Unit 1.M.1:
Identifying Materials and their Uses

- Name common materials and their uses
- Physical characteristics of common materials

Skills:
- Observing
Name common materials and their uses
Wood, Paper and Card

We get **Wood** from Trees. Wood is hard. Objects made of **Wood** are used by us in everyday life. Paper is also made up of **Wood**. We make books, newspapers and magazines with paper. Card is a hard paper to make book covers, greeting cards and many other things.
Activity: (1)

a. **CIRCLE** the Wooden object:
b. and write the name of the object in the box under it.
b. Put √ or ✗:
1. We get paper from wood. (   )
2. We make books from metal. (   )
3. Card is a hard type of paper. (   )

Key words:
- wood
- paper
- trees
- objects
- hard
- card

Key Ideas:
- Identifying common materials like wood, paper and card
- Uses of wood, paper and card.

Project:
- Make a wood, paper and card scrap book
- Collect pictures of wood, paper and card objects and paste them in the scrap book
We get **Metal** from the ground.

**Metal** is strong, hard and shiny.

**Metal** is used to make many objects.
Some objects made up of **Metal** are heavy.
We cannot bend **Metal** easily.
Activity: (1)

2. **CIRCLE** the Metal object:
   a. and write the name of the object in the box under it.
Key words:
metal
ground
strong
hard
shiny
object
heavy

Key Ideas:
• Identifying common materials like metal.
• Uses of metal.

Key Question:
Fill in the blanks with the help of the given words:

4. Metal is h__ _ _ d.
5. Metal is s__ _ ny.
6. Metal is st__ _ _ g.
Plastic is a man made material
We can make different objects with Plastic.
It is strong and can be colored.
Some of Plastics objects are soft and easy to bend and are flexible.
Rubber

We get **Rubber** from trees. It is manmade material. It is stretchy, flexible and bendy. We can make many different things from the **Rubber**.
Activity: (1) ?

a. Fill in the blanks using the correct words:

rubber  bendy  flexible

1. We get ____________ from trees.
2. Rubber is ____________, ____________.

b. CIRCLE the plastic object:

- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
Key words:
- plastic
- rubber
- strong
- hard
- soft
- object
- colored
- bend
- flexible
- stretchy
- easy
- manmade
Key questions:
   a. Identify objects as Wood, Plastic and Metal.

   b. **CIRCLE** the things made from Paper:

   - bottle
   - chair
   - box
   - coin
   - nails
   - duck
   - envelope
   - safety pin
   - yarn
   - book
c. Draw an object made of:

- Metal
- Plastic
- Wood
Glass is made from heating sand to a very high temperature! About (about 2,912 degrees Fahrenheit!). We can see through some of the Glasses and it is called transparent. We cannot see through some of the glasses and it is called opaque. Some Glasses are strong and some are breakable. We can make many different objects from the Glass.
Clay

We use clay for making pottery. We can mould it into different shapes and designs before it dries. Children also play with clay and make many shapes. It is hard, soft and also breakable, when not fully dry.
Activity (1):

a. **CIRCLE** the glass objects:

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Remember Glass is dangerous! !
Always call an adult if you come across broken glass !
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b. Put √ or ⨉:
1. Some of the objects made of 'wet' clay are soft. (   )
2. Clay is strong when wet. (   )

Key words:
- Clay
- glass
- breakable
- hard
- soft
- pottery
- shapes
- designs
- transparent
- opaque
- shiny
- strong

Key Ideas:
- Identifying common materials like glass and clay.
- Uses of glass and clay.

Project:
Take the soft clay and make shapes.
(a) square
(b) circle
(c) triangle
Above are examples of **fabrics**. Some fabrics are natural which we get from living things. For example:

1) We get wool from sheep.

2) We get cotton from cotton plants.

3) We get silk from silk worms. **Wool** gives us warmth. **Cotton** allows the heat to go out.
Activity (1):

1. Draw things made of Fabric:

Fabric
Key questions:
1. Choose and CIRCLE the correct word for the item:

- METAL
- WOOD
- PLASTIC
- RUBBER
- METAL
- FABRIC
- GLASS
- CLAY
- WOOD
- PLASTIC
- PAPER
- METAL
2. MATCH

Glass

Clay

Metal

Rubber
3. Choose the correct word from the box and Fill in the blanks:

<table>
<thead>
<tr>
<th>Silk</th>
<th>Wool</th>
<th>Cotton</th>
<th>Wood</th>
</tr>
</thead>
</table>

- We get ____________ from Silkworm.
- We get ____________ from Trees.
- We get ____________ from plants.
- We get ____________ from Sheep.

