5. Changing the shape of a substance

We know that physical changes are reversible. But not all of them. Some physical changes occurred by changing the shape[1] of a substance are not reversible. Let's see which are reversible and which are not.

Example (1) – Blowing up a balloon

When you blow up a balloon the shape of the balloon is changed. If you let the air inside the balloon go it will come back to its usual shape. This physical change is reversible.

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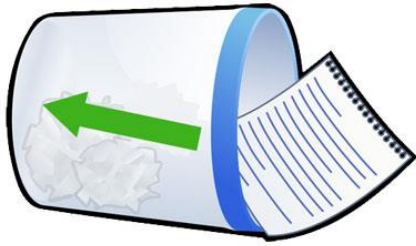## Example (2) – Crumpling[2] a piece of paper

When you crumple a piece of paper it will become creased and wrinkled. However, neither the amount of matter in the paper nor the material the paper is made is changed. This change is reversible.

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[1] shape /ʃeɪp/ *noun*

the external form, contours, or outline (le contour)   of someone or something.

[2] Crumple /ˈkrʌmpl/ *verb*

gerund or present participle: **crumpling**
crush (something, typically paper or cloth) so that it becomes creased (froissé)
and wrinkled (froissé)

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Example (3) – Molding clay[3]

When you mold some clay into a pot, the shape of clay is changed, but no new matter or material is formed. You can turn the pot back into the same chunk of clay before you bake it in the kiln. This physical change is reversible.

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Example (4) – Stretching a rubber band (Étirer un élastique)

When you stretch a rubber band, you alter its shape, but it is still made of rubber. When you let it go it will come back to its usual shape. This physical change is reversible.

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[3] Clay /kleɪ/ *noun*

a stiff, sticky fine-grained earth that can be moulded when wet (terre à grains fins rigide et collante qui peut être moulée lorsqu'elle est mouillée), and is dried and baked (séché et cuit) to make bricks, pottery, and ceramics.

Ex : "the soil is mainly clay" (le sol est principalement argileux)

Example (5) – Squashing [4]a sponge

Similarly, when you squash a sponge, you alter its shape, but it is still made of sponge. When you let it go it will come back to its usual shape. This physical change is also reversible.

Reference : https://k8schoollessons.com/

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[4] squash[1]/skwɒʃ/ *verb*

gerund or present participle: **squashing**

crush or squeeze (écraser ou presser) (something) with force so that it becomes flat, soft, or out of shape.