

2. WHERE WE LIVE AND WHAT WE WEAR

TEACHING TASK

Page No:18

Multiple Choice Questions

1. What is essential for keeping the air inside your home clean and healthy?
- | | |
|----------------|---------------|
| A) Ventilation | B) Decoration |
| C) Insulation | D) Lighting |

Key: A

Solution: Ventilation allows fresh air to enter and stale air to exit, reducing pollutants and maintaining healthy indoor air quality.

2. What is the primary purpose of ventilation?
- | |
|--------------------------------------|
| A) Enhancing aesthetics |
| B) Reducing noise |
| C) Keeping the air clean and healthy |
| D) Increasing humidity levels |

Key: C

Solution: Ventilation replaces indoor polluted air with fresh outdoor air, removing contaminants and improving health.

3. How can air flow easily from one side of the house to the other?
- | |
|---|
| A) By sealing all windows and doors |
| B) By positioning windows and doors strategically |
| C) By installing air conditioners in every room |
| D) By blocking off certain areas from airflow |

Key: B

Solution: Strategic placement of windows and doors (e.g., opposite sides) creates cross-ventilation, allowing air to flow freely.

4. What should you do regularly to remove dirt, dust, and allergens from floors and surfaces?
- | |
|--|
| A) Watering plants |
| B) Sweeping, mopping, vacuuming, and dusting |
| C) Rearranging furniture |
| D) Opening windows |

Key: B

Solution: Regular cleaning (sweeping, mopping, vacuuming, dusting) physically removes allergens and dirt from surfaces.

5. What is an essential aspect of trash management?
- | | |
|----------------------------------|-------------------------|
| A) Recycling | B) Composting |
| C) Emptying trash cans regularly | D) Collecting rainwater |

Key: C

Solution: Emptying trash cans regularly prevents odor, pests, and bacterial growth, maintaining hygiene.

LEARNER'S TASK

Multiple Choice Questions

1. Which feature should each room have to allow fresh air in?
A) Windows B) Mirrors C) Curtains D) Carpets

Key: A

Solution: Windows can be opened to let fresh air in and stale air out, improving ventilation.

2. What should you do with interior doors to promote airflow?
A) Keep them closed B) Remove them
C) Keep them open D) Paint them

Key: C

Solution: Keeping interior doors open allows air to circulate freely between rooms, enhancing ventilation.

3. What can be used to circulate air and keep it moving?
A) Fans B) Rugs C) Sofas D) Televisions

Key: A

Solution: Fans (ceiling, table, or exhaust fans) help move air around, preventing stagnation and improving airflow.

4. What should you do regularly to remove dirt, dust, and allergens?
A) Sweep, mop, vacuum, and dust B) Paint the walls
C) Rearrange furniture D) Water the plants

Key: A

Solution: Regular cleaning (sweeping, mopping, vacuuming, dusting) removes allergens and maintains cleanliness.

5. How can you prevent odors and maintain cleanliness if you have pets?
A) Give them treats B) Walk them often
C) Clean up after them regularly D) Bathe them once a year

Key: C

Solution: Regularly cleaning pet waste, fur, and bedding reduces odors, allergens, and bacterial growth.

TEACHING TASK

Page No:21

Multiple Choice Questions

1. What is the process involved in creating fabric from fibers?
A) Melting and molding
B) Hammering and shaping
C) Spinning into yarn and weaving or knitting
D) Grinding and compressing

Key: C

Solution: Fabric is created by first spinning fibers into yarn, then weaving or knitting the yarn into cloth.

2. Which natural fiber is known for its softness, breathability, and use in clothing like t-shirts and jeans?
A) Wool B) Silk C) Cotton D) Linen

Key: C

Solution: Cotton is soft, breathable, and commonly used in everyday clothing such as t-shirts and jeans.

3. What animal's fleece provides wool, a warm and moisture-wicking fiber used for making sweaters and socks?

A) Sheep B) Goat C) Rabbit D) Alpaca

Key: A

Solution: Sheep's fleece is the primary source of wool, which is warm, moisture-wicking, and ideal for sweaters and socks.

4. Which synthetic fiber is widely used due to its strength, durability, and resistance to wrinkles?

A) Nylon B) Polyester C) Acrylic D) Polypropylene

Key: B

Solution: Polyester is strong, durable, and resists wrinkles, making it popular for various applications.

5. What material is rayon derived from?

A) Petroleum B) Wood pulp C) Cotton D) Silk

Key: B

Solution: Rayon is a semi-synthetic fiber made from regenerated cellulose, primarily derived from wood pulp.

6. What advantage of polypropylene makes it suitable for activewear?

A) Moisture-wicking B) Resistance to fading
C) Softness D) Warmth

Key: A

Solution: Polypropylene's moisture-wicking property keeps sweat away from the skin, making it ideal for activewear.

7. What property of acrylic makes it a popular choice for outdoor furniture?

A) Warmth B) Lightweight
C) Resistance to moths D) Breathability

Key: C

Solution: Acrylic is resistant to moths, mildew, and fading, making it durable for outdoor use.

