

8. How Things Are Made

A. Fill in the blanks.

Braille, Clean, Wood, Fruits, Pulp

1. Paper is made from _____, which comes from trees.
2. _____ is a system of raised dots used by visually challenged people.
3. Natural dyes come from _____ and plants.
4. Handmade paper is made from paper _____.
5. Reusing and recycling help keep our environment _____.

B. Choose the correct option.

1. What is the final step in making recycled paper?

| | |
|--------------------------------------|---------------------------------------|
| (a) Drying <input type="checkbox"/> | (b) Soaking <input type="checkbox"/> |
| (c) Tearing <input type="checkbox"/> | (d) Grinding <input type="checkbox"/> |
2. Which of the following is made from paper pulp?

| | |
|--|--|
| (a) Plastic bottles <input type="checkbox"/> | (b) Metal boxes <input type="checkbox"/> |
| (c) Glass jars <input type="checkbox"/> | (d) Paper bowls <input type="checkbox"/> |
3. Which natural ingredient gives yellow colour?

| | |
|---------------------------------------|---------------------------------------|
| (a) Beetroot <input type="checkbox"/> | (b) Turmeric <input type="checkbox"/> |
| (c) Spinach <input type="checkbox"/> | (d) Henna <input type="checkbox"/> |
4. Which type of paper is thick and used for packing?

| | |
|---|--|
| (a) Cardboard <input type="checkbox"/> | |
| (b) Tissue paper <input type="checkbox"/> | |
| (c) Notebook paper <input type="checkbox"/> | |
| (d) Newspaper <input type="checkbox"/> | |
5. What should we do to reduce paper waste?

| | |
|---|--|
| (a) Burn paper <input type="checkbox"/> | |
| (b) Throw paper <input type="checkbox"/> | |
| (c) Use both sides <input type="checkbox"/> | |
| (d) Tear paper <input type="checkbox"/> | |

C. Match the following.

| Column A | Column B | Ans. |
|---------------------|--|----------|
| 1. Recycled Paper | i. Tool used to mash soaked paper and seeds | 1. _____ |
| 2. Banana Fibre | ii. Used to bind paper in recycled paper-making | 2. _____ |
| 3. Talapatra | iii. Made from old newspapers | 3. _____ |
| 4. Tissue paper | iv. Used to make paper, helps conserve trees | 4. _____ |
| 5. Fenugreek Seeds | v. Soft paper used for cleaning | 5. _____ |
| 6. Grinder or hands | vi. A traditional writing material made from palm leaves | 6. _____ |

D. Write whether the following statements are True or False.

1. Natural dyes are harmful.
2. Beetroot gives red/pink colour.
3. 5Rs keep surroundings clean.
4. Plastic is an eco-friendly material.
5. Paper pulp is a dry mixture of paper pieces.
6. Reuse means using something again.
7. Handmade paper is made using paper pulp.
8. Grinding is a step in making recycled paper.
9. Old newspapers cannot be reused.
10. The 5Rs include Remove.

E. Short Answer Questions.

1. What are the 5Rs of waste management?

Ans. _____

2. Why should we follow the 5Rs rule?

Ans. _____

3. What is paper made from?

Ans. _____

4. Which parts of plants are used to make natural dyes?

Ans. _____

5. Why should we use paper responsibly?

Ans. _____

6. What materials were used in ancient India for writing?

Ans. _____

7. How is book paper different from handmade recycled paper?

Ans. _____

8. How can you make recycled paper colourful naturally?

Ans. _____

9. Why is tissue paper good for cleaning?

Ans. _____

10. Why should we avoid plastic?

Ans. _____

F. Long Answer & Value-Based Questions.

1. Explain the 5Rs of waste management with examples.

Ans. _____

2. Describe the steps to make recycled paper at home.

Ans. _____

3. What are natural dyes? How are they useful? Give examples.

Ans. _____





4. Explain why we should save paper and how we can do it.

Ans. _____

5. Explain the process of making paper in factories in brief.

Ans. _____

G. Match the different types of paper with their uses.

| Describe different types of paper | Uses |
|---|---|
|  <ul style="list-style-type: none"> ● | <ul style="list-style-type: none"> ● Used for reading news |
|  <ul style="list-style-type: none"> ● | <ul style="list-style-type: none"> ● Used for cleaning |
|  <ul style="list-style-type: none"> ● | <ul style="list-style-type: none"> ● Used for packing |
|  <ul style="list-style-type: none"> ● | <ul style="list-style-type: none"> ● Used for crafts and cards |

