

7. MATTER, MATERIALS AND MIXTURES



Characteristics of Materials



strong



weak



flexible



transparent



translucent



opaque



soft



hard



waterproof



absorbent



shiny



dull



rigid



hot



cold



rough



smooth



material



characteristics



properties



MATTER

Matter is what we can see, touch, taste or smell.

Everything is made up of matter. Matter can have **physical changes** or **chemical changes**.



PHYSICAL CHANGES

Changing the shape, the size, the colour or the state of something, we are doing physical changes.

Changes of state:



SOLID



LIQUID



GAS

CHEMICAL CHANGES

Matter can change with air, water, fire or other elements. **Combustion** or **Oxidation** are some of these processes.



COMBUSTION

When we burn a paper or wood, the name of this reaction is called combustion. The paper and wood become ash.



OXIDATION

It happens when the metal starts to turn brown and rough. We can see the example with some cars or bicycles which spend a lot of time in the street.



MIXTURES

A mixture happens when we mix two or more different materials.



TYPES OF MATERIALS

We can differentiate materials into **natural** or **manufactured**.



NATURAL MATERIALS

Natural materials come from living things.

From plants: Cotton, wood...



From animals: Feathers, wool...



From the ground:



SLATE



IRON



CRUDE OIL

MANUFACTURED MATERIALS

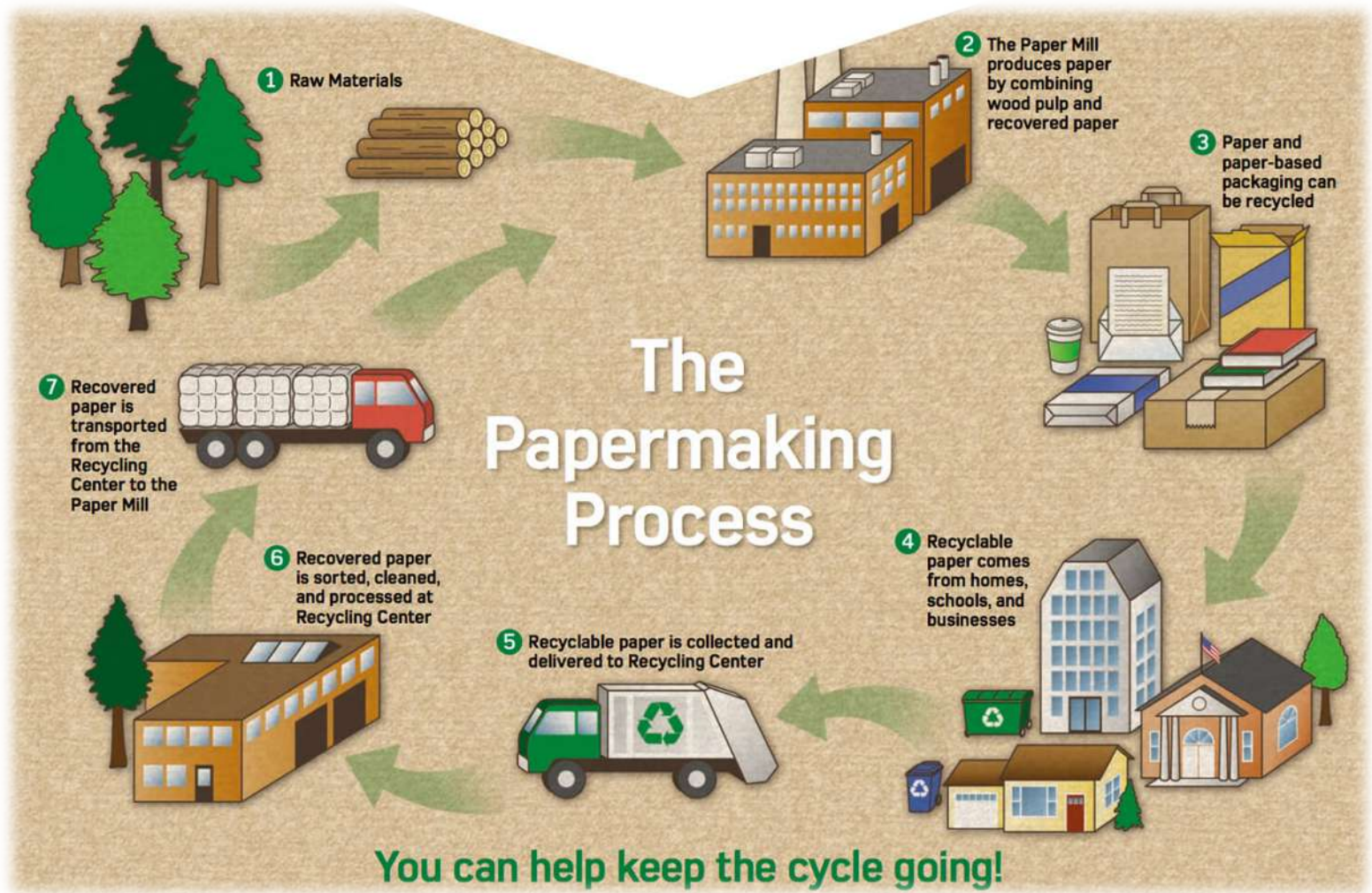


Manufactured materials are natural materials which people transform into new products.