ADVANCED LEVEL

(i) More than One Answer Type:

8. Which natural fibers are known for their softness and breathability? (Select all that apply)

A) Wool B) Cotton C) Silk D) Linen

Key: B, C

Solution: Cotton and silk are both soft and breathable, making them comfortable for clothing. Wool is warm but can be itchy, and linen is breathable but not as soft.

9. Which advantage(s) are associated with artificial fibers? (Select all that apply)

A) Durability
B) Affordability
C) Resistance to moths
D) Ability to be engineered for specific properties

Key: A, B, C, D

Solution: Artificial fibers are durable, affordable, resistant to moths, and can be engineered for specific traits like stretch or water resistance.

(ii) Fill In the Blanks:

10. _____ is one of the most popular natural fibers, known for its softness, breathability, and use in clothing like t-shirts and jeans.

Key: Cotton

Solution: Cotton is widely used for its comfort and versatility in everyday clothing.

11. _____ made from the fibers of the flax plant, is lightweight, breathable, and highly absorbent.

Key: Linen

Solution: Linen, derived from flax, is valued for its lightweight, breathable, and absorbent properties.

(iii) Matching Type:

12.

s.no	Column I	Column II
1.	Cotton	A. Derived from the fleece of sheep or other animals, known for warmth and moisture-wicking properties.
2.	Wool	B. Produced by silkworms spinning cocoons, prized for its smooth, luxurious feel.
3.	Silk	C. Made from the fibres of the flax plant, lightweight, breathable, highly absorbent.
4.	Linen	D. Comes from the cotton plant's fluffy seed pods, soft, breathable, and used in a wide range of clothing.

Key: D, A, B, C

(iv) Answer the Following Questions:

13. Explain about Natural Fibers and its importance

Solution:

Natural Fibers are hair-like raw materials obtained directly from plants, animals, or geological processes. They are biodegradable and form the fundamental building blocks for creating textiles, ropes, and other materials.

Types of Natural Fibers with Examples:

Plant Fibers (Cellulosic): Derived from various parts of plants.

Seed Fiber: Cotton (from the seed pod of the cotton plant).

Bast Fiber (from the stem): Jute, Flax (for Linen), Hemp.

Leaf Fiber: Sisal, Abaca (from banana leaves).

Animal Fibers (Protein): Obtained from animal sources.

Wool: From the fleece of sheep, goats (e.g., Cashmere, Mohair), alpacas, etc.

Silk: From the cocoons of silkworms.

Importance of Natural Fibers:

Natural fibers are crucial for environmental, economic, and practical reasons:

Biodegradable and Renewable: Unlike synthetic fibers (e.g., polyester, nylon), natural fibers decompose naturally, reducing long-term waste and environmental pollution. They are derived from renewable sources that can be replanted or regrown.

Environmental Sustainability: Their production generally requires less energy compared to the manufacturing of synthetic polymers from petroleum. This results in a lower carbon footprint and makes them a more eco-friendly choice.

Economic Importance: The cultivation, harvesting, and processing of natural fibers (like cotton, jute, and wool) are a primary source of income for millions of farmers, artisans, and workers in rural and agricultural communities across the globe.

LEARNER'S TASK

Multiple Choice Questions

1. What are fibers?
- | | |
|----------------------------|------------------------------|
| A) Large, solid structures | B) Tiny, thread-like strands |
| C) Liquid substances | D) Metal components |

Key: B

Solution: Fibers are defined as fine, hair-like, thread-shaped structures that are the basic building blocks used to make yarns and fabrics.

2. Which natural fiber, derived from the hemp plant, is particularly noted for its strength, durability, and resistance to mold and mildew?
- | | | | |
|---------|---------|---------|----------|
| A) Silk | B) Wool | C) Hemp | D) Linen |
|---------|---------|---------|----------|

Key: C

Solution: Hemp fiber, obtained from the stalks of the Cannabis sativa plant, is renowned for being one of the strongest and most durable natural fibers. It is also naturally resistant to mold and ultraviolet light.

3. Among the listed natural fibers, which one is recognized for its ability to be come softer with each wash and is used in various items such as clothing, bags, and shoes?
- | | | | |
|-----------|---------|---------|----------|
| A) Cotton | B) Silk | C) Hemp | D) Linen |
|-----------|---------|---------|----------|

Key: D

Solution: Linen, made from the flax plant, is known for this specific characteristic. Unlike many other fibers, linen softens with repeated washing and use, increasing its comfort over time.

4. What are artificial fibers also known as?
- | | |
|-------------------|-------------------------|
| A) Natural fibers | B) Synthetic fibers |
| C) Organic fibers | D) Biodegradable fibers |

Key: B

Solution: Artificial fibers are man-made, typically from chemical sources, and are therefore most accurately called synthetic fibers.

