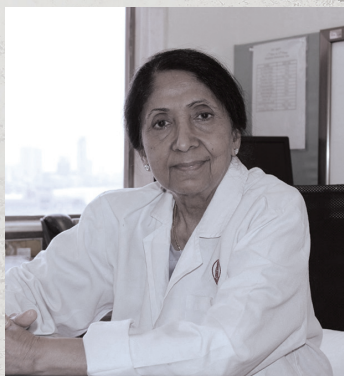
(a).....



(b).....



(c).....



(d).....



(e).....



(f).....

Here are some clues to help you:

- (a) Do you enjoy sucking on sugarcane stems? Did you know we imported sugarcane from other parts of the world till this scientist (1897-1984) developed varieties that were sweeter than native Indian varieties and better suited to grow in our country than imported varieties? She is sometimes called 'The first Indian woman botanist'. Chapter 2 ('Diversity in the Living World') of your Grade VI science textbook (NCERT, 2024-25) highlights her role in the Silent Valley Movement and in documenting Indian plant diversity.

- (b) Chapter 7 ('Temperature and its Measurement') of your Grade VI science textbook (NCERT, 2024-25) introduces this scientist (1918-2001) as the 'Weather Woman of India'. She invented many instruments to make precise measurements of weather phenomena like humidity, rainfall, air pressure, and wind speed. This reduced our need to import scientific instruments from other countries. She also used one of her instruments to measure the thickness of the ozone layer. You read about ozone in Chapter 5 ('Physical and Chemical Changes') of your Grade VII science textbook (NCERT, 2024-25). Her measurements have helped us understand the importance of this layer in protecting life on Earth.
- (c) In Chapter 8 ('A Treat for Mosquitoes') of your Grade V Environmental Science textbook (NCERT, 2024-2025), you read about how we can get malaria when we are bitten by a disease-causing mosquito. Chapter 2 ('Microorganisms: Friend and Foe') of your Grade VIII science textbook (NCERT, 2024-25) shares simple things you can do to prevent the spread of this disease. But what if you have malaria? This scientist (1917-2006) isolated many chemicals of medicinal value from plants native to India and used some of them to develop a drug to treat malaria.
- (d) Some couples find it difficult to have children naturally. In Chapter 6 ('Reproduction in Animals') of your Grade VIII science textbook (NCERT, 2024-25), you read of how in-vitro fertilisation can help such couples have test-tube babies. This scientist (1946-) was among the first to try this process in India. She was also one of the two people who led the medical team that delivered one of India's first test-tube babies: Harsha Chawda.
- (e) In Chapter 1 ('Crop Production and Management') of your Grade VIII science textbook (NCERT, 2024-25), you read of how important water is in growing food. Our farmers depend on the monsoons and groundwater for water. But we are using up groundwater very quickly and the monsoons can be late or not bring enough rainfall. This puts us at risk of droughts. Droughts can cause crops to fail and millions to die. This scientist (1956-) has developed seeds of wheat, rice, and mulberry that can grow in severe drought conditions.
- (f) You may have learned from your parents, teachers, and Chapter 3 ('Mindful Eating: A Path to a Healthy Body') of your Grade VI science textbook (NCERT, 2024-25) about the importance of a balanced diet and how inadequate nutrition can cause diseases. But many children and adults cannot afford nutritious food. This scientist (1911-1998) studied the nutritional value of a commonly available, sweet, and inexpensive drink, called *Neera*, prepared from the sap of coconut palms. She showed that adding this drink to the diets of undernourished adolescents and pregnant women could improve their health.

Sources for images:

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