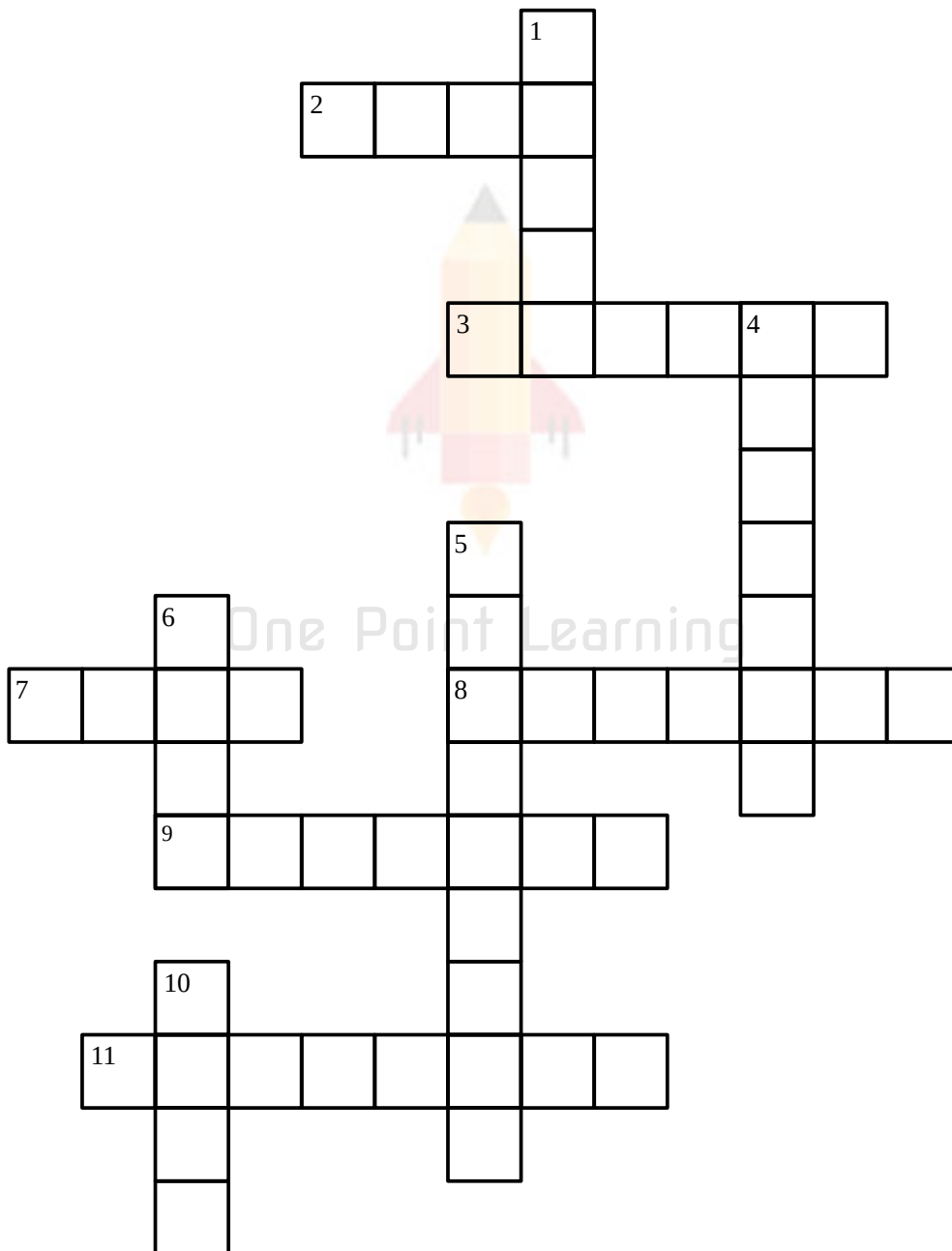
H. Solve the Cross-word puzzle.