5. Nylon is commonly used in which of the following?

- A) Outdoor furniture
- B) Thermal underwear
- C) Swimwear
- D) Scarves

Key: C

Solution: Nylon's excellent strength, elasticity, and quick-drying properties make it a primary material for swimwear and activewear.

6. Acrylic is often used as a substitute for which natural fiber?

- A) Wool
- B) Cotton
- C) Silk
- D) Linen

Key: A

Solution: Acrylic fiber is designed to mimic the warmth and softness of wool, making it a popular and often more affordable alternative in sweaters, blankets, and cold-weather accessories.

7. Which synthetic fiber is known for its elasticity and strength?

- A) Polyester
- B) Nylon
- C) Acrylic
- D) Rayon

Key: B

Solution: While strong, nylon is particularly distinguished by its high elasticity (its ability to stretch and return to its original shape) and exceptional strength, especially when wet.

ADVANCED LEVEL

(i) More than One Answer Type:

8. Which natural fibers are derived from plants? (Select all that apply)

- A) Wool
- B) Silk
- C) Linen
- D) Hemp

Key: C, D

Solution: Plant-based fibers, also known as cellulosic fibers, are obtained from various parts of plants. Linen comes from the stem of the flax plant, and hemp comes from the stem of the hemp plant.

9. Which synthetic fibers are known for their strength and durability? (Select all that apply)

- A) Polyester
- B) Nylon
- C) Acrylic
- D) Polypropylene

Key: A, B, D

Solution: Strength and durability are key characteristics of polyester, nylon, and polypropylene. Acrylic is prized for other properties like warmth and colorfastness.

(ii) Fill In the Blanks:

10. _____ is known for its warmth and moisture-wicking properties

Key: Wool

Solution: Wool, sourced from sheep and other animals, has natural crimp that traps air for warmth. It can also absorb a large amount of moisture vapor without feeling wet, a property known as moisture-wicking.

11. Silk is produced by silkworms when they spin their _____.

Key: cocoons

Solution: The silk fiber is a continuous protein filament that silkworms secrete from glands in their heads to spin a protective cocoon around themselves during metamorphosis.

(iii) Matching Type

12.

s.no	Column I	Column II
1.	Polyester	A. Known for its strength and elasticity, ideal for activewear and swimwear.
2.	Nylon	B. Soft, wool-like fibre often used as a substitute for wool in clothing
3.	Acrylic	C. Versatile fibre that is lightweight, moisture-wicking, and resistant to stains and Odors.
4.	Polypropylene	D. Widely used synthetic fibre, strong, durable, and resistant to wrinkles and shrinking

Key: D, A, B, C

(iv) Answer the Following Questions:

13. Explain about Artificial Fibers and its importance

Solution:

Artificial Fibers (also known as synthetic or man-made fibers) are fibers created through chemical synthesis, unlike natural fibers which are obtained from natural sources. They are typically derived from petroleum-based polymers (plastics) or other raw materials like cellulose.

Common Types of Artificial Fibers:

Polyester: The most widely used synthetic fiber. Known for its strength, durability, resistance to wrinkling and shrinking, and quick-drying properties.

Nylon: Noted for its high strength, exceptional elasticity, and abrasion resistance.

Acrylic: A soft and warm fiber often used as a synthetic alternative to wool.

Polypropylene: A lightweight fiber that is excellent at moisture-wicking and is resistant to stains and mildew.

Spandex (Lycra): Famous for its extreme elasticity, often blended with other fibers to add stretch.

Rayon: A semi-synthetic fiber made from regenerated cellulose (wood pulp). It is versatile and feels similar to silk, cotton, or linen.

Importance of Artificial Fibers:

Artificial fibers are critically important for modern society due to their enhanced and customizable properties:

Enhanced Performance and Functionality: They are engineered for specific purposes that natural fibers often cannot match.

Durability: Fibers like nylon and polyester are incredibly strong and resistant to wear and tear, making them ideal for items like seatbelts, backpacks, and outdoor furniture.

Elasticity: Spandex provides unmatched stretch for activewear, swimwear, and undergarments.

Moisture Management: Polypropylene and polyester wick moisture away from the body, keeping athletes dry and comfortable.

Wrinkle and Shrink Resistance: A garment made of polyester will retain its shape and require little ironing, making it very easy to care for.

Economic and Mass Production: Synthetic fibers can be produced consistently, in massive quantities, and at a low cost. This makes clothing and textiles affordable and accessible to a global population.

Versatility and Specialized Applications: Their properties can be tailored for highly specific uses.

Healthcare: Used in surgical sutures, artificial organs, and disposable medical fabrics.

Industry: Used in tire cords, conveyor belts, ropes, and filters.

Home Furnishings: Used in carpets, upholstery, and curtains for their stain resistance and durability.

Accessibility and Alternatives: They provide affordable alternatives to expensive natural fibers. For example, acrylic offers a wool-like experience for those allergic to wool or on a budget, and faux leather and suede provide animal-free alternatives.