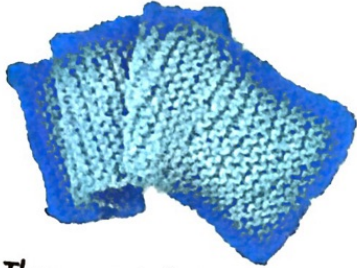
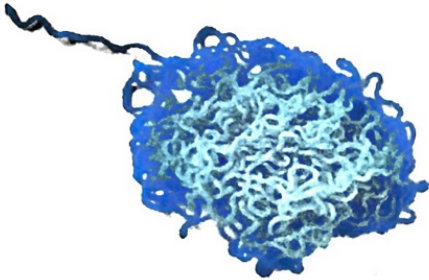




A knitter uses a ball of yarn.



The yarn is knitted into a long strip.



The knitted strip can unravel into the same amount of yarn as the original ball.

Physical Changes

If you cut and fold a piece of paper to make an origami sculpture, you change only the size and shape of the paper. You have not changed the particles that make up the paper.

A change in the size, shape, or state of matter is a physical change. A physical change does not change the particles that make up matter. The arrangement of the particles, however, may be changed.

Examples of Physical Changes

Are you causing a physical change when you mix nuts and raisins? A mixture of nuts and raisins does not form a new substance. You can separate the nuts and raisins by hand. In a mixture of salt and water, the particles are too small to be separated by hand. However, if the water evaporates, the salt will be left behind. Because the parts of a mixture do not change and can be separated, making a mixture is an example of a physical change.

Breaking a pencil is a physical change. The pieces of the pencil are still made of wood and graphite. If you sharpen the broken ends, you can keep using the pencil. Another physical change is tearing. If you tear a sheet of paper into tiny pieces, it still is made of the same kind of matter.

3. **Identify** **Circle** two examples of physical changes.
4. **Classify** Is a phase change, such as ice melting into a puddle, an example of a physical change? Why or why not?