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| --- | --- | --- | --- | --- |
| **PHYSICAL VS CHEMICAL CHANGES** | | | | |
|  |  |  |  |  |
| **Define:** |  |  |  |  |
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|  | Physical Change - | change in shape, size, form, or state of matter | | |
|  |  |  |  |  |
|  | Chemical Change - | change in which something new is created | | |
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|  |  |  |  |  |
| **Example** | **Observations before change** | **Physical Change** | **Chemical Change** | **How do you know?** |
|  |  |  |  |  |
| Sugar | white, solid pieces | crushing cube | X | nothing new was created |
| & |  |  |  |
| Water | clear, liquid | make a mixture | X |
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| Wood | thin, flat, hard , solid, tan, flexible | break it, bend it | burn it | heat, light, odor change, color change, smoke, ashes |
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|  |  |  |  |  |
| Marshmallow | white, fluffy, smooth, squishy, cylinder shape | break it, squish it | toast it | heat, light, odor change, color change, smoke, ashes |
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|  |  |  |  |  |
| Lifesaver | hard, round, hole in middle, color, odor, smooth and rough | crush it, bite it, change size | saliva has enzyme (amylase) | something new was created (sucrose to glucose) |
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| **What question do you ask to determine if a physical or a chemical change took place:** | | | | |
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|  | Was something new created? | |  |  |
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|  |  | **DIGESTION** |  |  |
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|  | **Physical Change →** | bite it, chew it, cut it, break it | → | Food is still not in the form that body uses for energy |
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| **Digestion:** |  |  |  |  |
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| Series of physical  and chemical changes  occurring to the food | |  |  |  |
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|  | **Chemical Change →** | enzymes (chemicals made by body) | → | Puts food in the form body can use for energy |
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