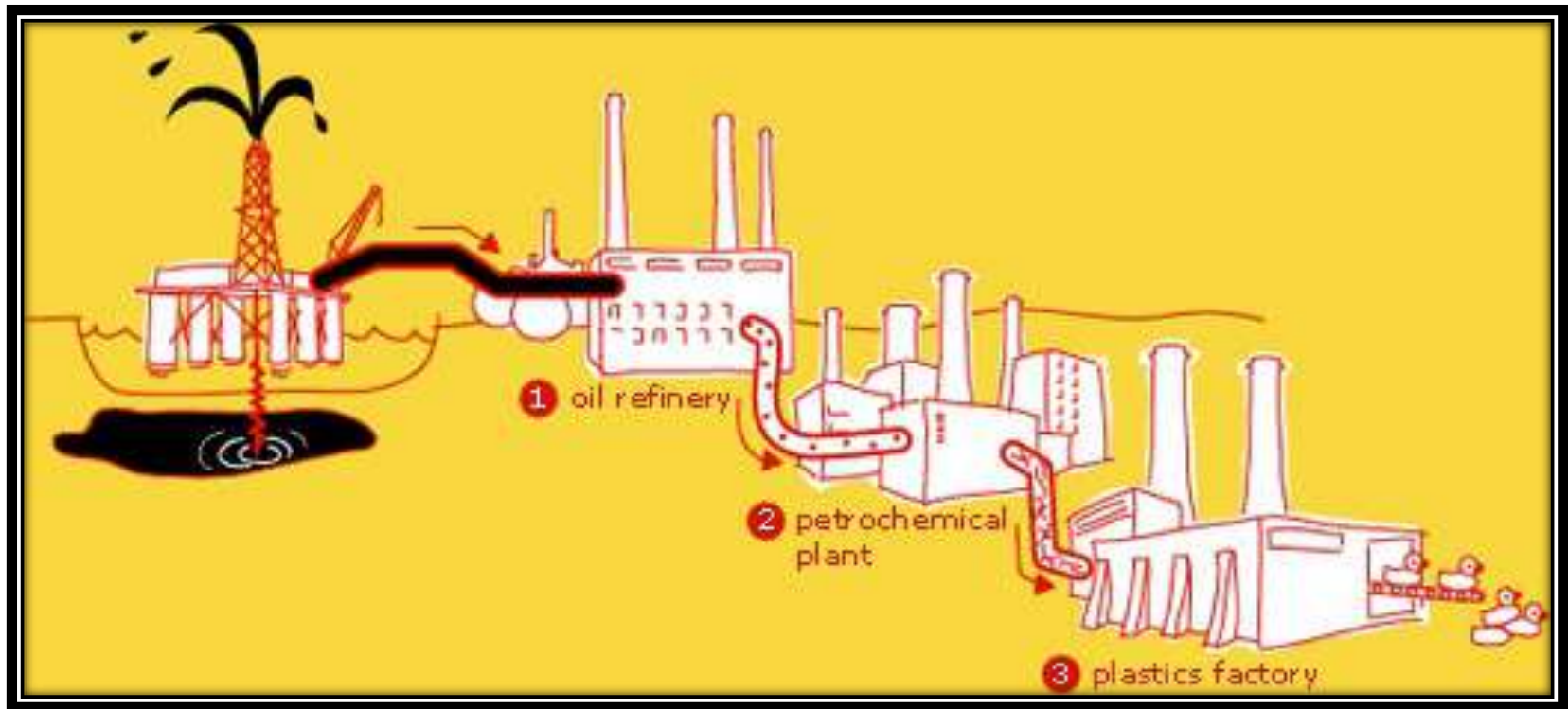
Where does paper come from?

- 1- People cut trees.
- 2- The wood is transported in trucks.
- 3- The wood is turned into paper in a factory.

PAPERMAKING PROCESS



PLASTIC PRODUCTION PROCESS



MEDIA CONTENT

Physical and chemical changes: [LINK](#)



Where does paper come from? [LINK](#)



Recycle song: [LINK](#)