4. In the space provided,
Write (true) if the sentence is correct
Write (false) if the sentence is wrong

1) We find metal in trees. (        )
2) We get leather from plants. (        )
3) Plastic is manmade material. (        )
4) We can make fabrics from cotton. (        )
Physical characteristics of common materials
Objects can be described in terms of their physical Properties:

a) Hard materials:
Wood, metal, plastic, rubber, glass and clay are hard materials. Below are the examples given:

b) Soft materials:
Cotton, wool, silk, plastic and rubber are soft materials below are the examples given:
c) Strong materials:
Wood, metal, plastic, rubbers, glass are strong materials.

![Wood], ![Metal], ![Plastic], ![Rubber], ![Glass]

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d) Breakable materials:
Glass and clay are breakable materials. Below are examples given:

![Broken Glass], ![Broken Clay]

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e) Rough materials:
Materials which are not smooth and are bumpy are rough materials.

![Rough Stone], ![Rough Surface]

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f) Smooth:
Materials which are not rough or bumpy but are smooth materials.

![Smooth Surface], ![Balloons]
g) Bendy/flexible and stretchy:
   Materials that can bend easily and stretch.

h) Shiny materials:
   Materials that shines.

i) Dull materials:
   Materials that do not shine

j) Transparent materials:
   Materials through which we can see.

k) Opaque materials:
   Materials through which we cannot see.
l) Heavy materials:
Materials that are heavy.

m) Light materials:
Materials that are light.

Activity: (1)
Look at the picture below and write the correct word for it:

a) Is it rough or smooth?

_____________    ______________

b) Is it strong or breakable?

_____________    ______________
c) Is it shiny or dull?

__________________________  __________________

d) Is it soft or hard?

__________________________  __________________

e) Is it heavy or light?

__________________________  __________________

f) Circle the flexible object:

__________________________
Key words:
Heavy, strong
Light, heavy
Shiny, dull
Strong, breakable
Smooth, rough
Hard, soft

Key ideas:
To understand the common characteristics of different materials, like being Light, heavy etc.

Project:
Take a wooden box and fill it with different kinds of materials; now one by one close your eyes and sense the materials and guess their names and write down on paper what do they feel like and sort their names in groups.
Materials:

✔ Writing materials (pencil, rubber, sharpener, book)

✔ School uniform, shoes, hair band

✔ Classroom objects (window, chair, table, clock, white board, shelf)

• Observe your materials with the five senses (no need to taste!)
• Record your observation in the chart below.

<table>
<thead>
<tr>
<th>Objects</th>
<th>Materials the objects are made of</th>
</tr>
</thead>
<tbody>
<tr>
<td>pencil</td>
<td></td>
</tr>
<tr>
<td>rubber</td>
<td></td>
</tr>
<tr>
<td>sharpener</td>
<td></td>
</tr>
<tr>
<td>book</td>
<td></td>
</tr>
<tr>
<td>uniform</td>
<td></td>
</tr>
<tr>
<td>shoes</td>
<td></td>
</tr>
<tr>
<td>Hair band</td>
<td></td>
</tr>
<tr>
<td>window</td>
<td></td>
</tr>
<tr>
<td>White board</td>
<td></td>
</tr>
<tr>
<td>shelf</td>
<td></td>
</tr>
<tr>
<td>table</td>
<td></td>
</tr>
<tr>
<td>chair</td>
<td></td>
</tr>
</tbody>
</table>

**Observing** is collecting information using the five senses.
ACTIVITY 2

Materials required
✓ Color pencils
✓ Rubber
✓ Sharpener
✓ Ruler
✓ Pencil
✓ Uniform
✓ Can
✓ Water bottle
✓ Glasses

- Observe the objects carefully and color the column of the materials they are made up of.

- Observe the pencil; you can see it is made up of Wood, Metal and Rubber. Now observe the other objects and color its column with the help of the given key.
Materials

Properties of Materials

<table>
<thead>
<tr>
<th>Objects</th>
<th>wood</th>
<th>rubber</th>
<th>metal</th>
<th>glass</th>
<th>fabric</th>
<th>plastic</th>
</tr>
</thead>
<tbody>
<tr>
<td>rubber</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sharpener</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ruler</td>
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<td></td>
</tr>
<tr>
<td>pencil</td>
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<td></td>
</tr>
<tr>
<td>uniform</td>
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<tr>
<td>can</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Water bottle</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>glasses</td>
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<td></td>
</tr>
</tbody>
</table>