Across:-

2. A plant from which we get wood to make paper.
3. Saying no to things that create waste.
7. The part of the plant used to make turmeric dye.
8. Process of turning old materials into new products.
9. A container where waste is thrown.
11. A natural ingredient that gives yellow colour.

Down:-

1. Using something again instead of throwing it away.
4. A leafy vegetable used to make green dye.
5. Thick paper used for packing boxes.
6. The main raw material used to make paper.
10. A soft, wet mixture used to make paper.



Answer**A. Fill in the Blanks.**

1. Wood 2. Braille 3. Fruits 4. Pulp 5. Clean

B. Multiple Choice Questions.

1. (a) Drying 2. (d) Paper bowls 3. (b) Turmeric 4. (a) Cardboard
5. (c) Use both sides

C. Match the following.

1. - iii 2. - iv 3. - vi 4. - v 5. - ii 6. - i

D. True or False.

1. False 2. True 3. True 4. False 5. False
6. True 7. True 8. True 9. False 10. False

E. Short Answer Questions

- The 5Rs are Refuse, Reduce, Reuse, Repurpose, and Recycle.
- We should follow the 5Rs to reduce waste, save resources, and protect the environment.
- Paper is made from materials like wood pulp, but it can also be created from old paper to save trees.
- Leaves, flowers, roots, seeds, and stems. For example, flowers and leaves give bright colours, and roots like turmeric give strong colour.
- Because making paper requires many trees, water, and energy. Using paper carefully saves trees and protects the environment.
- People used cloth, leaves, wooden boards, and talapatra for writing.
- Book paper is smooth and machine-made, while handmade recycled paper is rough and made from reused paper.
- By adding natural dyes like turmeric, spinach, or beetroot to the paper pulp.
- Tissue paper is soft and absorbent, so it can easily soak up liquids and clean surfaces.
- Plastic is harmful to the environment and takes a long time to decompose.

F. Long Answer Questions.

- The 5Rs help us manage waste and protect the environment.
 - Refuse: Say no to things that create waste (e.g., refusing plastic bags).
 - Reduce: Use fewer resources (e.g., using both sides of paper).
 - Reuse: Use items again (e.g., using old jars for storage).
 - Repurpose: Use old items in a new way (e.g., making a pen holder from a tin can).
 - Recycle: Turn old materials into new products (e.g., making paper from old newspapers).
- The steps to make recycled paper at home:
 - Collect old newspapers and tear them into small pieces.
 - Soak the pieces in water for a few hours or overnight.
 - Add fenugreek seeds and grind the mixture into a soft pulp.
 - Spread the pulp evenly on a flat surface or cloth.
 - Press and roll it to remove extra water.
 - Leave it to dry in the sun.
 - Once dry, the recycled paper is ready to use.
- Natural dyes are colours obtained from plants and natural sources. They are eco-friendly and safe for the environment.

They are useful because they do not harm nature and can be used to colour paper and fabrics.

Examples:

- Turmeric – yellow colour
- Beetroot – red or pink colour
- Spinach – green colour

- Paper is made from trees, so using too much paper leads to cutting more trees. This harms the environment and wildlife.

We can save paper by:





- Using both sides of paper
- Reusing old notebooks and papers
- Recycling paper
- Avoiding unnecessary printing
- Saving paper helps protect trees and keeps our environment clean.

5. In factories, paper is made through several steps:

- Wood from trees is cut into small pieces.
- The wood is crushed and mixed with water to make pulp.
- The pulp is cleaned to remove unwanted materials.
- It is spread into thin sheets using machines.
- The sheets are pressed and dried to remove water.
- Finally, the paper is rolled and cut into different sizes.

This process helps produce smooth and strong paper for books and writing.

G. Match the following.

| Describe different types of paper | Uses |
|---|---------------------------|
|  | Used for reading news |
|  | Used for cleaning |
|  | Used for packing |
|  | Used for crafts and cards |

H. Solve the following crossword.

Across:-

2. TREE
3. REFUSE
7. ROOT
8. RECYCLE
9. DUSTBIN
11. TURMERIC

Down:-

1. REUSE
4. SPINACH
5. CARDBOARD
6. WOOD
10. PULP