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|  | Advantages | Disadvantages |
| Plastics | Cheap  Many uses from bottles to body parts  Recyclable – Plastics can be melted and used to make other products.  Durable – Plastics can take the wear and tear of everyday life without falling apart.  Resistant to the environment – Plastics are able to endure a variety of weather conditions without disintegrating. – strength e,f natural – cheap – lightweight for strength – moulded into shapes – long life – recyclable or incinerated – modify molecules for different properties. | Cost of Recycling – While recycling is a plus, recycling is a very costly endeavor.  Volume – In the United States 20% of our landfill is made up of plastics. As more products are being made of plastics, where will this lead us in the future?  Durability – This is an advantage as well as a disadvantage. Plastics are extremely durable, which means that they last a long time. Those plastics in the landfill will be there for years. Great Pacific Garbage Patch  Doesn’t break down – landfill – ocean dump – incinerating releases toxic gases – melting also releases toxic gases – enters food chain – produced from petroleum products – incorrect use can be dangerous -  Generally made from petroleum derivatives – linked to oil dependence  Flammable – This is definitely an advantage in that they can be melted down, however smoldering plastics can release toxic fumes into the environment. |
| Recycling | Plastics can be used over and over again  Cheaper to reuse  Reduces landfill & waste | Need to be sorted otherwise the plastic’s properties are altered e.g. bottle with PET lid and HDPE bottle is not recycled  Expensive to sort  Some plastics cannot be recycled |
| bioplastics | Reduces need for oil-based products  Break down given the right conditions  Reduces landfill  Safer for environment  Made from renewable resources | Food for fuel now becomes food for plastics debate  Needs right conditions to decompose otherwise it will still just add to landfill.  Sorting expense again  Can’t be mixed with oil based plastics  Decomposing can still produce gases that contribute to global warming. |